



HYGIENETECH

Hygiene Technologies International, Inc.

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April 6, 2009

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

Document No. 20904001.1

Attention: David Gau

Regarding: 9th Floor Post Cleaning Fungal Growth Exposure Assessment Survey

Dear Mr. Gau:

On March 22, 2009, a water intrusion episode occurred on the 9th Floor of the State of California Board of Equalization (BOE) building and subsequently flooded portions of the lower eight floors, particularly the areas in and surrounding the northwestern stairwell. Some time after the flood, the lower portion of the walls surround the northwestern stairwell access door on the 9th Floor was removed by Department of General Services (DGS) representatives to facilitate drying and a temporary plastic barrier was established. Additionally, air blowers and high efficiency particulate air (HEPA) scrubbers were placed within the barrier to aid in the drying process. On March 24, 2009, DGS's consultant, BioMax, indicated that visible suspect fungal growth was observed on surfaces where the wall cuts had been made. Those wall openings were immediately sealed with plastic sheeting and adhesive tape. On March 25, 2009, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted a limited fungal growth exposure assessment survey on the 9th Floor in order to determine the status of the floor for fungal spore exposure potentials prior to it being re-occupied by BOE staff. Varying surface samples were also collected from the 19th Floor for comparison purposes. Those results and observations were provided in HygieneTech Document No. 20903001.2 dated April 3, 2009. On April 2 and 3, 2009, following the detail cleaning performed by the designated DGS contractor, HygieneTech conducted a follow-up survey to verify that the cleaning was performed successfully. The most recent survey findings, along with the analytical data, 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 Allergenco-D™ cassettes. Surface samples were collected for fungal growth assessment using Zefon brand Bio-Tape™ surface samplers. 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 and surface fungi assessment analytical data with supporting and background information appear in the enclosed table.

As presented in Table 20904001-1, the airborne spore count data recorded showed common spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Cladosporium*, colorless spores typical of



Penicillium and *Aspergillus* species, *Oidium*, other brown, smuts, *Stachybotrys*, and/or *Torula*, with basidiospores predominating in both samples collected. In the indoor areas tested, the data showed low airborne concentrations of common fungal spores that included one or more of the following: ascospores, basidiospores, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, smuts, and/or *Ulocladium*. The exception involved the sample collected near Column N22, where a low level of airborne *Stachybotrys* was detected. The distribution of fungal spore types detected in the surveyed areas was consistent with those found outdoors, and the overall data within the tested areas were well below the overall data recorded outdoors. The surface assessment data, as presented in Table 20904001-2, indicated no evidence of fungal growth or above-background levels of loose fungal spores on those surfaces sampled. 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 and surface borne fungi are expected.

Be advised that the data provided in this report only represent limited fungal 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 exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors. Also be advised that additional fungal growth may exist at one or more locations in the structure that were not specifically assessed during the survey.

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

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

Kenny K. Hsi, CIH
Technical Director

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A



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

**TABLE 20904001-1
AIRBORNE TOTAL FUNGI RESULTS
9TH FLOOR
SACRAMENTO, CALIFORNIA
APRIL 2 AND 3, 2009**

Page 1

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

SAMPLE NUMBER	20904001-TM01OUTWF	20904001-TM02WF	20904001-TM03WF	20904001-TM04WF
SAMPLING LOCATION/ACTIVITIES	Outdoors; about five feet 20 feet east of building; approximately five feet above ground/Normal office activities	Outside of barrier; Column M22 area; adjacent to Cubicle 093; approximately five feet above floor/Sampling activities only	Outside of barrier; area between Columns M22 and N22; adjacent to cubicle 085; approximately five feet above floor/Sampling activities only	Outside of barrier; northern hallway; about one foot east of elevator lobby; approximately five feet above floor/Sampling activities only
START/STOP	12:20:00/12:25:00	12:44:00/12:49:00	12:51:00/12:56:00	12:58:00/13:03:00
DATE	4-02-09	4-02-09	4-02-09	4-02-09
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13			
Ascospores	960		53	
Aureobasidium				
Basidiospores	1,300	53	53	53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	800			110
Epicoccum				
Myrothecium				
Nigrospora				
Oidium	13			
Penicillium/Aspergillus types	590	210	110	53
Pithomyces				
Rusts				
Scopulariopsis				
Smuts (Periconia, Myxomycetes)				13
Stachybotrys				
Stemphylium				
Ulocladium				13
Unidentified mitosporic fungi				
Unidentified zygomycetes				
Hyphal fragments	80	27	<13	13
Background debris*	2+	1+	1+	2+
TOTAL	3,700	270	210	240

