



# HYGIENETECH

Hygiene Technologies International, Inc.

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April 8, 2014

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

Document No. 21403001.1

Attention: David Gau

Regarding: Limited Fungal Growth Exposure Assessment Surveys  
March 2014 Random Sampling

Dear Mr. Gau:

On March 3, 4, 10, 17, and 24, 2014, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted limited fungal growth exposure assessment surveys involving 22 randomly selected areas located within the California State Board of Equalization (BOE) building. The findings of the surveys, along with the analytical data, conclusions, and recommendations when applicable, appear below.

On the survey dates, air samples were collected for total (viable and nonviable) fungi analyses using a Zefon brand Bio-Pump Plus™ equipped with 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 21403001-1, the airborne spore count data recorded showed fungal spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium/Aspergillus* species, *Oidium*, other brown, *Nigrospora*, rusts, smuts, *Stachybotrys*, and/or *Ulocladium*. In the indoor areas tested, the data showed that airborne fungal spores were either not detected at or above the laboratory detection limit indicated or were detected at low airborne concentrations. The fungal spore types found indoor included *Alternaria*, ascospores, basidiospores, *Cladosporium*, colorless spores typical of *Penicillium/Aspergillus* species, other brown, rusts, smuts, *Stachybotrys*, and/or *Torula*. 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 outdoor data recorded. Note that although a low but detectable level of *Stachybotrys* was found in the 4<sup>th</sup> Floor Column K17 area sample collected on March 3, subsequent air sampling performed in that same area on March 4 indicated only low levels of ascospores and smuts. The airborne *Stachybotrys* detected was likely an anomaly or originated from the outdoors. 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 and exposure potentials that existed at the time these surveys were performed and at the precise sample locations indicated. 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 surveys.

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 Hsi', is written over a solid horizontal line.

Kenny K. Hsi, CIH  
Technical Director

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 21403001-1  
AIRBORNE TOTAL FUNGI RESULTS  
450 N STREET  
SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014

Page 1

Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)

SAMPLE NUMBER	21403001-1 TM01OUT	21403001-1 TM02	21403001-1 TM03	21403001-1 TM04
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 10 feet east of building; approximately five feet above ground/Normal outdoor activities	4 <sup>th</sup> Floor; Column K17 area; Cubicle 76; immediately adjacent to Column K17; approximately five feet above floor/Normal office activities	7 <sup>th</sup> Floor; Column K18 area; Cubicle 37; about center; approximately five feet above floor/Normal office activities	10 <sup>th</sup> Floor; Column J18 area; about two feet northwest of Column J18; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/03/14	03/03/14	03/03/14	03/03/14
<b>START/STOP</b>	10:36:00/10:41:00	10:45:00/10:50:00	10:53:00/10:58:00	11:01:00/11:06:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	27			
Ascospores	1,400	53		
Basidiospores	4,900	53		53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	13			
Cladosporium	1,200			
Curvularia				
Epicoccum				
Fusarium				
Nigrospora	27			
Oidium				
Other brown			13	
Other colorless				
Penicillium/Aspergillus types	320			53
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	40			
Stachybotrys		13		
Stemphylium				
Torula			13	
Ulocladium				
Hyphal fragments	13	<13	<13	<13
Background debris*	2+	1+	1+	2+
<b>TOTAL **</b>	7,900	120	27	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.

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TABLE 21403001-1  
AIRBORNE TOTAL FUNGI RESULTS  
450 N STREET  
SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014

Page 2

## Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)

SAMPLE NUMBER	21403001-1 TM05	21403001-1 TM06	21403001-1 TM07OUT	21403001-1 TM08
<b>SAMPLING LOCATION/ACTIVITIES</b>	15 <sup>th</sup> Floor; Column M22 area; about one foot south of Column M22; approximately five feet above floor/Normal office activities	18 <sup>th</sup> Floor; Break Room 1814; approximately five feet above floor/Normal office activities	Outdoors; about 15 feet east of building; approximately five feet above ground/Normal outdoor activities	4 <sup>th</sup> Floor; Column K17 area; Cubicle 76; immediately adjacent to Column K17; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/03/14	03/03/14	03/04/14	03/04/14
<b>START/STOP</b>	11:13:00/11:18:00	11:22:00/11:27:00	16:23:00/16:28:00	16:31:00/16:36:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	
Ascospores		53	750	53
Basidiospores		53	530	
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium		110	2,200	
Curvularia				
Epicoccum				
Fusarium				
Nigrospora				
Oidium				
Other brown	13		13	
Penicillium/Aspergillus types				
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	13		27	13
Stachybotrys			13	
Stemphylium				
Torula				
Trichocladium				
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	13	13	<13
Background debris*	2+	2+	2+	2+
<b>TOTAL**</b>	27	210	3,500	67

\*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.

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SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014

Page 3

## Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)

SAMPLE NUMBER	21403001-1 TM09OUT	21403001-1 TM10	21403001-1 TM11	21403001-1 TM12
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 10 feet west of building; approximately five feet above ground/Normal outdoor activities	3 <sup>rd</sup> Floor; Room 310; Cubicle 124; entry area; about center; approximately five feet above floor/Normal office activities	6 <sup>th</sup> Floor; Column N22 area; Room 605 entry area; approximately five feet above floor/Normal office activities	9 <sup>th</sup> Floor; Column K20 area; Cubicle 25; about center; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/10/14	03/10/14	03/10/14	03/10/14
<b>START/STOP</b>	14:20:00/14:25:00	14:30:00/14:35:00	14:40:00/14:45:00	14:48:00/14:53:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores	1,000			
Basidiospores	1,500			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	53			
Curvularia				
Epicoccum				
Fusarium				
Nigrospora	13			
Oidium				
Other brown	27			
Penicillium/Aspergillus types	160			
Pithomyces				
Rusts	13			13
Smuts (Periconia, Myxomycetes)	40	13	13	53
Stachybotrys				
Stemphylium				
Torula				
Ulocladium	27			
Hyphal fragments	13	<13	<13	<13
Background debris*	1+	1+	2+	2+
<b>TOTAL**</b>	2,800	13	13	67

\*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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MARCH 3, 4, 10, 17, AND 24, 2014

Page 4

## Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)

SAMPLE NUMBER	21403001-1 TM13	21403001-1 TM14	21403001-1 TM15OUT	21403001-1 TM16
<b>SAMPLING LOCATION/ACTIVITIES</b>	14 <sup>th</sup> Floor; western corridor; about center; approximately five feet above floor/Normal office activities	17 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	Outdoors; about 15 feet east of building; approximately five feet above ground/Normal outdoor activities	5 <sup>th</sup> Floor; southern corridor; adjacent to Room 518 entry door; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/10/14	03/10/14	03/17/14	03/17/14
<b>START/STOP</b>	14:56:00/15:01:00	14:49:00/14:54:00	10:30:00/10:35:00	10:38:00/10:43:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Ascospores			53	
Basidiospores			1,400	53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium			690	53
Curvularia				
Epicoccum				
Nigrospora				
Oidium			40	
Other brown			13	
Other colorless				
Penicillium/Aspergillus types				
Pithomyces				
Rusts		13	27	27
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	<13	67	53
Background debris*	2+	2+	2+	2+
<b>TOTAL**</b>	<13	13	2,200	130

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

\*\*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.

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SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014**

Page 5

**Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)**

SAMPLE NUMBER	21403001-1 TM17	21403001-1 TM18	21403001-1 TM19	21403001-1 TM20
<b>SAMPLING LOCATION/ACTIVITIES</b>	8 <sup>th</sup> Floor; Mail Room 8B; about center; approximately five feet above floor/Normal office activities	16 <sup>th</sup> Floor; Column L22 area; Cubicle 115 entry area; approximately five feet above floor/Normal office activities	20 <sup>th</sup> Floor; Conference Room 2011; southeastern corner; approximately five feet above floor/Normal office activities	22 <sup>nd</sup> Floor; Conference Room 2221; about five feet west of entry door; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/17/14	03/17/14	03/17/14	03/17/14
<b>START/STOP</b>	10:48:00/10:53:00	10:55:00/11:00:00	11:06:00/11:11:00	11:16:00/11:21:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Ascospores				
Basidiospores				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium			53	
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types		53		
Pithomyces				
Rusts			27	13
Smuts (Periconia, Myxomycetes)				
Stemphylium				
Stachybotrys				
Torula				
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	<13	<13	<13
Background debris*	2+	1+	1+	1+
<b>TOTAL**</b>	<13	53	80	13

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SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014

Page 6

## Results reported in spores per cubic meter of air (spores/M<sup>3</sup>)

SAMPLE NUMBER	21403001-1 TM21	21403001-1 TM22OUT	21403001-1 TM23	21403001-1 TM24
<b>SAMPLING LOCATION/ACTIVITIES</b>	24 <sup>th</sup> Floor; Break Room 2424; about center; approximately five feet above floor/Normal office activities	Outdoors; about 15 feet west of building; approximately five feet above ground/Normal outdoor activities	1 <sup>st</sup> Floor; eastern corridor; adjacent to day care center entry door; approximately five feet above floor/Normal building activities	2 <sup>nd</sup> Floor; southeast stairwell area; approximately five feet above floor/Normal building activities
<b>DATE</b>	03/17/14	03/24/14	03/24/14	03/24/14
<b>START/STOP</b>	11:24:00/11:29:00	16:06:00/16:11:00	16:13:00/16:18:00	16:20:00/16:25:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13	13		
Ascospores				
Basidiospores		370		
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	53	15,000	13	110
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types		110		
Pithomyces				
Rusts		53		
Smuts (Periconia, Myxomycetes)		350		27
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	<13	13	<13	<13
Background debris*	2+	2+	1+	1+
<b>TOTAL**</b>	67	16,000	13	130

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

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AIRBORNE TOTAL FUNGI RESULTS  
450 N STREET  
SACRAMENTO, CALIFORNIA  
MARCH 3, 4, 10, 17, AND 24, 2014**

Page 7

SAMPLE NUMBER	21403001-1 TM25	21403001-1 TM26	21403001-1 TM27	21403001-1 TM28
<b>SAMPLING LOCATION/ACTIVITIES</b>	11 <sup>th</sup> Floor; Men's Restroom; about center; approximately five feet above floor/Normal restroom activities	19 <sup>th</sup> Floor; Quiet Room 1907 entry area; about center; approximately five feet above floor/Normal office activities	21 <sup>st</sup> Floor; Break Room 2106; about center; approximately five feet above floor/Normal office activities	23 <sup>rd</sup> Floor; Conference Room 2304; adjacent to southern door; approximately five feet above floor/Normal office activities
<b>DATE</b>	03/24/14	03/24/14	03/24/14	03/24/14
<b>START/STOP</b>	16:30:00/16:35:00	16:39:00/16:44:00	16:46:00/16:51:00	16:54:00/16:59:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria		13		
Ascospores				
Basidiospores				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium			53	
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types				
Pithomyces				
Rusts			27	13
Smuts (Periconia, Myxomycetes)		13		27
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	<13	<13	<13	<13
Background debris*	2+	1+	1+	1+
<b>TOTAL**</b>	<13	27	80	40

\*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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Report for:

**Mr. Lakhpreet Sandhu**  
**Hygiene Technologies International, Inc.**  
3625 Del Amo Boulevard, Suite 180  
Torrance, CA 90503-8370

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Regarding: Project: 21403001-1  
EML ID: 1177585

Approved by:

Technical Manager  
Melissa Tracey

Dates of Analysis:  
Spore trap analysis: 03-04-2014

Service SOPs: Spore trap analysis (1038)  
AIHA-LAP, LLC accredited service, Lab ID #179768