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



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**TABLE 20904001-1
AIRBORNE TOTAL FUNGI RESULTS
9TH FLOOR
SACRAMENTO, CALIFORNIA
APRIL 2 AND 3, 2009**

Page 2

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

SAMPLE NUMBER	20904001-TM05WF	20904001-TM01OUTCL	20904001-TM02CL	20904001-TM03CL
SAMPLING LOCATION/ACTIVITIES	Outside of barrier; Column N22 area; adjacent to cubicle 127B; approximately five feet above floor/Sampling activities only	Outdoors; about 25 feet east of building; approximately five feet above ground/Normal outdoor activities	Within barrier; Column N21 area; hallway adjacent to Cubicle 099; approximately five feet above floor/Sampling activities only	Within barrier; Column N22 area between Cubicles 109 and 108; approximately five feet above floor/Sampling activities only
START/STOP	13:09:00/13:14:00	10:10:00/10:15:00	10:18:00/10:23:00	10:24:00/10:29:00
DATE	4-02-09	4-03-09	4-03-09	4-03-09
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Ascospores		210		
Aureobasidium				
Basidiospores		480	53	
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium		110		
Epicoccum				
Oidium		13		
Other brown		13		
Penicillium/Aspergillus types	110	270		
Pithomyces				
Rusts				
Scopulariopsis				
Smuts (Periconia, Myxomycetes)		120		
Stachybotrys		13		
Stemphylium				
Torula		27		
Trichoderma				
Trichophyton				
Trichosporon				
Ulocladium				
Unidentified zygomycetes				
Hyphal fragments	<13	40	<13	<13
Background debris*	1+	3+	1+	1+
TOTAL	110	1,300	53	<13

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

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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TABLE 20904001-1
AIRBORNE TOTAL FUNGI RESULTS
9TH FLOOR
SACRAMENTO, CALIFORNIA
APRIL 2 AND 3, 2009

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

SAMPLE NUMBER	20904001-TM04CL			
SAMPLING LOCATION/ACTIVITIES	Within barrier; Column N20 area; between Cubicles 117 and 118; approximately five feet above floor/Sampling activities only	This column intentionally left blank	This column intentionally left blank	This column intentionally left blank
START/STOP	10:31:00/10:36:00			
DATE	4-03-09			
SAMPLE TIME	5 minutes			
Alternaria				
Ascospores				
Aureobasidium				
Basidiospores	53			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium				
Epicoccum				
Oidium				
Other brown				
Penicillium/Aspergillus types				
Pithomyces				
Rusts				
Scopulariopsis				
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Stemphylium				
Torula				
Trichoderma				
Trichophyton				
Ulocladium				
Unidentified zygomycetes				
Hyphal fragments	13			
Background debris*	1+			
TOTAL	53			

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

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TABLE 20904001-2
SURFACE FUNGAL GROWTH POTENTIALS
9TH FLOOR
SACRAMENTO, CALIFORNIA
APRIL 2, 2009

Page 1

SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL101LS	Column L22 area; outside the barrier; Cubicle 90; telephone receiver; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL102LS	Column L22; outside the barrier; area Cubicle 89; white fan; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL103LS	Column L22 area; outside the barrier; Cubicle 81; paperweight with purple and red design; about center; from horizontal surface of glass	Light	None	None	None	Background
20904001-TL104LS	Column M22 area; outside the barrier; Cubicle 82; Jonny Depp photo frame; about center; from vertical surface of plastic	Light	None	None	None	Background
20904001-TL105LS	Column M22 area; outside the barrier; Cubicle 94; Dell computer; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL106LS	Column M22 area; outside the barrier; Cubicle 84; Sharp calculator; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL107LS	Column M22 area; outside of barrier; Cubicle 93; eastern cubicle partition; about center; from horizontal surface of metal	Light	None	None	None	Background