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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 correction of results is not applied. 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.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21403001-1Date of Sampling: 03-03-2014  
Date of Receipt: 03-03-2014  
Date of Report: 03-04-2014**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM01 OUT		21403001-1 TM02		21403001-1 TM03	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5334031-1		5334032-1		5334033-1	
Analysis Date:	03/04/2014		03/04/2014		03/04/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27				
Ascospores	26	1,400	1	53		
Basidiospores	92	4,900	1	53		
Chaetomium	1	13				
Cladosporium	23	1,200				
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora	2	27				
Other brown					1	13
Other colorless						
Penicillium/Aspergillus types†	6	320				
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	3	40				
Stachybotrys			1	13		
Stemphylium						
Torula					1	13
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		1+		1+	
Hyphal fragments/m3	13		< 13		< 13	
Pollen/m3	330		< 13		< 13	
Skin cells (1-4+)	< 1+		< 1+		< 1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>7,900</b>		<b>120</b>		<b>27</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-03-2014  
Date of Receipt: 03-03-2014  
Date of Report: 03-04-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM04		21403001-1 TM05		21403001-1 TM06	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5334034-1		5334035-1		5334036-1	
Analysis Date:	03/04/2014		03/04/2014		03/04/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores					1	53
Basidiospores	1	53			1	53
Chaetomium						
Cladosporium					2	110
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown			1	13		
Other colorless						
Penicillium/Aspergillus types†	1	53				
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes			1	13		
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		2+		3+	
Hyphal fragments/m3	< 13		< 13		13	
Pollen/m3	< 13		< 13		< 13	
Skin cells (1-4+)	1+		1+		2+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>110</b>		<b>27</b>		<b>210</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

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

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The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-03-2014  
Date of Receipt: 03-03-2014  
Date of Report: 03-04-2014

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21403001-1 TM01 OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: March in California† (n‡=19953)						Typical Outdoor Data for: The entire year in California† (n‡=200710)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>													
Alternaria	27	13	13	27	53	80	45	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	8	7	13	13	27	40	12
Chaetomium	13	7	13	13	27	40	11	8	13	13	27	47	19
Cladosporium	1,200	80	160	400	1,100	1,700	94	110	210	610	1,600	2,800	97
Curvularia	-	7	13	13	27	40	2	7	13	13	27	53	6
Nigrospora	27	7	10	13	13	27	4	7	13	13	27	53	8
Other brown	-	12	13	13	27	53	30	13	13	13	40	53	34
Penicillium/Aspergillus types	320	53	53	160	440	730	80	53	100	210	590	1,000	84
Stachybotrys	-	7	13	13	27	61	3	7	13	13	33	67	4
Torula	-	8	13	13	40	67	7	8	13	13	40	67	12
<b>Seldom found growing indoors**</b>													
Ascospores	1,400	27	53	160	480	810	78	25	53	110	360	690	71
Basidiospores	4,900	67	130	430	1,400	2,700	96	53	80	260	990	2,300	93
Rusts	-	13	13	13	42	80	22	13	13	13	53	80	26
Smuts, Periconia, Myxomycetes	40	13	13	27	67	110	54	13	13	40	110	210	68
<b>§ TOTAL SPORES/m3</b>	<b>7,900</b>												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 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, 20% 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

\* 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.

‡n = number of samples used to calculate data.

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.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21403001-1 TM01 OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				27	7 - 33 - 590	45
Ascospores				1,400	13 - 210 - 5,700	76
Basidiospores				4,900	17 - 450 - 24,000	92
Chaetomium				13	7 - 13 - 160	9
Cladosporium				1,200	27 - 470 - 10,000	90
Nigrospora				27	7 - 13 - 240	16
Penicillium/Aspergillus types				320	13 - 170 - 2,700	68
Smuts, Periconia, Myxomycetes				40	7 - 53 - 930	64
<b>Total</b>				7,900		

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: 21403001-1 TM02**

% 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: 0.3750 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.5042 Critical value: 0.5833 Outside Similar: No	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Ascospores				53
	Basidiospores				53
	Stachybotrys				13
	<b>Total</b>				120

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM03

% 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: 0.3750 Critical value: 9.4877 Inside Similar: Yes	Result: 0.0000	dF: 10 Result: -0.2212 Critical value: 0.5515 Outside Similar: No	Score: 110 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Torula					13
<b>Total</b>					<b>27</b>

**Location:** 21403001-1 TM04

% 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: 0.3750 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6012 Critical value: 0.6190 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					<b>110</b>

**Location:** 21403001-1 TM05

% 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: 0.3750 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: -0.0583 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					<b>27</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM06

% 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: 4 Result: 0.3750 Critical value: 9.4877 Inside Similar: Yes	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
Ascospores					53
Basidiospores					53
Cladosporium					110
<b>Total</b>					210

\* 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.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample:** 21403001-1 TM01 OUT

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					2	27
Bipolaris/Drechslera group					ND	< 13
Chaetomium					1	13
Cladosporium					23	1,200
Curvularia					ND	< 13
Nigrospora					2	27
Penicillium/Aspergillus types†					6	320
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					26	1,400
Basidiospores					92	4,900
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					3	40
<b>Total</b>						<b>7,947</b>

**Location:** 21403001-1 TM02

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					ND	< 13
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					1	13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					1	53
Basidiospores					1	53
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					ND	< 13
<b>Total</b>						<b>120</b>

MoldSCORE‡			
100	200	300	Score
			100
			100
			100
			100
			100
			100
			100
			100
			121
			100
			113
			100
			100
			100
			100
<b>Final MoldSCORE</b>			<b>121</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM03

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula	█				1	13				105
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
<b>Total</b>						<b>27</b>				<b>Final MoldSCORE 110</b>

**Location:** 21403001-1 TM04

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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				108
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				100
Basidiospores	█				1	53				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
<b>Total</b>						<b>107</b>				<b>Final MoldSCORE 108</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-03-2014  
 Date of Receipt: 03-03-2014  
 Date of Report: 03-04-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM05

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Other brown	█				1	13				105
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes	█				1	13				103
<b>Total</b>						<b>27</b>				<b>Final MoldSCORE 108</b>

**Location:** 21403001-1 TM06

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium	█				2	110				105
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores	█				1	53				106
Basidiospores	█				1	53				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
<b>Total</b>						<b>213</b>				<b>Final MoldSCORE 105</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-03-2014  
Date of Receipt: 03-03-2014  
Date of Report: 03-04-2014

### **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.

‡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.



Report for:

**Mr. Kenny Hsi, Mr. Lakhpreet Sandhu**  
**Hygiene Technologies International, Inc.**  
3625 Del Amo Boulevard, Suite 180  
Torrance, CA 90503-8370

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Regarding: Project: 21403001-1  
EML ID: 1178183

Approved by:

Technical Manager  
Melissa Tracey

Dates of Analysis:  
Spore trap analysis: 03-06-2014

Service SOPs: Spore trap analysis (1038)  
AIHA-LAP, LLC accredited service, Lab ID #179768

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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 correction of results is not applied. 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.

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-04-2014  
 Date of Receipt: 03-05-2014  
 Date of Report: 03-06-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM 07 OUT		21403001-1 TM 08	
Comments (see below)	None		None	
Lab ID-Version‡:	5336841-1		5336842-1	
Analysis Date:	03/06/2014		03/06/2014	
	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13		
Ascospores	14	750	1	53
Basidiospores	10	530		
Chaetomium				
Cladosporium	41	2,200		
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Other brown	1	13		
Other colorless				
Penicillium/Aspergillus types†				
Pithomyces				
Rusts				
Smuts, Periconia, Myxomycetes	2	27	1	13
Stachybotrys	1	13		
Stemphylium				
Torula				
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	2+		2+	
Hyphal fragments/m3	13		< 13	
Pollen/m3	670		< 13	
Skin cells (1-4+)	< 1+		1+	
Sample volume (liters)	75		75	
<b>§ TOTAL SPORES/m3</b>		<b>3,500</b>		<b>67</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.  
 † 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.  
 ‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".  
 § Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-04-2014  
Date of Receipt: 03-05-2014  
Date of Report: 03-06-2014

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21403001-1 TM 07 OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: March in California† (n‡=19953)						Typical Outdoor Data for: The entire year in California† (n‡=200710)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>													
Alternaria	13	13	13	27	53	80	45	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	8	7	13	13	27	40	12
Chaetomium	-	7	13	13	27	40	11	8	13	13	27	47	19
Cladosporium	2,200	80	160	400	1,100	1,700	94	110	210	610	1,600	2,800	97
Curvularia	-	7	13	13	27	40	2	7	13	13	27	53	6
Nigrospora	-	7	10	13	13	27	4	7	13	13	27	53	8
Other brown	13	12	13	13	27	53	30	13	13	13	40	53	34
Penicillium/Aspergillus types	-	53	53	160	440	730	80	53	100	210	590	1,000	84
Stachybotrys	13	7	13	13	27	61	3	7	13	13	33	67	4
Torula	-	8	13	13	40	67	7	8	13	13	40	67	12
<b>Seldom found growing indoors**</b>													
Ascospores	750	27	53	160	480	810	78	25	53	110	360	690	71
Basidiospores	530	67	130	430	1,400	2,700	96	53	80	260	990	2,300	93
Rusts	-	13	13	13	42	80	22	13	13	13	53	80	26
Smuts, Periconia, Myxomycetes	27	13	13	27	67	110	54	13	13	40	110	210	68
<b>§ TOTAL SPORES/m3</b>	<b>3,500</b>												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 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, 20% 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

\* 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.

‡n = number of samples used to calculate data.

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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-04-2014  
 Date of Receipt: 03-05-2014  
 Date of Report: 03-06-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21403001-1 TM 07 OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 33 - 590	45
Ascospores				750	13 - 210 - 5,700	76
Basidiospores				530	17 - 450 - 24,000	92
Cladosporium				2,200	27 - 470 - 10,000	90
Other brown				13	7 - 13 - 130	24
Penicillium/Aspergillus types				< 13	13 - 170 - 2,700	68
Smuts, Periconia, Myxomycetes				27	7 - 53 - 930	64
Stachybotrys				13	7 - 13 - 550	3
<b>Total</b>				3,500		

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: 21403001-1 TM 08**

% 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: N/A Result: N/A Critical value: N/A Inside Similar: N/A	Result: 0.4444	dF: 7 Result: 0.5000 Critical value: 0.6786 Outside Similar: No	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Ascospores				53
	Smuts, Periconia, Myxomycetes				13
	<b>Total</b>				67

\* 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.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-04-2014  
Date of Receipt: 03-05-2014  
Date of Report: 03-06-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

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

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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-04-2014  
 Date of Receipt: 03-05-2014  
 Date of Report: 03-06-2014

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample:** 21403001-1 TM 07 OUT

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					1	13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					41	2,200
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown					1	13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					1	13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					14	750
Basidiospores					10	530
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					2	27
<b>Total</b>						<b>3,533</b>

**Location:** 21403001-1 TM 08

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					ND	< 13
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					1	53
Basidiospores					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					1	13
<b>Total</b>						<b>67</b>

MoldSCORE‡			
100	200	300	Score
			100
			100
			100
			100
			100
			100
			100
			100
			100
<b>Seldom found growing indoors**</b>			
			116
			100
			100
			102
<b>Final MoldSCORE</b>			<b>102</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-04-2014  
Date of Receipt: 03-05-2014  
Date of Report: 03-06-2014

### **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.

‡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.



Report for:

**Mr. Kenny Hsi, Mr. Lakhpreet Sandhu**  
**Hygiene Technologies International, Inc.**  
3625 Del Amo Boulevard, Suite 180  
Torrance, CA 90503-8370

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Regarding: Project: 21403001-1  
EML ID: 1180871

Approved by:

Technical Manager  
Melissa Tracey

Dates of Analysis:  
Spore trap analysis: 03-12-2014

Service SOPs: Spore trap analysis (1038)  
AIHA-LAP, LLC accredited service, Lab ID #179768