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

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

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APRIL 2, 2009**

Page 2

SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL108LS	Column M22 area; outside of barrier; Cubicle 86; HP laser jet printer; about center; from horizontal of plastic	Light	None	None	None	Background
20904001-TL109LS	Column N22 area; outside of barrier; Cubicle 125; southern cubicle partition; about center; from horizontal surface of metal	Light	None	None	None	Background
20904001-TL110LS	Column N22 area; outside of barrier; Cubicle 127B; Dell monitor; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL111LS	Column N21 area; outside of barrier; Cubicle 128; Dell mouse; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL112LS	Column N20 area; outside of barrier; Cubicle 130; Dell monitor; about center; from vertical surface of LCD screen	Light	None	None	None	Background
20904001-TL113LS	Column N20 area; outside of barrier; Cubicle 131; table adjacent to Dell monitor; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL114LS	Between Column N19 and N20 area; outside of barrier; Cubicle 132; Optimus radio; about center; from horizontal surface of plastic	Light	None	None	None	Background

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

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL115LS	Column N19 area; outside of barrier; Cubicle 140; chair; armrest; from horizontal surface of rubber	Light	Very few	None	None	Background
20904001-TL116LS	Column N19 area; outside of barrier; Cubicle 133; over head file cabinet; along eastern cubicle partition; about center; from horizontal surface of metal	Light	None	None	None	Background
20904001-TL117LS	Column N20 area; outside of barrier; Cubicle 142; Dell speaker; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL118LS	Column L22 area; outside of barrier; Cubicle 91; file shelving along southern cubicle partition; about center; from horizontal surface of metal	Light	None	None	None	Background
20904001-TL119LS	Column N19 area; outside of barrier; Cubicle 145; keyboard; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL120LS	Column N19 area; outside of barrier; Cubicle 144; Sharp calculator; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL121LS	Column L22 area; outside of barrier; Cubicle 92; eastern cubicle partition; about center; from horizontal surface of metal	Light	None	None	None	Background

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

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL12LS	Column M22 area; outside of barrier; Cubicle 82; Dell Computer; about center; from horizontal surface of plastic	Light	None	None	None	Background
20904001-TL01CL	Cubicle 101; within barrier; computer at northwestern corner; about center; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL02CL	Conference Room 902; within barrier; Panasonic electronic display board; top panel; about center; from vertical surface of plastic	Light	Very few	None	None	Background
20904001-TL03CL	Column N22 area; within barrier; Cubicle 95; Dell monitor; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL04CL	Column N21 area; within barrier; Cubicle 98; Station 55; northern partition shelving; from horizontal surface of metal	Light	Very few	None	None	Background
20904001-TL05CL	Column N20 area; within barrier; Cubicle 103; Sharp calculator; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL06CL	Column N22 area; within barrier; Cubicle 96; Dell Monitor; about center; from vertical surface of LCD screen	Light	Very few	None	None	Background
20904001-TL07CL	Column N21 area; within barrier; Cubicle 99; Team five; northern partition shelving; about center; from horizontal surface of metal	Light	Very few	None	None	Background

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

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9TH FLOOR
SACRAMENTO, CALIFORNIA
APRIL 2, 2009

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL08CL	Column N21 area; within barrier; Cubicle 117; wooden box adjacent to calculator; about center; from horizontal surface of wood	Light	Very few	None	None	Background
20904001-TL09CL	Column N21 area; within barrier; Cubicle 105; Sony radio cassette player; about center; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL10CL	Area between Column N20 and 21; within barrier; Cubicle 104; Dell Monitor; about center; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL11CL	Column N20; within barrier; Cubicle 118; table adjacent to monitor; from horizontal surface of plastic	Light	Very few	None	None	Background
20904001-TL12CL	Column N22; within barrier; Cubicle 110; keyboard support pad; about center; from horizontal surface of leather	Light	Very few	None	None	Background
20904001-TL13CL	Column N22 area; within barrier; Cubicle 109; northern cubicle partition; about center; from horizontal surface of metal	Light	Very few	None	None	Background
20904001-TL14CL	Column N21; within barrier; Cubicle 106; Sharp Calculator; about center; from horizontal surface of plastic	Light	Very few	None	None	Background