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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 correction of results is not applied. 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.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1Date of Sampling: 03-11-2014  
Date of Receipt: 03-11-2014  
Date of Report: 03-12-2014**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM09OUT		21403001-1 TM10		21403001-1 TM11	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5349518-1		5349519-1		5349520-1	
Analysis Date:	03/12/2014		03/12/2014		03/12/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores	19	1,000				
Basidiospores	28	1,500				
Botrytis						
Chaetomium						
Cladosporium	1	53				
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora	1	13				
Other brown	2	27				
Other colorless						
Penicillium/Aspergillus types†	3	160				
Pithomyces						
Rusts	1	13				
Smuts, Periconia, Myxomycetes	3	40	1	13	1	13
Stachybotrys						
Stemphylium						
Torula						
Ulocladium	2	27				
Zygomycetes						
Background debris (1-4+)††	1+		1+		2+	
Hyphal fragments/m3	13		< 13		< 13	
Pollen/m3	1,100		67		< 13	
Skin cells (1-4+)	< 1+		< 1+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>2,800</b>		<b>13</b>		<b>13</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-11-2014  
Date of Receipt: 03-11-2014  
Date of Report: 03-12-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM12		21403001-1 TM13		21403001-1 TM14	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5349521-1		5349522-1		5349523-1	
Analysis Date:	03/12/2014		03/12/2014		03/12/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Ascospores						
Basidiospores						
Botrytis						
Chaetomium						
Cladosporium						
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts	1	13			1	13
Smuts, Periconia, Myxomycetes	4	53				
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		2+		2+	
Hyphal fragments/m3	< 13		< 13		< 13	
Pollen/m3	13		13		< 13	
Skin cells (1-4+)	1+		1+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>67</b>		<b>&lt; 13</b>		<b>13</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-11-2014  
Date of Receipt: 03-11-2014  
Date of Report: 03-12-2014

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21403001-1 TM09OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: March in California† (n‡=19953)						Typical Outdoor Data for: The entire year in California† (n‡=200710)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>													
Alternaria	-	13	13	27	53	80	45	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	8	7	13	13	27	40	12
Chaetomium	-	7	13	13	27	40	11	8	13	13	27	47	19
Cladosporium	53	80	160	400	1,100	1,700	94	110	210	610	1,600	2,800	97
Curvularia	-	7	13	13	27	40	2	7	13	13	27	53	6
Nigrospora	13	7	10	13	13	27	4	7	13	13	27	53	8
Other brown	27	12	13	13	27	53	30	13	13	13	40	53	34
Penicillium/Aspergillus types	160	53	53	160	440	730	80	53	100	210	590	1,000	84
Stachybotrys	-	7	13	13	27	61	3	7	13	13	33	67	4
Torula	-	8	13	13	40	67	7	8	13	13	40	67	12
Ulocladium	27	7	13	13	27	27	6	8	13	13	27	40	10
<b>Seldom found growing indoors**</b>													
Ascospores	1,000	27	53	160	480	810	78	25	53	110	360	690	71
Basidiospores	1,500	67	130	430	1,400	2,700	96	53	80	260	990	2,300	93
Rusts	13	13	13	13	42	80	22	13	13	13	53	80	26
Smuts, Periconia, Myxomycetes	40	13	13	27	67	110	54	13	13	40	110	210	68
<b>§ TOTAL SPORES/m3</b>	2,800												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 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, 20% 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

\* 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.

‡n = number of samples used to calculate data.

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Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-11-2014  
 Date of Receipt: 03-11-2014  
 Date of Report: 03-12-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21403001-1 TM09OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores				1,000	13 - 210 - 5,800	76
Basidiospores				1,500	17 - 450 - 24,000	92
Cladosporium				53	27 - 480 - 10,000	90
Nigrospora				13	7 - 13 - 230	16
Other brown				27	7 - 13 - 130	24
Penicillium/Aspergillus types				160	13 - 170 - 2,700	68
Rusts				13	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				40	7 - 53 - 930	64
Ulocladium				27	7 - 13 - 93	4
<b>Total</b>				2,800		

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: 21403001-1 TM10**

% 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: 3.8000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.3583 Critical value: 0.5833 Outside Similar: No	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					13

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-11-2014  
 Date of Receipt: 03-11-2014  
 Date of Report: 03-12-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM11

% 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: 3.8000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.3583 Critical value: 0.5833 Outside Similar: No	Score: 103 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					13

**Location:** 21403001-1 TM12

% 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: 4 Result: 3.8000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.0083 Critical value: 0.5833 Outside Similar: No	Score: 110 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Rusts					13
Smuts, Periconia, Myxomycetes					53
<b>Total</b>					67

**Location:** 21403001-1 TM13

% 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: 3.8000 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	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					< 13

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-11-2014  
 Date of Receipt: 03-11-2014  
 Date of Report: 03-12-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM14

% 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: 3.8000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.0958 Critical value: 0.5833 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Rusts					13
<b>Total</b>					13

\* 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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-11-2014  
 Date of Receipt: 03-11-2014  
 Date of Report: 03-12-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM11

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes	█				1	13	█			103
<b>Total</b>						<b>13</b>				<b>Final MoldSCORE 103</b>

**Location:** 21403001-1 TM12

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes	█				4	53	█			110
<b>Total</b>						<b>67</b>				<b>Final MoldSCORE 110</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-11-2014  
 Date of Receipt: 03-11-2014  
 Date of Report: 03-12-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM13

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
<b>Total</b>						<b>N/A</b>				
							<b>Final MoldSCORE</b>	<b>100</b>		

**Location:** 21403001-1 TM14

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts					1	13	█			105
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
<b>Total</b>						<b>13</b>				
							<b>Final MoldSCORE</b>	<b>100</b>		

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-11-2014  
Date of Receipt: 03-11-2014  
Date of Report: 03-12-2014

### **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.

‡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.



Report for:

**Mr. Kenny Hsi, Mr. Lakhpreet Sandhu**  
**Hygiene Technologies International, Inc.**  
3625 Del Amo Boulevard, Suite 180  
Torrance, CA 90503-8370

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Regarding: Project: 21403001-1  
EML ID: 1183406

Approved by:

Technical Manager  
Melissa Tracey

Dates of Analysis:  
Spore trap analysis: 03-18-2014

Service SOPs: Spore trap analysis (1038)  
AIHA-LAP, LLC accredited service, Lab ID #179768

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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 correction of results is not applied. 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.

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1TM15OUT		21403001-1TM16		21403001-1TM17		21403001-1TM18	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	5362241-1		5362242-1		5362243-1		5362244-1	
Analysis Date:	03/18/2014		03/18/2014		03/18/2014		03/18/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Ascospores	1	53						
Basidiospores	26	1,400	1	53				
Chaetomium								
Cladosporium	13	690	1	53				
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium	3	40						
Other brown	1	13						
Other colorless								
Penicillium/Aspergillus types†							1	53
Pithomyces								
Rusts	2	27	2	27				
Smuts, Periconia, Myxomycetes								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		1+	
Hyphal fragments/m3	67		53		< 13		< 13	
Pollen/m3	2,200		110		27		< 13	
Skin cells (1-4+)	< 1+		1+		1+		< 1+	
Sample volume (liters)	75		75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>2,200</b>		<b>130</b>		<b>&lt; 13</b>		<b>53</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.  
 † 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.  
 ‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".  
 § Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1Date of Sampling: 03-17-2014  
Date of Receipt: 03-17-2014  
Date of Report: 03-18-2014**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1TM19		21403001-1TM20		21403001-1TM21	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5362245-1		5362246-1		5362247-1	
Analysis Date:	03/18/2014		03/18/2014		03/18/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria					1	13
Ascospores						
Basidiospores						
Chaetomium						
Cladosporium	1	53			1	53
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Oidium						
Other brown						
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts	2	27	1	13		
Smuts, Periconia, Myxomycetes						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	1+		1+		2+	
Hyphal fragments/m3	< 13		< 13		< 13	
Pollen/m3	13		13		40	
Skin cells (1-4+)	< 1+		< 1+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>80</b>		<b>13</b>		<b>67</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 sample volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-17-2014  
Date of Receipt: 03-17-2014  
Date of Report: 03-18-2014

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21403001-1TM15OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: March in California† (n‡=19953)						Typical Outdoor Data for: The entire year in California† (n‡=200710)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>													
Alternaria	-	13	13	27	53	80	45	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	8	7	13	13	27	40	12
Chaetomium	-	7	13	13	27	40	11	8	13	13	27	47	19
Cladosporium	690	80	160	400	1,100	1,700	94	110	210	610	1,600	2,800	97
Curvularia	-	7	13	13	27	40	2	7	13	13	27	53	6
Nigrospora	-	7	10	13	13	27	4	7	13	13	27	53	8
Other brown	13	12	13	13	27	53	30	13	13	13	40	53	34
Penicillium/Aspergillus types	-	53	53	160	440	730	80	53	100	210	590	1,000	84
Stachybotrys	-	7	13	13	27	61	3	7	13	13	33	67	4
Torula	-	8	13	13	40	67	7	8	13	13	40	67	12
<b>Seldom found growing indoors**</b>													
Ascospores	53	27	53	160	480	810	78	25	53	110	360	690	71
Basidiospores	1,400	67	130	430	1,400	2,700	96	53	80	260	990	2,300	93
Oidium	40	13	13	17	53	80	22	13	13	13	44	75	19
Rusts	27	13	13	13	42	80	22	13	13	13	53	80	26
Smuts, Periconia, Myxomycetes	-	13	13	27	67	110	54	13	13	40	110	210	68
<b>§ TOTAL SPORES/m3</b>	<b>2,200</b>												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 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, 20% 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

\* 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.

‡n = number of samples used to calculate data.

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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21403001-1TM15OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores					13 - 210 - 5,800	76
Basidiospores					17 - 450 - 24,000	92
Cladosporium					27 - 480 - 10,000	90
Oidium					7 - 13 - 230	12
Other brown					7 - 13 - 130	24
Penicillium/Aspergillus types					13 - 170 - 2,700	68
Rusts					7 - 20 - 360	20
Smuts, Periconia, Myxomycetes					7 - 53 - 930	64
<b>Total</b>						

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: 21403001-1TM16**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 5%	dF: 5 Result: 3.4286 Critical value: 11.0705 Inside Similar: Yes	Result: 0.6667	dF: 6 Result: 0.7000 Critical value: 0.7714 Outside Similar: No	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Basidiospores				
	Cladosporium				
	Rusts				
	<b>Total</b>				

**Location: 21403001-1TM17**

% 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: 5 Result: 3.4286 Critical value: 11.0705 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
	<b>None Detected</b>				

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1TM18

% 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: 5 Result: 3.4286 Critical value: 11.0705 Inside Similar: Yes	Result: 0.0000	dF: 7 Result: -0.0625 Critical value: 0.6786 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					53
<b>Total</b>					53

**Location:** 21403001-1TM19

% 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: 5 Result: 3.4286 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.2286 Critical value: 0.7714 Outside Similar: No	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Rusts					27
<b>Total</b>					80

**Location:** 21403001-1TM20

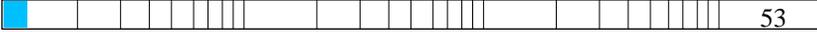
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: < 1%	dF: 5 Result: 3.4286 Critical value: 11.0705 Inside Similar: Yes	Result: 0.2857	dF: 6 Result: 0.0286 Critical value: 0.7714 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Rusts					13
<b>Total</b>					13

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1TM21

<b>% of outdoor total spores/m3</b>	<b>Friedman chi-square* (indoor variation)</b>	<b>Agreement ratio** (indoor/outdoor)</b>	<b>Spearman rank correlation*** (indoor/outdoor)</b>	<b>MoldSCORE**** (indoor/outdoor)</b>	
Result: 2%	dF: 5 Result: 3.4286 Critical value: 11.0705 Inside Similar: Yes	Result: 0.2500	dF: 7 Result: 0.1429 Critical value: 0.6786 Outside Similar: No	Score: 105 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Alternaria					13
Cladosporium					53
<b>Total</b>					67

\* 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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample:** 21403001-1TM15OUT

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium	█	█	█	█	13	690
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown	█				1	13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores	█				1	53
Basidiospores	█	█	█	█	26	1,400
Oidium	█				3	40
Rusts	█				2	27
Smuts, Periconia, Myxomycetes					ND	< 13
<b>Total</b>						<b>2,213</b>

**Location:** 21403001-1TM16

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					ND	< 13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium	█				1	53
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					ND	< 13
Basidiospores	█				1	53
Rusts	█				2	27
Smuts, Periconia, Myxomycetes					ND	< 13
<b>Total</b>						<b>133</b>

MoldSCORE‡			Score
100	200	300	
█			100
█			100
█			100
█			101
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█			100
█			110
█			100
<b>Final MoldSCORE</b>			<b>101</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1TM17