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

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20904001-TL15CL	Column N22; within barrier; Cubicle 108; grey revolving chair; armrest; about center; from horizontal surface of rubber	Light	Very few	None	None	Background
20904001-TL16CL	Column N22 area; within barrier; Cubicle 112; mirror; about center; from vertical surface of plastic	Light	Very few	None	None	Background
20904001-TL17CL	Column N21 area; within barrier; Cubicle 115; telephone receiver; about center; from horizontal surface of metal	Light	Very few	None	None	Background
20904001-TL18CL	Column N21 area; within barrier; Cubicle 114; revolving chair; armrest; from slanting vertical surface of wood	Light	Very few	None	None	Background
20904001-TL19CL	Area between Column N21 and N22; within barrier; sunflower poster along northern cubicle partition; about center; from vertical surface of plastic	Light	Very few	None	None	Background
20904001-TL20CL	Column N20 area; within barrier; Cubicle 119; northern cubicle partition; about center; from top horizontal surface of metal	Light	Very few	None	None	Background
20904001-TL21CL	Column N21 area; within barrier; Cubicle 121; yellow picture frame; about center; from top vertical surface of wood	Light	Very few	None	None	Background
20904001-TL22CL	Column N21; within barrier; Cubicle 122; Dell Computer; about center; from horizontal surface of plastic	Light	Very few	None	None	Background

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

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



EMLab P&K

Report for:

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

Regarding: Project: 20904001
 EML ID: 528662

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 04-03-2009

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: 20904001

Date of Sampling: 04-03-2009
Date of Receipt: 04-02-2009
Date of Report: 04-03-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20904001-TM01OUTWF		20904001-TM02WF		20904001-TM03WF		20904001-TM04WF		20904001-TM05WF	
Comments (see below)	None		None		None		A		A	
Lab ID-Version‡:	2340184-1		2340185-1		2340186-1		2340187-1		2340188-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13								
Arthrinium										
Ascospores*	18	960			1	53				
Aureobasidium										
Basidiospores*	25	1,300	1	53	1	53	1	53		
Bipolaris/Drechslera group										
Botrytis										
Chaetomium										
Cladosporium	15	800					2	110		
Curvularia										
Epicoccum										
Fusarium										
Myrothecium										
Nigrospora										
Oidium	1	13								
Other colorless										
Penicillium/Aspergillus types†	11	590	4	210	2	110	1	53	2	110
Pithomyces										
Rusts*										
Smuts*, Periconia, Myxomycetes*							1	13		
Stachybotrys										
Stemphylium										
Torula										
Ulocladium							1	13		
Zygomycetes										
Background debris (1-4+)††	2+		1+		1+		2+		1+	
Hyphal fragments/m3	80		27		< 13		13		< 13	
Pollen/m3	790		< 13		< 13		< 13		13	
Skin cells (1-4+)	None		1+		< 1+		2+		< 1+	
Sample volume (liters)	75		75		75		75		75	
§ TOTAL SPORE/m3		3,700		270		210		240		110

Comments: A) Analysis of replicate sample is delayed.

* 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: 20904001

Date of Sampling: 04-03-2009
Date of Receipt: 04-02-2009
Date of Report: 04-03-2009

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 20904001-TM01OUTWF**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: April				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	27	230	47	7	27	210	58
Bipolaris/Drechslera group	-	7	13	130	12	7	13	120	13
Chaetomium	-	7	13	120	13	7	13	120	19
Cladosporium	800	27	320	4,100	92	53	640	6,600	97
Curvularia	-	7	13	240	7	7	13	220	7
Nigrospora	-	7	13	94	7	7	13	170	8
Penicillium/Aspergillus types	590	26	160	1,500	77	38	210	2,500	86
Stachybotrys	-	7	13	350	3	7	13	290	5
Torula	-	7	13	170	12	7	13	150	12
Seldom found growing indoors**									
Ascospores	960	13	110	2,700	74	13	110	1,800	71
Basidiospores	1,300	13	200	5,100	89	13	210	6,800	93
Oidium	13	7	20	230	22	7	13	190	20
Rusts	-	7	19	240	23	7	13	250	28
Smuts, Periconia, Myxomycetes	-	7	38	430	62	8	40	480	70
TOTAL SPORES/M3	3,676								

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

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

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

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

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Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20904001-TM01OUTWF:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 27 - 400	52
Ascospores				960	13 - 150 - 4,400	76
Basidiospores				1,300	13 - 310 - 15,000	91
Cladosporium				800	27 - 530 - 8,800	94
Oidium				13	7 - 13 - 230	15
Penicillium/Aspergillus types				590	27 - 210 - 2,500	81
Smuts, Periconia, Myxomycetes				ND	7 - 40 - 820	69
Total				3,676		

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: 20904001-TM02WF

% 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: 3 Result: 2.1500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.4143 Critical value: 0.7714 Outside Similar: No	Score: 127 Result: Low		
Species Detected		Spores/m3				
		<100	1K	10K	>100K	
	Basidiospores					53
	Penicillium/Aspergillus types					210
	Total					263

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20904001-TM03WF

% 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: 3 Result: 2.1500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.6667	dF: 6 Result: 0.5429 Critical value: 0.7714 Outside Similar: No	Score: 112 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Basidiospores					53
Penicillium/Aspergillus types					110
Total					216

Location: 20904001-TM04WF

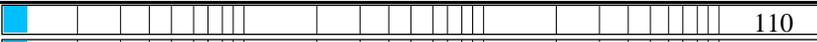
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 3 Result: 2.1500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.5455	dF: 8 Result: 0.3333 Critical value: 0.6190 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					110
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
Ulocladium					13
Total					242

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20904001-TM05WF

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 2%	dF: 3 Result: 2.1500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.2857	dF: 6 Result: 0.2143 Critical value: 0.7714 Outside Similar: No	Score: 115 Result: Low
Species Detected		Spores/m3		
		<100	1K	10K
				>100K
Penicillium/Aspergillus types				
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.

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Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

MoldSCORE™: Spore Trap Report

Location: 20904001-TM03WF

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				2	110				112
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Seldom found growing indoors**										
Ascospores††	█				1	53				100
Basidiospores††	█				1	53				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
Total						216				Final MoldSCORE 112

Location: 20904001-TM04WF

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium	█				2	110				104
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				102
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
Ulocladium	█				1	13				105
Seldom found growing indoors**										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††	█				1	13				103
Total						242				Final MoldSCORE 108

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

MoldSCORE™: Spore Trap Report

Location: 20904001-TM05WF

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█				2	110	█			115
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						110				Final MoldSCORE 115

*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: 20904001
 EML ID: 528910

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 04-03-2009

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: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-03-2009
 Date of Report: 04-03-2009

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	20904001 TM01OUTCL		20904001 TM02CL		20904001 TM03CL		20904001 TM04CL	
Comments (see below)	A		A		A		A	
Lab ID-Version‡:	2341317-1		2341318-1		2341319-1		2341320-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Arthrinium								
Ascospores*	4	210						
Aureobasidium								
Basidiospores*	9	480	1	53			1	53
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	2	110						
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium	1	13						
Other brown	1	13						
Penicillium/Aspergillus types†	5	270						
Pithomyces								
Rusts*								
Smuts*, Periconia, Myxomycetes*	9	120						
Stachybotrys	1	13						
Stemphylium								
Torula	2	27						
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	3+		1+		1+		1+	
Hyphal fragments/m3	40		< 13		< 13		13	
Pollen/m3	490		< 13		< 13		< 13	
Skin cells (1-4+)	< 1+		1+		1+		1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		1,300		53		< 13		53

Comments: A) Analysis of replicate sample is delayed.

* 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: 20904001

Date of Sampling: 04-03-2009
Date of Receipt: 04-03-2009
Date of Report: 04-03-2009