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
<b>Total</b>						<b>N/A</b>				<b>Final MoldSCORE 100</b>

**Location:** 21403001-1TM18

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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				108
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				100
Basidiospores					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes					ND	< 13				100
<b>Total</b>						<b>53</b>				<b>Final MoldSCORE 108</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1TM19

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				1	53	█			102
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts	█				2	27	█			110
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
<b>Total</b>						<b>80</b>	<b>Final MoldSCORE 102</b>			

**Location:** 21403001-1TM20

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts	█				1	13	█			105
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
<b>Total</b>						<b>13</b>	<b>Final MoldSCORE 100</b>			

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-17-2014  
 Date of Receipt: 03-17-2014  
 Date of Report: 03-18-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1TM21

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡		
	<100	1K	10K	>100K			100	200	300
<b>Generally able to grow indoors*</b>									
Alternaria	█				1	13	█		105
Bipolaris/Drechslera group					ND	< 13	█		100
Chaetomium					ND	< 13	█		100
Cladosporium	█				1	53	█		102
Curvularia					ND	< 13	█		100
Nigrospora					ND	< 13	█		100
Penicillium/Aspergillus types†					ND	< 13	█		100
Stachybotrys					ND	< 13	█		100
Torula					ND	< 13	█		100
<b>Seldom found growing indoors**</b>									
Ascospores					ND	< 13	█		100
Basidiospores					ND	< 13	█		100
Rusts					ND	< 13	█		100
Smuts, Periconia, Myxomycetes					ND	< 13	█		100
<b>Total</b>						<b>67</b>			
							<b>Final MoldSCORE</b>		<b>105</b>

\* 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.

‡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.



Report for:

**Mr. Kenny Hsi, Mr. Lakhpreet Sandhu**  
**Hygiene Technologies International, Inc.**  
3625 Del Amo Boulevard, Suite 180  
Torrance, CA 90503-8370

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Regarding: Project: 21403001-1  
EML ID: 1187181

Approved by:

Technical Manager  
Melissa Tracey

Dates of Analysis:  
Spore trap analysis: 03-26-2014

Service SOPs: Spore trap analysis (1038)  
AIHA-LAP, LLC accredited service, Lab ID #179768

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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 correction of results is not applied. 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.

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-24-2014  
 Date of Receipt: 03-25-2014  
 Date of Report: 03-26-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM22OUT		21403001-1 TM23		21403001-1 TM24		21403001-1 TM25	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	5383201-1		5383202-1		5383203-1		5383204-1	
Analysis Date:	03/26/2014		03/26/2014		03/26/2014		03/26/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13						
Ascospores								
Basidiospores	7	370						
Botrytis								
Chaetomium								
Cladosporium	290	15,000	1	13	2	110		
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other colorless								
Penicillium/Aspergillus types†	2	110						
Pithomyces								
Rusts	4	53						
Smuts, Periconia, Myxomycetes	26	350			2	27		
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		1+		1+		2+	
Hyphal fragments/m3	13		< 13		< 13		< 13	
Pollen/m3	3,800		< 13		330		27	
Skin cells (1-4+)	< 1+		< 1+		< 1+		1+	
Sample volume (liters)	75		75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>16,000</b>		<b>13</b>		<b>130</b>		<b>&lt; 13</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-24-2014  
Date of Receipt: 03-25-2014  
Date of Report: 03-26-2014

**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21403001-1 TM26		21403001-1 TM27		21403001-1 TM28	
Comments (see below)	None		None		None	
Lab ID-Version‡:	5383205-1		5383206-1		5383207-1	
Analysis Date:	03/26/2014		03/26/2014		03/26/2014	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13				
Ascospores						
Basidiospores						
Bipolaris/Drechslera group						
Botrytis						
Chaetomium						
Cladosporium			1	53		
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts			2	27	1	13
Smuts, Periconia, Myxomycetes	1	13			2	27
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	1+		1+		1+	
Hyphal fragments/m3	< 13		< 13		< 13	
Pollen/m3	40		53		13	
Skin cells (1-4+)	< 1+		< 1+		< 1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>27</b>		<b>80</b>		<b>40</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.

† 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 analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21403001-1

Date of Sampling: 03-24-2014  
Date of Receipt: 03-25-2014  
Date of Report: 03-26-2014

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21403001-1 TM22OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: March in California† (n‡=19953)						Typical Outdoor Data for: The entire year in California† (n‡=200710)					
		very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>													
Alternaria	13	13	13	27	53	80	45	13	13	27	67	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	8	7	13	13	27	40	12
Chaetomium	-	7	13	13	27	40	11	8	13	13	27	47	19
Cladosporium	15,000	80	160	400	1,100	1,700	94	110	210	610	1,600	2,800	97
Curvularia	-	7	13	13	27	40	2	7	13	13	27	53	6
Nigrospora	-	7	10	13	13	27	4	7	13	13	27	53	8
Penicillium/Aspergillus types	110	53	53	160	440	730	80	53	100	210	590	1,000	84
Stachybotrys	-	7	13	13	27	61	3	7	13	13	33	67	4
Torula	-	8	13	13	40	67	7	8	13	13	40	67	12
<b>Seldom found growing indoors**</b>													
Ascospores	-	27	53	160	480	810	78	25	53	110	360	690	71
Basidiospores	370	67	130	430	1,400	2,700	96	53	80	260	990	2,300	93
Rusts	53	13	13	13	42	80	22	13	13	13	53	80	26
Smuts, Periconia, Myxomycetes	350	13	13	27	67	110	54	13	13	40	110	210	68
<b>§ TOTAL SPORES/m3</b>	<b>16,000</b>												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 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, 20% 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.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

\* 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.

‡n = number of samples used to calculate data.