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 20904001 TM01OUTCL

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: April				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	-	7	27	230	47	7	27	210	58
Bipolaris/Drechslera group	-	7	13	130	12	7	13	120	13
Chaetomium	-	7	13	120	13	7	13	120	19
Cladosporium	110	27	320	4,100	92	53	640	6,600	97
Curvularia	-	7	13	240	7	7	13	220	7
Nigrospora	-	7	13	94	7	7	13	170	8
Other brown	13	7	13	93	33	7	13	80	37
Penicillium/Aspergillus types	270	26	160	1,500	77	38	210	2,500	86
Stachybotrys	13	7	13	350	3	7	13	290	5
Torula	27	7	13	170	12	7	13	150	12
Seldom found growing indoors**									
Ascospores	210	13	110	2,700	74	13	110	1,800	71
Basidiospores	480	13	200	5,100	89	13	210	6,800	93
Oidium	13	7	20	230	22	7	13	190	20
Rusts	-	7	19	240	23	7	13	250	28
Smuts, Periconia, Myxomycetes	120	7	38	430	62	8	40	480	70
TOTAL SPORES/M3	1,256								

† 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.

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Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-03-2009
 Date of Report: 04-03-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 20904001 TM01OUTCL:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores				210	13 - 150 - 4,400	76
Basidiospores				480	13 - 310 - 15,000	91
Cladosporium				110	27 - 530 - 8,800	94
Oidium				13	7 - 13 - 230	15
Other brown				13	7 - 13 - 93	33
Penicillium/Aspergillus types				270	27 - 210 - 2,500	81
Smuts, Periconia, Myxomycetes				120	7 - 40 - 820	69
Stachybotrys				13	7 - 13 - 370	3
Torula				27	7 - 13 - 160	11
Total				1,256		

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: 20904001 TM02CL

% 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: 2 Result: 1.5000 Critical value: 5.9915 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.6667 Critical value: 0.5833 Outside Similar: Yes	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Basidiospores				53
	Total				53

Location: 20904001 TM03CL

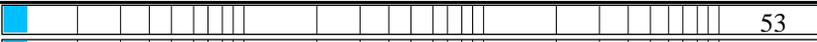
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: < 1%	dF: 2 Result: 1.5000 Critical value: 5.9915 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	None Detected				N/A

Client: Hygiene Technologies International, Inc.:
 Northern California
 C/O: Mr. Wes Frey
 Re: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-03-2009
 Date of Report: 04-03-2009

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 20904001 TM04CL

% 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: 2 Result: 1.5000 Critical value: 5.9915 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.6667 Critical value: 0.5833 Outside Similar: Yes	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Total					53

* 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: 20904001

Date of Sampling: 04-03-2009
 Date of Receipt: 04-03-2009
 Date of Report: 04-03-2009

MoldSCORE™: Spore Trap Report

Location: 20904001 TM03CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					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

Location: 20904001 TM04CL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
Generally able to grow indoors*										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
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	█			104
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††					ND	< 13	█			100
Total						53				Final MoldSCORE 104

Client: Hygiene Technologies International, Inc.:
Northern California
C/O: Mr. Wes Frey
Re: 20904001

Date of Sampling: 04-03-2009
Date of Receipt: 04-03-2009
Date of Report: 04-03-2009

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.



EMLab P&K

Report for:

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

Regarding: Project: 20904001
 EML ID: 528661

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:

Direct microscopic exam (Qualitative): 04-03-2009

Project SOPs: Direct microscopic exam (Qualitative) (I100005)

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: 20904001

Date of Sampling: 04-02-2009
 Date of Receipt: 04-02-2009
 Date of Report: 04-03-2009

DIRECT MICROSCOPIC EXAMINATION REPORT

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 2340146-1: Tape sample 20904001 TL101LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340147-1: Tape sample 20904001 TL102LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340148-1: Tape sample 20904001 TL103LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340149-1: Tape sample 20904001 TL104LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340150-1: Tape sample 20904001 TL105LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340151-1: Tape sample 20904001 TL106LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340152-1: Tape sample 20904001 TL107LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340153-1: Tape sample 20904001 TL108LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340154-1: Tape sample 20904001 TL109LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340155-1: Tape sample 20904001 TL110LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340156-1: Tape sample 20904001 TL111LS				
Light	None	None	None	No mold spores detected

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 2340157-1: Tape sample 20904001 TL112LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340158-1: Tape sample 20904001 TL113LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340159-1: Tape sample 20904001 TL114LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340160-1: Tape sample 20904001 TL115LS				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2340161-1: Tape sample 20904001 TL116LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340162-1: Tape sample 20904001 TL117LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340163-1: Tape sample 20904001 TL118LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340164-1: Tape sample 20904001 TL119LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340165-1: Tape sample 20904001 TL120LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340166-1: Tape sample 20904001 TL121LS				
Light	None	None	None	No mold spores detected
Lab ID-Version: 2340167-1: Tape sample 20904001 TL122LS				
Light	None	None	None	No mold spores detected

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



Request For Analysis

52866

Project Number/Purchase Order: 20904001 Date Submitted: 4/2/9

Project Contact: W. Grey Turnaround Required: PSL (same day)

Lab Destination: Reelays, Em Lab P&K Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20904001-TL101LS	N/A	Brown Tape	PSL Surface fungi AS/SS Smears Caucalohis
TL102LS			
TL103LS			
TL104LS			
TL105LS			
TL106LS			
TL107LS			
TL108LS			
TL109LS			
TL110LS			
TL111LS			
TL112LS			
TL113LS			
TL114LS			
TL115LS			
TL116LS			

Special Instructions:

1. Sampled by: Handley on 4/2/9 @ 10:00 Received by: _____
 2. Relinquished by: Handley on 4/2/9 Received by: Grey 4/2/09 14:00
 3. Relinquished by: Grey 4/2/09 14:00 Received by: Brandon Deaton 4/2/09 @ 14:30
- Please include signature, date, and time

Lab Use Only:



EMLab P&K

Report for:

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

Regarding: Project: 20904001
 EML ID: 528810

Approved by:

Lab Manager
Dr. Kamashwaran Ramanathan

Dates of Analysis:

Direct microscopic exam (Qualitative): 04-03-2009

Project SOPs: Direct microscopic exam (Qualitative) (I100005)

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: 20904001

Date of Sampling: 04-02-2009
Date of Receipt: 04-03-2009
Date of Report: 04-03-2009

DIRECT MICROSCOPIC EXAMINATION REPORT

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 2341016-1: Tape sample 20904001-TL01CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341017-1: Tape sample 20904001-TL02CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341018-1: Tape sample 20904001-TL03CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341019-1: Tape sample 20904001-TL04CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341020-1: Tape sample 20904001-TL05CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341021-1: Tape sample 20904001-TL06CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341022-1: Tape sample 20904001-TL07CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341023-1: Tape sample 20904001-TL08CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341024-1: Tape sample 20904001-TL09CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341025-1: Tape sample 20904001-TL10CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341026-1: Tape sample 20904001-TL11CL				
Light	Very few	None	None	Normal trapping

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 2341027-1: Tape sample 20904001-TL12CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341028-1: Tape sample 20904001-TL13CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341029-1: Tape sample 20904001-TL14CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341030-1: Tape sample 20904001-TL15CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341031-1: Tape sample 20904001-TL16CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341032-1: Tape sample 20904001-TL17CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341033-1: Tape sample 20904001-TL18CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341034-1: Tape sample 20904001-TL19CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341035-1: Tape sample 20904001-TL20CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341036-1: Tape sample 20904001-TL21CL				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 2341037-1: Tape sample 20904001-TL22CL				
Light	Very few	None	None	Normal trapping

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



Request For Analysis

Project Number/Purchase Order: 20904001 Date Submitted: 4/2/09
 Project Contact: Chun Lau / Wes Frey Turnaround Required: RUSH BY NOON
 Lab Destination: EM Lab Park (San Bruno) Lab Contact: Samples receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20904001-TL01CL	N/A	BioTape	Surface fungal IP (qualitative)
-TL 02 CL			
-TL 02 CL			
-TL 04 CL			
-TL 05 CL			
-TL 06 CL			
-TL 07 CL			
-TL 08 CL			
-TL 09 CL			
-TL 10 CL			
-TL 11 CL			
-TL 12 CL			
-TL 13 CL			
-TL 14 CL			
-TL 15 CL			
✓ -TL 16 CL	✓	✓	✓



Special Instructions: _____

1. Sampled by: C L C 4/2/09 Received by: Am. Marisey 4-3-09 9:30
 2. Relinquished by: C L C 4/2/09 Received by: Franklin on 4/2/9 @ 11:45
 3. Relinquished by: Franklin on 4/2/9 @ 11:30 Received by: _____
 Please include signature, date, and time

Lab Use Only: _____