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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-24-2014  
 Date of Receipt: 03-25-2014  
 Date of Report: 03-26-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21403001-1 TM22OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 33 - 590	45
Ascospores				< 13	13 - 210 - 5,800	76
Basidiospores				370	17 - 450 - 24,000	92
Cladosporium				15,000	27 - 480 - 10,000	90
Penicillium/Aspergillus types				110	13 - 170 - 2,700	68
Rusts				53	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				350	7 - 53 - 930	64
<b>Total</b>				16,000		

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: 21403001-1 TM23**

% 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: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.2857	dF: 6 Result: 0.7143 Critical value: 0.7714 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				13
	<b>Total</b>				13

**Location: 21403001-1 TM24**

% 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: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.7143 Critical value: 0.7714 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				110
	Smuts, Periconia, Myxomycetes				27
	<b>Total</b>				130

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-24-2014  
 Date of Receipt: 03-25-2014  
 Date of Report: 03-26-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM25

% 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: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					< 13

**Location:** 21403001-1 TM26

% 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: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: -0.1857 Critical value: 0.7714 Outside Similar: No	Score: 108 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Alternaria					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					<b>27</b>

**Location:** 21403001-1 TM27

% 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: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.4286 Critical value: 0.7714 Outside Similar: No	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Cladosporium					53
Rusts					27
<b>Total</b>					<b>80</b>

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Date of Sampling: 03-24-2014  
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 Date of Report: 03-26-2014

**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location:** 21403001-1 TM28

<b>% of outdoor total spores/m3</b>	<b>Friedman chi-square* (indoor variation)</b>	<b>Agreement ratio** (indoor/outdoor)</b>	<b>Spearman rank correlation*** (indoor/outdoor)</b>	<b>MoldSCORE**** (indoor/outdoor)</b>	
Result: < 1%	dF: 5 Result: 3.0000 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.0286 Critical value: 0.7714 Outside Similar: No	Score: 105 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Rusts					13
Smuts, Periconia, Myxomycetes					27
<b>Total</b>					40

\* 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.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21403001-1

Date of Sampling: 03-24-2014  
 Date of Receipt: 03-25-2014  
 Date of Report: 03-26-2014

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample:** 21403001-1 TM22OUT

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					1	13
Bipolaris/Drechslera group					ND	< 13
Chaetomium					ND	< 13
Cladosporium					290	15,000
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†					2	110
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					ND	< 13
Basidiospores					7	370
Rusts					4	53
Smuts, Periconia, Myxomycetes					26	350
<b>Total</b>						<b>16,360</b>

**Location:** 21403001-1 TM23

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

MoldSCORE‡			
100	200	300	Score
			100
			100
			100
			100
			100
			100
			100
			100
			100
			100
			100
			100
			100
<b>Final MoldSCORE</b>			<b>100</b>

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**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM24

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				2	110	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes	█				2	27	█			105
<b>Total</b>						<b>133</b>				<b>Final MoldSCORE 105</b>

**Location:** 21403001-1 TM25

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
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
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13	█			100
Basidiospores					ND	< 13	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes					ND	< 13	█			100
<b>Total</b>						<b>N/A</b>				<b>Final MoldSCORE 100</b>

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 Date of Report: 03-26-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM26

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					1	13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					ND	< 13				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					ND	< 13				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				
Basidiospores					ND	< 13				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes					1	13				
<b>Total</b>						<b>27</b>	<b>Final MoldSCORE 108</b>			

**Location:** 21403001-1 TM27

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					1	53				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					ND	< 13				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores					ND	< 13				
Basidiospores					ND	< 13				
Rusts					2	27				
Smuts, Periconia, Myxomycetes					ND	< 13				
<b>Total</b>						<b>80</b>	<b>Final MoldSCORE 100</b>			

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 Re: 21403001-1

Date of Sampling: 03-24-2014  
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 Date of Report: 03-26-2014

**MoldSCORE™: Spore Trap Report**

**Location:** 21403001-1 TM28

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡		
	<100	1K	10K	>100K			100	200	300
<b>Generally able to grow indoors*</b>									
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
<b>Seldom found growing indoors**</b>									
Ascospores					ND	< 13	█		100
Basidiospores					ND	< 13	█		100
Rusts					1	13	█		105
Smuts, Periconia, Myxomycetes					2	27	█		105
<b>Total</b>						<b>40</b>			
								<b>Final MoldSCORE</b>	<b>105</b>

\* 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.

‡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.



# HYGIENE TECH

Hygiene Technologies International, Inc.



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(310) 370-2474 FAX  
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## Request For Analysis

Project Number/~~Purchase Order~~: 21403001-1 Date Submitted: 3/3/14  
 Project Contact: L. Sanchez / K. Hsi Turnaround Required: Normal  
 Lab Destination: EMBARB P&K Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
21403001-1 TM01	75L	Air-o-cell	Spore Trap Analysis (Total Fungi)
21403001-1 TM02	75L	Air-o-cell	
21403001-1 TM03	75L	Air-o-cell	
21403001-1 TM04	75L	Air-o-cell	
21403001-1 TM05	75L	Air-o-cell	
21403001-1 TM06	75L	Air-o-cell	

Special Instructions: Random Sampling CR-1

1. Sampled by: L. Sanchez on 3/3/14 @ 12:00 Received by: [Signature] 3/3/14 @ 12:07  
 2. Relinquished by: L. Sanchez on 3/3/14 @ 12:00 Received by: \_\_\_\_\_  
 3. Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Please include signature, date, and time

Lab Use Only:







# HYGIENE TECH

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## Request For Analysis

Project Number/Purchase Order: 21403001-1 Date Submitted: 3/17/14  
 Project Contact: L. Sandhu/K. Hsi Turnaround Required: Normal  
 Lab Destination: EM LAB P&K Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
21403001-TM05005	75L	Arso-cell	Spore Trap Analysis (70% Fungi)
21403001-TM16	75L	Arso-cell	
21403001-TM17	75L	Arso-cell	
21403001-TM18	75L	Arso-cell	
21403001-TM19	75L	Arso-cell	
21403001-TM20	75L	Arso-cell	
21403001-TM21	75L	Arso-cell	

Special Instructions: Remain Sampling (R-3)

1. Sampled by: H Sandhu on 3/17/14 @ 10:30 Received by: Michael Poo on 03/17/14 12:40 PM  
 2. Relinquished by: H Sandhu on 3/17/14 @ 12:15 Received by: \_\_\_\_\_  
 3. Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Please include signature, date, and time

Lab Use Only:

