



# HYGIENETECH

Hygiene Technologies International, Inc.

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August 16, 2016

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

Document No. 21605001.1

Attention: Edna B. Murphy  
Deputy Director Administration Department

Regarding: Limited Fungal Growth Exposure Assessment Surveys  
May 2016 Random Sampling

Dear Ms. Murphy:

On May 6, 10, 23, 31, and June 1, 2016, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted limited fungal growth exposure assessment surveys involving 24 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 21605001-1, the airborne spore count data recorded showed fungal spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Botrytis*, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium/Aspergillus* species, *Nigrospora*, *Oidium*, other brown, other colorless, rusts, smuts, and/or *Torula*. In the indoor areas tested, the data showed that airborne fungal spores were detected at low airborne concentrations. The fungal spore types found indoor *Alternaria*, ascospores, basidiospores, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium/Aspergillus* species, *Nigrospora*, other brown, other colorless, rusts, smuts, *Stachybotrys*, *Torula*, and/or *Trichocladium*. 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 5<sup>th</sup> Floor northern corridor area sample collected on May 6 and in the 20<sup>th</sup> Floor elevator lobby area sample collected on May 31, subsequent air sampling performed in both areas upon receipt of lab data on May 10 and June 1, respectively, indicated only low levels of fungal spores such as *Alternaria*, ascospores, basidiospores, *Cladosporium*, colorless



spores typical of *Penicillium/Aspergillus* species, and/or smuts. 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 21605001-1  
AIRBORNE TOTAL FUNGI RESULTS  
450 N STREET  
SACRAMENTO, CALIFORNIA  
MAY 6, 10, 23, 31, AND JUNE 1 2016**

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

SAMPLE NUMBER	21605001-1 TM01OUT	21605001-1 TM02	21605001-1 TM03	21605001-1 TM04
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 15 feet east of building approximately five feet above ground/Normal outdoor activities	5 <sup>th</sup> Floor; northern corridor adjacent to northwestern drinking fountain; approximately five feet above floor/ Normal office activities	6 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	7 <sup>th</sup> Floor; area between Column K19 and K20; Cubicle 43; entry area; approximately five feet above floor/Normal office activities
<b>DATE</b>	05/06/16	05/06/16	05/06/16	05/06/16
<b>START/STOP</b>	15:31:00/15:36:00	15:40:00/15:45:00	15:50:00/15:55:00	15:57:00/16:02:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	27			
Ascospores	690	53		
Basidiospores	530			
Bipolaris/Drechslera group				
Botrytis	13			
Chaetomium	13			
Cladosporium	3,200			53
Curvularia				
Epicoccum				
Fusarium				
Nigrospora				
Oidium	13			
Other brown			13	
Other colorless				
Penicillium/Aspergillus types	110		53	
Pithomyces				
Rusts	27			
Smuts (Periconia, Myxomycetes)	150	27	67	
Stachybotrys		13		
Stemphylium				
Torula			13	
Ulocladium				
Hyphal fragments	<13	13	<13	<13
Background debris*	2+	3+	3+	2+
<b>TOTAL **</b>	4,800	93	150	53

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

\*\*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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450 N STREET  
SACRAMENTO, CALIFORNIA  
MAY 6, 10, 23, 31, AND JUNE 1 2016

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

SAMPLE NUMBER	21605001-1 TM05	21605001-1 TM06	21605001-1 TM07OUT	21605001-1 TM08
<b>SAMPLING LOCATION/ACTIVITIES</b>	8 <sup>th</sup> Floor; Column K21 area; Cubicle 48; approximately five feet above floor/Normal office activities	9 <sup>th</sup> Floor; Column N23 area; Cubicle 86 entry area; approximately five feet above floor/Normal office activities	Outdoors; about 25 feet northeast of main entrance; approximately five feet above ground/Normal outdoor activities	1 <sup>st</sup> Floor; Cafeteria corridor adjacent to Room 114; approximately five feet above floor/Normal office activities
<b>DATE</b>	05/06/16	05/06/16	05/10/16	05/10/16
<b>START/STOP</b>	16:05:00/16:10:00	16:13:00/16:18:00	16:20:00/16:25:00	16:27:00/16:32:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			170	13
Ascospores			750	
Basidiospores			4,900	210
Bipolaris/Drechslera group				
Botrytis			13	
Chaetomium			13	
Cladosporium			15,000	210
Epicoccum				
Fusarium				
Nigrospora			13	
Oidium			13	
Other brown			53	
Other colorless			13	
Penicillium/Aspergillus types			1,100	
Pithomyces				
Rusts	13		13	
Smuts (Periconia, Myxomycetes)		13	4,500	120
Stachybotrys				
Stemphylium				
Torula			13	
Trichocladium				
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	<13	120	40
Background debris*	2+	2+	3+	2+
<b>TOTAL**</b>	13	13	27,000	560

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

SAMPLE NUMBER	21605001-1 TM09	21605001-1 TM10	21605001-1 TM11	21605001-1 TM12
<b>SAMPLING LOCATION/ACTIVITIES</b>	2 <sup>nd</sup> Floor; Elevator Lobby; approximately five feet above floor/Normal office activities	3 <sup>rd</sup> Floor; Break Room 304; about center; approximately five feet above floor/Normal office activities	4 <sup>th</sup> Floor; Column N19 area; Print Station/Cubicle 31; about center; approximately five feet above floor/Normal office activities	5 <sup>th</sup> Floor; northern corridor adjacent to northwestern drinking fountain; approximately five feet above floor/ Normal office activities
<b>DATE</b>	05/10/16	05/10/16	05/10/16	05/10/16
<b>START/STOP</b>	16:35:00/16:40:00	16:42:00/16:47:00	16:49:00/16:54:00	16:56:00/17:01:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13			
Ascospores				
Basidiospores	53			53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	160			110
Curvularia				
Epicoccum				
Fusarium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types			53	
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	53	27	40	67
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	13	<13	<13	13
Background debris*	3+	2+	2+	3+
<b>TOTAL **</b>	280	27	93	230

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

SAMPLE NUMBER	21605001-1 TM13OUT	21605001-1 TM14	21605001-1 TM15	21605001-1 TM16
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 15 feet south of the building; approximately five feet above ground/Normal outdoor activities	10 <sup>th</sup> Floor; Column J18 area; Cubicle 6; about two feet north of Column J18; approximately five feet above floor/Normal office activities	11 <sup>th</sup> Floor; Break Rom 1103; about center; approximately five feet above floor/Normal office activities	14 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities
<b>DATE</b>	05/23/16	05/23/16	05/23/16	05/23/16
<b>START/STOP</b>	09:47:00/09:52:00	10:00:00/10:05:00	10:08:00/10:13:00	10:16:00/10:21:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13			
Ascospores	210		110	
Basidiospores	2,000			
Botrytis				
Chaetomium	13			
Cladosporium	960	210		160
Curvularia				
Epicoccum				
Nigrospora				
Oidium				
Other brown	13	13	13	
Other colorless			13	
Penicillium/Aspergillus types	110	530	53	
Pithomyces				
Rusts	13			27
Smuts (Periconia, Myxomycetes)	110		27	27
Stachybotrys				
Stemphylium				
Torula				
Trichocladium			13	
Ulocladium				
Zygomycetes				
Hyphal fragments	13	<13	<13	<13
Background debris*	3+	3+	3+	3+
<b>TOTAL**</b>	3,400	760	230	210

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

SAMPLE NUMBER	21605001-1 TM17	21605001-1 TM18	21605001-1 TM19	21605001-1 TM20OUT
<b>SAMPLING LOCATION/ACTIVITIES</b>	15 <sup>th</sup> Floor; Area between Column K22 and K23; about center; approximately five feet above floor/Normal office activities	16 <sup>th</sup> Floor; Column K20 area; about 20 feet northeast of Column K20; approximately five feet above floor/Normal office activities	17 <sup>th</sup> Floor; Column N18 area; about three feet southwest of Column N18; approximately five feet above floor/Normal office activities	Outdoors; about 25 feet northeast of the main entrance; approximately five feet above ground/Normal outdoor activities
<b>DATE</b>	05/23/16	05/23/16	05/23/16	05/31/16
<b>START/STOP</b>	10:23:00/10:28:00	10:35:00/10:40:00	10:43:00/10:48:00	13:48:00/13:53:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				13
Ascospores				270
Basidiospores	210			2,200
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				93
Cladosporium				2,000
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				67
Other brown			13	13
Other colorless				
Penicillium/Aspergillus types		53	53	
Polythrincium				
Rusts	13			40
Smuts (Periconia, Myxomycetes)	13			170
Stachybotrys				
Stemphylium				
Torula				40
Ulocladium			13	
Zygomycetes				
Hyphal fragments	<13	<13	<13	80
Background debris*	2+	2+	2+	4+
<b>TOTAL**</b>	240	53	67	4,900

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

SAMPLE NUMBER	21605001-1 TM21	21605001-1 TM22	21605001-1 TM23	21605001-1 TM24
<b>SAMPLING LOCATION/ACTIVITIES</b>	18 <sup>th</sup> Floor; Break Room 1814; about center; approximately five feet above floor/Sampling activities only	19 <sup>th</sup> Floor; Quiet Room 1908; about center; approximately five feet above floor/Normal office activities	20 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	21 <sup>st</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities
<b>DATE</b>	05/31/16	05/31/16	05/31/16	05/31/16
<b>START/STOP</b>	13:56:00/14:01:00	14:04:00/14:09:00	14:12:00/14:17:00	14:19:00/14:24:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria		13		13
Ascospores			480	
Basidiospores	53	53	160	110
Bipolaris/Drechslera group				
Botrytis				
Chaetomium			13	
Cladosporium		53	160	320
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora	13			
Oidium				
Other brown	13	13		13
Penicillium/Aspergillus types	160		320	690
Pithomyces				
Rusts	13			13
Smuts (Periconia, Myxomycetes)	27	67	67	13
Stachybotrys			13	
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	<13	13	<13	13
Background debris*	3+	3+	3+	3+
<b>TOTAL**</b>	280	200	1,200	1,200

\*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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SAMPLE NUMBER	21605001-1 TM25	21605001-1 TM26	21605001-1 TM27	21605001-1 TM28OUT
<b>SAMPLING LOCATION/ACTIVITIES</b>	22 <sup>nd</sup> Floor; Column J20; Cubicle 78 entry area; approximately five feet above floor/ Normal office activities	23 <sup>rd</sup> Floor; Break Room 2302; about center; approximately five feet above floor/ Normal office activities	24 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	Outdoors; about 15 feet east of the building; approximately five feet above ground/Normal outdoor activities
<b>DATE</b>	05/31/16	05/31/16	05/31/16	06/01/16
<b>START/STOP</b>	14:26:00/14:31:00	14:36:00/14:41:00	14:44:00/14:49:00	14:45:00/14:50:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	
Ascospores		53	270	53
Basidiospores			370	210
Bipolaris/Drechslera group				
Botrytis				
Chaetomium			13	40
Cladosporium	53	110	430	910
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				13
Other brown				40
Penicillium/Aspergillus types	53		160	
Pithomyces				
Rusts		27		200
Smuts (Periconia, Myxomycetes)		13	67	130
Stachybotrys				
Stemphylium				
Torula				53
Ulocladium				
Hyphal fragments	<13	<13	13	120
Background debris*	2+	3+	3+	2+
<b>TOTAL**</b>	110	200	1,300	1,700

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SAMPLE NUMBER	21605001-1 TM29			
SAMPLING LOCATION/ACTIVITIES	20 <sup>th</sup> Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	This Column Intentionally left blank	This Column Intentionally left blank	This Column Intentionally left blank
DATE	06/01/16			
START/STOP	14:55:00/15:00:00			
SAMPLE TIME	5 minutes			
Alternaria	27			
Ascospores	53			
Basidiospores	160			
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	160			
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types	160			
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	27			
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	13			
Background debris*	2+			
<b>TOTAL**</b>	590			

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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: 21605001-1; Random Sampling (Round 1)  
EML ID: 1537141

Approved by:

Dates of Analysis:  
Spore trap analysis: 05-10-2016

Technical Manager  
Louise White

Service SOPs: Spore trap analysis (EM-MY-S-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.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

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

Location:	21605001-1TM01OUT		21605001-1TM02		21605001-1TM03	
Comments (see below)	None		None		None	
Lab ID-Version‡:	7120778-1		7120779-1		7120780-1	
Analysis Date:	05/10/2016		05/10/2016		05/10/2016	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27				
Ascospores	13	690	1	53		
Basidiospores	10	530				
Botrytis	1	13				
Chaetomium	1	13				
Cladosporium	60	3,200				
Myrothecium						
Nigrospora						
Oidium	1	13				
Other brown					1	13
Other colorless						
Penicillium/Aspergillus types†	2	110			1	53
Pithomyces						
Rusts	2	27				
Smuts, Periconia, Myxomycetes	11	150	2	27	5	67
Stachybotrys			1	13		
Stemphylium						
Torula					1	13
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		3+		3+	
Hyphal fragments/m3	< 13		13		< 13	
Pollen/m3	67		13		13	
Skin cells (1-4+)	< 1+		1+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>4,800</b>		<b>93</b>		<b>150</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> 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: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

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

Location:	21605001-1TM04		21605001-1TM05		21605001-1TM06	
Comments (see below)	None		None		None	
Lab ID-Version‡:	7120781-1		7120782-1		7120783-1	
Analysis Date:	05/10/2016		05/10/2016		05/10/2016	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores						
Botrytis						
Chaetomium						
Cladosporium	1	53				
Myrothecium						
Nigrospora						
Oidium						
Other brown						
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts			1	13		
Smuts, Periconia, Myxomycetes					1	13
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>53</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, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> 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: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
Date of Receipt: 05-09-2016  
Date of Report: 05-10-2016

**MoldRANGE™: Extended Outdoor Comparison**  
**Outdoor Location: 21605001-1TM01OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: May in California† (n‡=19170)						Typical Outdoor Data for: The entire year in California† (n‡=230447)					
		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	33	80	130	62	13	13	27	65	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	12	7	13	13	27	53	12
Chaetomium	13	8	13	13	27	40	22	8	13	13	27	48	19
Cladosporium	3,200	110	210	530	1,400	2,300	97	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	27	40	3	7	13	13	27	53	6
Nigrospora	-	7	13	13	13	27	4	7	13	13	27	53	9
Other brown	-	13	13	13	40	53	35	13	13	13	40	53	34
Penicillium/Aspergillus types	110	53	53	170	460	750	79	53	100	210	610	1,000	84
Stachybotrys	-	7	13	13	29	67	5	7	13	13	33	67	4
Torula	-	13	13	14	53	80	18	8	13	13	40	67	11
<b>Seldom found growing indoors**</b>													
Ascospores	690	25	53	110	320	590	72	27	53	110	370	750	71
Basidiospores	530	40	56	200	640	1,200	91	53	80	260	1,000	2,400	93
Botrytis	13	13	13	27	53	80	19	13	13	20	53	80	16
Oidium	13	13	13	25	53	80	31	13	13	13	50	80	19
Rusts	27	13	13	27	53	100	39	13	13	13	53	87	26
Smuts, Periconia, Myxomycetes	150	13	27	67	210	390	79	13	13	40	110	200	68
<b>§ TOTAL SPORES/m3</b>	<b>4,800</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: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

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

**Outdoor Summary: 21605001-1TM01OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				27	7 - 40 - 590	44
Ascospores				690	13 - 210 - 6,100	76
Basidiospores				530	13 - 430 - 24,000	92
Botrytis				13	7 - 27 - 270	5
Chaetomium				13	7 - 13 - 160	9
Cladosporium				3,200	27 - 480 - 9,900	90
Oidium				13	7 - 13 - 210	11
Penicillium/Aspergillus types				110	13 - 170 - 2,600	67
Rusts				27	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				150	7 - 53 - 930	64
<b>Total</b>				4,800		

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: 21605001-1TM02**

% 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: 3.3500 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.3341 Critical value: 0.5273 Outside Similar: No	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Ascospores				53
	Smuts, Periconia, Myxomycetes				27
	Stachybotrys				13
	<b>Total</b>				93

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

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

**Location: 21605001-1TM03**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 3%	dF: 4 Result: 3.3500 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2857	dF: 12 Result: 0.0087 Critical value: 0.4965 Outside Similar: No	Score: 122 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					67
Torula					13
<b>Total</b>					<b>150</b>

**Location: 21605001-1TM04**

% 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: 3.3500 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.6515 Critical value: 0.5515 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
<b>Total</b>					<b>53</b>

**Location: 21605001-1TM05**

% 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: 3.3500 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.3182 Critical value: 0.5515 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Rusts					13
<b>Total</b>					<b>13</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

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

**Location:** 21605001-1TM06

<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: 4 Result: 3.3500 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.4697 Critical value: 0.5515 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

\* 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: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample: 21605001-1TM01OUT**

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	██████████				60	3,200
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†	█				2	110
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores	██████				13	690
Basidiospores	██████				10	530
Botrytis	█				1	13
Oidium	█				1	13
Rusts	█				2	27
Smuts, Periconia, Myxomycetes	█				11	150
<b>Total</b>						<b>4,773</b>

**Location: 21605001-1TM02**

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					ND	< 13
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes	█				2	27
<b>Total</b>						<b>93</b>

MoldSCORE‡		Score
100	200	
█		100
█		100
█		100
█		100
█		100
█		100
█		100
█	█	121
█		100
█		116
█		100
█		100
█		105
<b>Final MoldSCORE</b>		<b>121</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM03

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
Other brown	█				1	13			105
Penicillium/Aspergillus types†	█				1	53			108
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	█				5	67			112
<b>Total</b>						<b>147</b>			<b>Final MoldSCORE 122</b>

**Location:** 21605001-1TM04

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	█				1	53			101
Curvularia					ND	< 13			100
Nigrospora					ND	< 13			100
Penicillium/Aspergillus types†					ND	< 13			100
Stachybotrys					ND	< 13			100
Torula					ND	< 13			100
<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 101</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
 Date of Receipt: 05-09-2016  
 Date of Report: 05-10-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM05

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			Score
	<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					ND	< 13				100
<b>Total</b>						<b>13</b>				
<b>Final MoldSCORE</b>										<b>100</b>

**Location:** 21605001-1TM06

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			Score
	<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					ND	< 13				100
Smuts, Periconia, Myxomycetes					1	13				103
<b>Total</b>						<b>13</b>				
<b>Final MoldSCORE</b>										<b>103</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21605001-1; Random Sampling (Round 1)

Date of Sampling: 05-06-2016  
Date of Receipt: 05-09-2016  
Date of Report: 05-10-2016

### **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: 201605001-1; Random Sampling (Round 2)  
EML ID: 1538468

Approved by:

Technical Manager  
Louise White

REVISED REPORT

Dates of Analysis:  
Spore trap analysis: 05-25-2016

Service SOPs: Spore trap analysis (EM-MY-S-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.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 201605001-1; Random Sampling (Round 2)

Date of Sampling: 05-10-2016  
Date of Receipt: 05-11-2016  
Date of Report: 05-12-2016

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

Location:	21605001-1TM07OUT		21605001-1TM08		21605001-1TM09	
Comments (see below)	None		None		None	
Lab ID-Version†:	7128301-2		7128302-2		7128303-2	
Analysis Date:	05/25/2016		05/25/2016		05/25/2016	
	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>
Alternaria	13	170	1	13	1	13
Ascospores	14	750				
Basidiospores	92	4,900	4	210	1	53
Botrytis	1	13				
Chaetomium	1	13				
Cladosporium	286	15,000	4	210	3	160
Myrothecium						
Nigrospora	1	13				
Oidium	1	13				
Other brown	4	53				
Other colorless	1	13				
Penicillium/Aspergillus types†	21	1,100				
Pithomyces						
Rusts	1	13				
Smuts, Periconia, Myxomycetes	84	4,500	9	120	4	53
Stachybotrys						
Stemphylium						
Torula	1	13				
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		2+		3+	
Hyphal fragments/m <sup>3</sup>	120		40		13	
Pollen/m <sup>3</sup>	53		< 13		13	
Skin cells (1-4+)	< 1+		1+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m<sup>3</sup></b>		<b>27,000</b>		<b>560</b>		<b>280</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
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Date of Sampling: 05-10-2016  
Date of Receipt: 05-11-2016  
Date of Report: 05-12-2016

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

Location:	21605001-1TM10		21605001-1TM11		21605001-1TM12	
Comments (see below)	None		None		None	
Lab ID-Version†:	7128304-2		7128305-2		7128306-2	
Analysis Date:	05/25/2016		05/25/2016		05/25/2016	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores					1	53
Botrytis						
Chaetomium						
Cladosporium					2	110
Myrothecium						
Nigrospora						
Oidium						
Other brown						
Other colorless						
Penicillium/Aspergillus types†			1	53		
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	2	27	3	40	5	67
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+		1+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>27</b>		<b>93</b>		<b>230</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> has been rounded to two significant figures to reflect analytical precision.

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Date of Sampling: 05-10-2016  
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**MoldRANGE™: Extended Outdoor Comparison**

**Outdoor Location: 21605001-1TM07OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: May in California† (n‡=19170)						Typical Outdoor Data for: The entire year in California† (n‡=230447)						
		spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
<b>Generally able to grow indoors*</b>														
Alternaria	170	13	13	33	80	130	62	13	13	27	65	110	53	
Bipolaris/Drechslera group	-	7	13	13	27	40	12	7	13	13	27	53	12	
Chaetomium	13	8	13	13	27	40	22	8	13	13	27	48	19	
Cladosporium	15,000	110	210	530	1,400	2,300	97	110	210	610	1,700	2,800	97	
Curvularia	-	7	13	13	27	40	3	7	13	13	27	53	6	
Nigrospora	13	7	13	13	13	27	4	7	13	13	27	53	9	
Other brown	53	13	13	13	40	53	35	13	13	13	40	53	34	
Other colorless	13	9	13	13	27	53	6	10	13	13	38	53	5	
Penicillium/Aspergillus types	1,100	53	53	170	460	750	79	53	100	210	610	1,000	84	
Stachybotrys	-	7	13	13	29	67	5	7	13	13	33	67	4	
Torula	13	13	13	14	53	80	18	8	13	13	40	67	11	
<b>Seldom found growing indoors**</b>														
Ascospores	750	25	53	110	320	590	72	27	53	110	370	750	71	
Basidiospores	4,900	40	56	200	640	1,200	91	53	80	260	1,000	2,400	93	
Botrytis	13	13	13	27	53	80	19	13	13	20	53	80	16	
Oidium	13	13	13	25	53	80	31	13	13	13	50	80	19	
Rusts	13	13	13	27	53	100	39	13	13	13	53	87	26	
Smuts, Periconia, Myxomycetes	4,500	13	27	67	210	390	79	13	13	40	110	200	68	
<b>§ TOTAL SPORES/m3</b>	<b>27,000</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.  
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 Re: 201605001-1; Random Sampling (Round 2)

Date of Sampling: 05-10-2016  
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**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Outdoor Summary: 21605001-1TM07OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				170	7 - 40 - 590	44
Ascospores				750	13 - 210 - 6,100	76
Basidiospores				4,900	13 - 430 - 24,000	92
Botrytis				13	7 - 27 - 280	5
Chaetomium				13	7 - 13 - 160	9
Cladosporium				15,000	27 - 480 - 9,900	90
Nigrospora				13	7 - 13 - 240	16
Oidium				13	7 - 13 - 210	11
Other brown				53	7 - 19 - 130	25
Other colorless				13	7 - 27 - 720	4
Penicillium/Aspergillus types				1,100	13 - 170 - 2,600	67
Rusts				13	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				4,500	7 - 53 - 950	64
Torula				13	7 - 13 - 170	9
<b>Total</b>				27,000		

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: 21605001-1TM08**

% 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: 8.5200 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4444	dF: 14 Result: 0.8308 Critical value: 0.4593 Outside Similar: Yes	Score: 111 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Alternaria				13
	Basidiospores				210
	Cladosporium				210
	Smuts, Periconia, Myxomycetes				120
	<b>Total</b>				560

Client: Hygiene Technologies International, Inc.  
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 Re: 201605001-1; Random Sampling (Round 2)

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

**Location: 21605001-1TM09**

% 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: 8.5200 Critical value: 9.4877 Inside Similar: Yes	Result: 0.4444	dF: 14 Result: 0.8308 Critical value: 0.4593 Outside Similar: Yes	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Basidiospores					53
Cladosporium					160
Smuts, Periconia, Myxomycetes					53
<b>Total</b>					280

**Location: 21605001-1TM10**

% 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: 8.5200 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1333	dF: 14 Result: 0.6000 Critical value: 0.4593 Outside Similar: Yes	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Smuts, Periconia, Myxomycetes					27
<b>Total</b>					27

**Location: 21605001-1TM11**

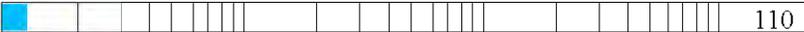
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: < 1%	dF: 4 Result: 8.5200 Critical value: 9.4877 Inside Similar: Yes	Result: 0.2500	dF: 14 Result: 0.6198 Critical value: 0.4593 Outside Similar: Yes	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					40
<b>Total</b>					93

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 Re: 201605001-1; Random Sampling (Round 2)

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

**Location:** 21605001-1TM12

% 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: 8.5200 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3529	dF: 14 Result: 0.8154 Critical value: 0.4593 Outside Similar: Yes	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Cladosporium					110
Smuts, Periconia, Myxomycetes					67
<b>Total</b>					230

\* 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.  
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 Re: 201605001-1; Random Sampling (Round 2)

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**MoldSCORE™: Spore Trap Report**

**Outdoor Sample: 21605001-1TM07OUT**

Fungi Identified	Outdoor sample spores/m3				Raw count	Spores/m3
	<100	1K	10K	>100K		
<b>Generally able to grow indoors*</b>						
Alternaria					13	170
Bipolaris/Drechslera group					ND	< 13
Chaetomium					1	13
Cladosporium					286	15,000
Curvularia					ND	< 13
Nigrospora					1	13
Other brown					4	53
Other colorless					1	13
Penicillium/Aspergillus types†					21	1,100
Stachybotrys					ND	< 13
Torula					1	13
<b>Seldom found growing indoors**</b>						
Ascospores					14	750
Basidiospores					92	4,900
Botrytis					1	13
Oidium					1	13
Rusts					1	13
Smuts, Periconia, Myxomycetes					84	4,500
<b>Total</b>						<b>26,827</b>

**Location: 21605001-1TM08**

Fungi Identified	Indoor 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					4	210
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					4	210
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes					9	120
<b>Total</b>						<b>560</b>

MoldSCORE‡			
100	200	300	Score
			104
			100
			100
			100
			100
			100
			100
			100
			100
			100
			111
			100
			105
<b>Final MoldSCORE</b>			<b>111</b>

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**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM09

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			Score
	<100	1K	10K	>100K			100	200	300	
<b>Generally able to grow indoors*</b>										
Alternaria	█				1	13	█			104
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium	█				3	160	█			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	█				1	53	█			100
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes	█				4	53	█			101
<b>Total</b>						<b>280</b>				<b>Final MoldSCORE 106</b>

**Location:** 21605001-1TM10

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			Score
	<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					ND	< 13	█			100
Smuts, Periconia, Myxomycetes	█				2	27	█			104
<b>Total</b>						<b>27</b>				<b>Final MoldSCORE 104</b>

Client: Hygiene Technologies International, Inc.  
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**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM11

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†	█				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	█				3	40			105
<b>Total</b>						<b>93</b>			<b>Final MoldSCORE 108</b>

**Location:** 21605001-1TM12

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	█				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	█				1	53			101
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes	█				5	67			106
<b>Total</b>						<b>227</b>			<b>Final MoldSCORE 106</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 201605001-1; Random Sampling (Round 2)

Date of Sampling: 05-10-2016  
Date of Receipt: 05-11-2016  
Date of Report: 05-12-2016

### **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: 21605001-1  
EML ID: 1543974

Approved by:

Dates of Analysis:  
Spore trap analysis: 05-24-2016

Technical Manager  
Louise White

Service SOPs: Spore trap analysis (EM-MY-S-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.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

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

Location:	21605001-TM13OUT		21605001-TM14		21605001-TM15		21605001-TM16	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	7156551-1		7156552-1		7156553-1		7156554-1	
Analysis Date:	05/24/2016		05/24/2016		05/24/2016		05/24/2016	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13						
Ascospores	4	210			2	110		
Basidiospores	37	2,000						
Chaetomium	1	13						
Cladosporium	18	960	4	210			3	160
Myrothecium								
Nigrospora								
Other brown	1	13	1	13	1	13		
Other colorless					1	13		
Penicillium/Aspergillus types†	2	110	10	530	1	53		
Pithomyces								
Rusts	1	13					2	27
Smuts, Periconia, Myxomycetes	8	110			2	27	2	27
Stachybotrys								
Stemphylium								
Torula								
Trichocladium					1	13		
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		3+		3+		3+	
Hyphal fragments/m3	13		< 13		< 13		< 13	
Pollen/m3	13		27		13		27	
Skin cells (1-4+)	< 1+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>3,400</b>		<b>760</b>		<b>230</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, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> 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: 21605001-1Date of Sampling: 05-23-2016  
Date of Receipt: 05-23-2016  
Date of Report: 05-24-2016**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21605001-TM17		21605001-TM18		21605001-TM19	
Comments (see below)	None		None		None	
Lab ID-Version†:	7156555-1		7156556-1		7156557-1	
Analysis Date:	05/24/2016		05/24/2016		05/24/2016	
	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>
Alternaria						
Ascospores						
Basidiospores	4	210				
Chaetomium						
Cladosporium						
Fusarium						
Myrothecium						
Nigrospora						
Other brown					1	13
Other colorless						
Penicillium/Aspergillus types†			1	53	1	53
Pithomyces						
Rusts	1	13				
Smuts, Periconia, Myxomycetes	1	13				
Stachybotrys						
Stemphylium						
Torula						
Trichocladium						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		2+		2+	
Hyphal fragments/m <sup>3</sup>	< 13		< 13		< 13	
Pollen/m <sup>3</sup>	< 13		< 13		< 13	
Skin cells (1-4+)	2+		2+		2+	
Sample volume (liters)	75		75		75	
<b>§ TOTAL SPORES/m<sup>3</sup></b>		<b>240</b>		<b>53</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, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> 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: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

**MoldRANGE™: Extended Outdoor Comparison**

**Outdoor Location: 21605001-TM13OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: May in California† (n‡=19170)						Typical Outdoor Data for: The entire year in California† (n‡=230447)					
		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	33	80	130	62	13	13	27	65	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	12	7	13	13	27	53	12
Chaetomium	13	8	13	13	27	40	22	8	13	13	27	48	19
Cladosporium	960	110	210	530	1,400	2,300	97	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	27	40	3	7	13	13	27	53	6
Nigrospora	-	7	13	13	13	27	4	7	13	13	27	53	9
Other brown	13	13	13	13	40	53	35	13	13	13	40	53	34
Other colorless	-	9	13	13	27	53	6	10	13	13	38	53	5
Penicillium/Aspergillus types	110	53	53	170	460	750	79	53	100	210	610	1,000	84
Stachybotrys	-	7	13	13	29	67	5	7	13	13	33	67	4
Torula	-	13	13	14	53	80	18	8	13	13	40	67	11
Trichocladium	-	7	13	13	13	27	2	7	13	13	13	27	2
<b>Seldom found growing indoors**</b>													
Ascospores	210	25	53	110	320	590	72	27	53	110	370	750	71
Basidiospores	2,000	40	56	200	640	1,200	91	53	80	260	1,000	2,400	93
Rusts	13	13	13	27	53	100	39	13	13	13	53	87	26
Smuts, Periconia, Myxomycetes	110	13	27	67	210	390	79	13	13	40	110	200	68
<b>§ TOTAL SPORES/m3</b>	<b>3,400</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: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

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

**Outdoor Summary: 21605001-TM13OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 40 - 590	44
Ascospores				210	13 - 210 - 6,100	76
Basidiospores				2,000	13 - 430 - 24,000	92
Chaetomium				13	7 - 13 - 160	9
Cladosporium				960	27 - 480 - 9,900	90
Other brown				13	7 - 19 - 130	25
Penicillium/Aspergillus types				110	13 - 170 - 2,600	67
Rusts				13	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				110	7 - 53 - 950	64
<b>Total</b>				<b>3,400</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: 21605001-TM14**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 21%	dF: 5 Result: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 9 Result: 0.3167 Critical value: 0.5833 Outside Similar: No	Score: 177 Result: Medium	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				210
	Other brown				13
	Penicillium/Aspergillus types				530
	<b>Total</b>				<b>760</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

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

**Location: 21605001-TM15**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 5 Result: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5333	dF: 11 Result: 0.0955 Critical value: 0.5273 Outside Similar: No	Score: 118 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					110
Other brown					13
Other colorless					13
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					27
Trichocladium					13
<b>Total</b>					230

**Location: 21605001-TM16**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 5 Result: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 9 Result: 0.3375 Critical value: 0.5833 Outside Similar: No	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					160
Rusts					27
Smuts, Periconia, Myxomycetes					27
<b>Total</b>					210

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

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

**Location: 21605001-TM17**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 6%	dF: 5 Result: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.5000	dF: 9 Result: 0.4292 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					210
Rusts					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					<b>240</b>

**Location: 21605001-TM18**

% 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: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.4333 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					53
<b>Total</b>					<b>53</b>

**Location: 21605001-TM19**

% 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: 4.5079 Critical value: 11.0705 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.1542 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Penicillium/Aspergillus types					53
<b>Total</b>					<b>67</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21605001-1

Date of Sampling: 05-23-2016  
Date of Receipt: 05-23-2016  
Date of Report: 05-24-2016

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

\* 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 (H<sub>0</sub>) 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 (H<sub>0</sub>) 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: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-TM15

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
Other brown	█				1	13			105
Other colorless					1	13			105
Penicillium/Aspergillus types†	█				1	53			107
Stachybotrys					ND	< 13			100
Torula					ND	< 13			100
Trichocladium	█				1	13			105
<b>Seldom found growing indoors**</b>									
Ascospores	█				2	110			138
Basidiospores					ND	< 13			100
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes	█				2	27			104
<b>Total</b>						<b>227</b>			<b>Final MoldSCORE 118</b>

**Location:** 21605001-TM16

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	█				3	160			106
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	█				2	27			104
<b>Total</b>						<b>213</b>			<b>Final MoldSCORE 106</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-TM17

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					4	210			107
Rusts					1	13			105
Smuts, Periconia, Myxomycetes					1	13			101
<b>Total</b>						<b>240</b>			<b>Final MoldSCORE 107</b>

**Location:** 21605001-TM18

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†					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: 21605001-1

Date of Sampling: 05-23-2016  
 Date of Receipt: 05-23-2016  
 Date of Report: 05-24-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-TM19

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†	█				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>67</b>				
										<b>Final MoldSCORE 108</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: 21605001-1  
EML ID: 1547458

Approved by:

Dates of Analysis:  
Spore trap analysis: 06-01-2016

Technical Manager  
Louise White

Service SOPs: Spore trap analysis (EM-MY-S-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.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21605001-1Date of Sampling: 05-31-2016  
Date of Receipt: 05-31-2016  
Date of Report: 06-01-2016**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	21605001-1TM20OUT		21605001-1TM21		21605001-1TM22		21605001-1TM23	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	7172829-1		7172830-1		7172831-1		7172832-1	
Analysis Date:	06/01/2016		06/01/2016		06/01/2016		06/01/2016	
	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>
Alternaria	1	13			1	13		
Ascospores	5	270					9	480
Basidiospores	41	2,200	1	53	1	53	3	160
Chaetomium	7	93					1	13
Cladosporium	38	2,000			1	53	3	160
Myrothecium								
Nigrospora			1	13				
Oidium	5	67						
Other brown	1	13	1	13	1	13		
Other colorless								
Penicillium/Aspergillus types†			3	160			6	320
Pithomyces								
Rusts	3	40	1	13				
Smuts, Periconia, Myxomycetes	13	170	2	27	5	67	5	67
Stachybotrys							1	13
Stemphylium								
Torula	3	40						
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	4+		3+		3+		3+	
Hyphal fragments/m <sup>3</sup>	80		< 13		13		< 13	
Pollen/m <sup>3</sup>	190		13		< 13		27	
Skin cells (1-4+)	1+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>§ TOTAL SPORES/m<sup>3</sup></b>		<b>4,900</b>		<b>280</b>		<b>200</b>		<b>1,200</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> 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: 21605001-1

Date of Sampling: 05-31-2016  
Date of Receipt: 05-31-2016  
Date of Report: 06-01-2016

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

Location:	21605001-1TM24		21605001-1TM25		21605001-1TM26		21605001-1TM27	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	7172833-1		7172834-1		7172835-1		7172836-1	
Analysis Date:	06/01/2016		06/01/2016		06/01/2016		06/01/2016	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13					1	13
Ascospores					1	53	5	270
Basidiospores	2	110					7	370
Chaetomium							1	13
Cladosporium	6	320	1	53	2	110	8	430
Fusarium								
Myrothecium								
Nigrospora								
Oidium								
Other brown	1	13						
Other colorless								
Penicillium/Aspergillus types†	13	690	1	53			3	160
Pithomyces								
Rusts	1	13			2	27		
Smuts, Periconia, Myxomycetes	1	13			1	13	5	67
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	3+		2+		3+		3+	
Hyphal fragments/m3	13		< 13		< 13		13	
Pollen/m3	13		< 13		13		27	
Skin cells (1-4+)	1+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>§ TOTAL SPORES/m3</b>		<b>1,200</b>		<b>110</b>		<b>200</b>		<b>1,300</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

**MoldRANGE™: Extended Outdoor Comparison**

**Outdoor Location: 21605001-1TM20OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: May in California† (n‡=19170)						Typical Outdoor Data for: The entire year in California† (n‡=230447)					
		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	33	80	130	62	13	13	27	65	110	53
Bipolaris/Drechslera group	-	7	13	13	27	40	12	7	13	13	27	53	12
Chaetomium	93	8	13	13	27	40	22	8	13	13	27	48	19
Cladosporium	2,000	110	210	530	1,400	2,300	97	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	27	40	3	7	13	13	27	53	6
Nigrospora	-	7	13	13	13	27	4	7	13	13	27	53	9
Other brown	13	13	13	13	40	53	35	13	13	13	40	53	34
Penicillium/Aspergillus types	-	53	53	170	460	750	79	53	100	210	610	1,000	84
Stachybotrys	-	7	13	13	29	67	5	7	13	13	33	67	4
Torula	40	13	13	14	53	80	18	8	13	13	40	67	11
<b>Seldom found growing indoors**</b>													
Ascospores	270	25	53	110	320	590	72	27	53	110	370	750	71
Basidiospores	2,200	40	56	200	640	1,200	91	53	80	260	1,000	2,400	93
Oidium	67	13	13	25	53	80	31	13	13	13	50	80	19
Rusts	40	13	13	27	53	100	39	13	13	13	53	87	26
Smuts, Periconia, Myxomycetes	170	13	27	67	210	390	79	13	13	40	110	200	68
<b>§ TOTAL SPORES/m3</b>	4,900												

†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: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

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

**Outdoor Summary: 21605001-1TM20OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 40 - 590	44
Ascospores				270	13 - 210 - 6,100	76
Basidiospores				2,200	13 - 430 - 24,000	92
Chaetomium				93	7 - 13 - 160	9
Cladosporium				2,000	27 - 480 - 9,900	90
Oidium				67	7 - 13 - 210	11
Other brown				13	7 - 19 - 130	25
Penicillium/Aspergillus types				< 13	13 - 170 - 2,600	67
Rusts				40	7 - 20 - 360	20
Smuts, Periconia, Myxomycetes				170	7 - 53 - 950	64
Torula				40	7 - 13 - 170	9
<b>Total</b>				4,900		

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: 21605001-1TM21**

% 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: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.5000	df: 12 Result: -0.1049 Critical value: 0.4965 Outside Similar: No	Score: 125 Result: Low
Species Detected	Spores/m3			
	<100	1K	10K	>100K
Basidiospores				53
Nigrospora				13
Other brown				13
Penicillium/Aspergillus types				160
Rusts				13
Smuts, Periconia, Myxomycetes				27
<b>Total</b>				280

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

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

**Location: 21605001-1TM22**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 4%	dF: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.6667	dF: 10 Result: 0.3939 Critical value: 0.5515 Outside Similar: No	Score: 121 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Basidiospores					53
Cladosporium					53
Other brown					13
Smuts, Periconia, Myxomycetes					67
<b>Total</b>					200

**Location: 21605001-1TM23**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 24%	dF: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.5882	dF: 12 Result: 0.4406 Critical value: 0.4965 Outside Similar: No	Score: 150 Result: Medium	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					480
Basidiospores					160
Chaetomium					13
Cladosporium					160
Penicillium/Aspergillus types					320
Smuts, Periconia, Myxomycetes					67
Stachybotrys					13
<b>Total</b>					1,200

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

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

**Location: 21605001-1TM24**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 23%	dF: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.7059	dF: 11 Result: -0.0045 Critical value: 0.5273 Outside Similar: No	Score: 202 Result: Medium	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Basidiospores					110
Cladosporium					320
Other brown					13
Penicillium/Aspergillus types					690
Rusts					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					1,200

**Location: 21605001-1TM25**

% 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: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.2295 Critical value: 0.5273 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Penicillium/Aspergillus types					53
<b>Total</b>					110

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

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

**Location: 21605001-1TM26**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 4%	dF: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.5714	dF: 10 Result: 0.5091 Critical value: 0.5515 Outside Similar: No	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Cladosporium					110
Rusts					27
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					<b>200</b>

**Location: 21605001-1TM27**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 26%	dF: 6 Result: 11.6688 Critical value: 12.5916 Inside Similar: Yes	Result: 0.7059	dF: 11 Result: 0.6205 Critical value: 0.5273 Outside Similar: Yes	Score: 125 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Ascospores					270
Basidiospores					370
Chaetomium					13
Cladosporium					430
Penicillium/Aspergillus types					160
Smuts, Periconia, Myxomycetes					67
<b>Total</b>					<b>1,300</b>

\* 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.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21605001-1

Date of Sampling: 05-31-2016  
Date of Receipt: 05-31-2016  
Date of Report: 06-01-2016

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

\*\*\* 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 (H<sub>0</sub>) 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: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample: 21605001-1TM20OUT**

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	█				7	93
Cladosporium	██████████				38	2,000
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown	█				1	13
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula	█				3	40
<b>Seldom found growing indoors**</b>						
Ascospores	██				5	270
Basidiospores	██████████				41	2,200
Oidium	█				5	67
Rusts	█				3	40
Smuts, Periconia, Myxomycetes	█				13	170
<b>Total</b>						<b>4,920</b>

**Location: 21605001-1TM21**

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	█				1	13
Other brown	█				1	13
Penicillium/Aspergillus types†	█				3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores					ND	< 13
Basidiospores	█				1	53
Rusts	█				1	13
Smuts, Periconia, Myxomycetes	█				2	27
<b>Total</b>						<b>280</b>

MoldSCORE‡		
100	200	300 Score
█		100
█		100
█		100
█		100
█		100
█		100
█		105
█		105
█	█	125
█		100
█		100
█		100
█		100
█		104
█		103
<b>Final MoldSCORE</b>		<b>125</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM22

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	█		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	█				1	53	█		100
Rusts					ND	< 13	█		100
Smuts, Periconia, Myxomycetes	█				5	67	█		112
<b>Total</b>						<b>200</b>			<b>Final MoldSCORE 121</b>

**Location:** 21605001-1TM23

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	█				1	13	█		100
Cladosporium	█				3	160	█		100
Curvularia					ND	< 13	█		100
Nigrospora					ND	< 13	█		100
Penicillium/Aspergillus types†	█	█			6	320	█	█	150
Stachybotrys	█				1	13	█		121
Torula					ND	< 13	█		100
<b>Seldom found growing indoors**</b>									
Ascospores	█	█	█		9	480	█	█	240
Basidiospores	█				3	160	█		100
Rusts					ND	< 13	█		100
Smuts, Periconia, Myxomycetes	█				5	67	█		105
<b>Total</b>						<b>1,213</b>			<b>Final MoldSCORE 150</b>

Client: Hygiene Technologies International, Inc.  
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Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM24

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	█		104
Bipolaris/Drechslera group					ND	< 13	█		100
Chaetomium					ND	< 13	█		100
Cladosporium	█	█			6	320	█		100
Curvularia					ND	< 13	█		100
Nigrospora					ND	< 13	█		100
Other brown	█				1	13	█		104
Penicillium/Aspergillus types†	█	█	█		13	690	█	█	202
Stachybotrys					ND	< 13	█		100
Torula					ND	< 13	█		100
<b>Seldom found growing indoors**</b>									
Ascospores					ND	< 13	█		100
Basidiospores	█				2	110	█		100
Rusts					1	13	█		101
Smuts, Periconia, Myxomycetes	█				1	13	█		100
<b>Total</b>						<b>1,173</b>			
							<b>Final MoldSCORE</b>		<b>202</b>

**Location:** 21605001-1TM25

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	█				1	53	█		101
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>107</b>			
							<b>Final MoldSCORE</b>		<b>108</b>

Client: Hygiene Technologies International, Inc.  
 C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
 Re: 21605001-1

Date of Sampling: 05-31-2016  
 Date of Receipt: 05-31-2016  
 Date of Report: 06-01-2016

**MoldSCORE™: Spore Trap Report**

**Location:** 21605001-1TM26

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	█				2	110			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	█				1	53			117
Basidiospores					ND	< 13			100
Rusts	█				2	27			110
Smuts, Periconia, Myxomycetes					1	13			101
<b>Total</b>						<b>200</b>			<b>Final MoldSCORE 102</b>

**Location:** 21605001-1TM27

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			104
Bipolaris/Drechslera group					ND	< 13			100
Chaetomium	█				1	13			100
Cladosporium	█	█			8	430			100
Curvularia					ND	< 13			100
Nigrospora					ND	< 13			100
Penicillium/Aspergillus types†	█				3	160			125
Stachybotrys					ND	< 13			100
Torula					ND	< 13			100
<b>Seldom found growing indoors**</b>									
Ascospores	█	█			5	270		█	176
Basidiospores	█	█			7	370			100
Rusts					ND	< 13			100
Smuts, Periconia, Myxomycetes	█				5	67			104
<b>Total</b>						<b>1,320</b>			<b>Final MoldSCORE 125</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Kenny Hsi, Mr. Lakhpreet Sandhu  
Re: 21605001-1

Date of Sampling: 05-31-2016  
Date of Receipt: 05-31-2016  
Date of Report: 06-01-2016

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

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Regarding: Project: 21605001-1  
EML ID: 1548393

Approved by:

Dates of Analysis:  
Spore trap analysis: 06-02-2016

Technical Manager  
Louise White

Service SOPs: Spore trap analysis (EM-MY-S-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.

EMLab P&K's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Hygiene Technologies International, Inc.  
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 Re: 21605001-1

Date of Sampling: 06-01-2016  
 Date of Receipt: 06-01-2016  
 Date of Report: 06-02-2016

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

Location:	21605001-1TM28OUT		21605001-1TM29	
Comments (see below)	None		None	
Lab ID-Version†:	7176353-1		7176354-1	
Analysis Date:	06/02/2016		06/02/2016	
	raw ct.	spores/m <sup>3</sup>	raw ct.	spores/m <sup>3</sup>
Alternaria			2	27
Ascospores	1	53	1	53
Basidiospores	4	210	3	160
Chaetomium	3	40		
Cladosporium	17	910	3	160
Fusarium				
Myrothecium				
Nigrospora				
Oidium	1	13		
Other brown	3	40		
Other colorless				
Penicillium/Aspergillus types†			3	160
Pithomyces				
Rusts	15	200		
Smuts, Periconia, Myxomycetes	10	130	2	27
Stachybotrys				
Stemphylium				
Torula	4	53		
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	2+		2+	
Hyphal fragments/m <sup>3</sup>	120		13	
Pollen/m <sup>3</sup>	80		< 13	
Skin cells (1-4+)	< 1+		1+	
Sample volume (liters)	75		75	
<b>§ TOTAL SPORES/m<sup>3</sup></b>		<b>1,700</b>		<b>590</b>

**Comments:**

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

† 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/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity (in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

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/m<sup>3</sup> has been rounded to two significant figures to reflect analytical precision.

Client: Hygiene Technologies International, Inc.  
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Date of Sampling: 06-01-2016  
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**MoldRANGE™: Extended Outdoor Comparison**

**Outdoor Location: 21605001-1TM28OUT**

Fungi Identified	Outdoor data	Typical Outdoor Data for: June in California† (n‡=19034)						Typical Outdoor Data for: The entire year in California† (n‡=230447)					
		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	67	110	63	13	13	27	65	110	53
Bipolaris/Drechslera group	-	7	13	13	27	41	12	7	13	13	27	53	12
Chaetomium	40	8	13	13	27	40	24	8	13	13	27	48	19
Cladosporium	910	110	210	590	1,400	2,200	98	110	210	610	1,700	2,800	97
Curvularia	-	7	13	13	27	40	4	7	13	13	27	53	6
Nigrospora	-	7	13	13	13	27	4	7	13	13	27	53	9
Other brown	40	13	13	13	40	53	36	13	13	13	40	53	34
Penicillium/Aspergillus types	-	53	53	190	480	750	82	53	100	210	610	1,000	84
Stachybotrys	-	8	13	13	27	53	5	7	13	13	33	67	4
Torula	53	10	13	13	40	67	18	8	13	13	40	67	11
<b>Seldom found growing indoors**</b>													
Ascospores	53	13	40	100	250	430	70	27	53	110	370	750	71
Basidiospores	210	40	53	160	450	880	90	53	80	260	1,000	2,400	93
Oidium	13	13	13	20	53	80	28	13	13	13	50	80	19
Rusts	200	13	13	27	53	100	38	13	13	13	53	87	26
Smuts, Periconia, Myxomycetes	130	13	23	53	160	310	79	13	13	40	110	200	68
<b>§ TOTAL SPORES/m3</b>	1,700												

†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: 21605001-1

Date of Sampling: 06-01-2016  
 Date of Receipt: 06-01-2016  
 Date of Report: 06-02-2016

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

**Outdoor Summary: 21605001-1TM28OUT:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores					13 - 210 - 6,100	76
Basidiospores					13 - 430 - 24,000	92
Chaetomium					7 - 13 - 160	9
Cladosporium					27 - 480 - 9,900	90
Oidium					7 - 13 - 210	11
Other brown					7 - 19 - 130	25
Penicillium/Aspergillus types					13 - 170 - 2,600	67
Rusts					7 - 20 - 360	20
Smuts, Periconia, Myxomycetes					7 - 53 - 950	64
Torula					7 - 13 - 170	9
<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: 21605001-1TM29**

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: 35%	dF: N/A Result: N/A Critical value: N/A Inside Similar: N/A	Result: 0.5333	dF: 11 Result: 0.2932 Critical value: 0.5273 Outside Similar: No	Score: 125 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					27
Ascospores					53
Basidiospores					160
Cladosporium					160
Penicillium/Aspergillus types					160
Smuts, Periconia, Myxomycetes					27
<b>Total</b>					590

\* 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.

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21605001-1Date of Sampling: 06-01-2016  
Date of Receipt: 06-01-2016  
Date of Report: 06-02-2016**MoldSTAT™: Supplementary Statistical Spore Trap Report**

\*\* 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 (H<sub>0</sub>) 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: 21605001-1

Date of Sampling: 06-01-2016  
 Date of Receipt: 06-01-2016  
 Date of Report: 06-02-2016

**MoldSCORE™: Spore Trap Report**

**Outdoor Sample: 21605001-1TM28OUT**

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	█				3	40
Cladosporium	█	█			17	910
Curvularia					ND	< 13
Nigrospora					ND	< 13
Other brown	█				3	40
Penicillium/Aspergillus types†					ND	< 13
Stachybotrys					ND	< 13
Torula	█				4	53
<b>Seldom found growing indoors**</b>						
Ascospores	█				1	53
Basidiospores	█				4	210
Oidium	█				1	13
Rusts	█				15	200
Smuts, Periconia, Myxomycetes	█				10	130
<b>Total</b>						<b>1,653</b>

**Location: 21605001-1TM29**

Fungi Identified	Indoor 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					ND	< 13
Cladosporium	█				3	160
Curvularia					ND	< 13
Nigrospora					ND	< 13
Penicillium/Aspergillus types†	█				3	160
Stachybotrys					ND	< 13
Torula					ND	< 13
<b>Seldom found growing indoors**</b>						
Ascospores	█				1	53
Basidiospores	█				3	160
Rusts					ND	< 13
Smuts, Periconia, Myxomycetes	█				2	27
<b>Total</b>						<b>587</b>

MoldSCORE‡		Score
100	200	
█		111
█		100
█		100
█		100
█		100
█		100
█		125
█		100
█		100
█		115
█		110
█		100
█		100
<b>Final MoldSCORE</b>		<b>125</b>

Client: Hygiene Technologies International, Inc.  
C/O: Mr. Lakhpreet Sandhu  
Re: 21605001-1

Date of Sampling: 06-01-2016  
Date of Receipt: 06-01-2016  
Date of Report: 06-02-2016

**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.







001547458

# HYGIENE TECHNOLOGIES INTERNATIONAL

3625 DEL AMO BOULEVARD, SUITE 180, TORRANCE, CA 90503 • (310) 370-8370 • FAX (310) 370-2474

## Request For Analysis

Project Number/Purchase Order: 21605001-1Date Submitted: 05-31-16Project Contact: L. Sandhu/K.HslTurnaround Required: NormalLab Destination: EMLAB P & KLab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
21605001-1TM20OUT	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM21	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM22	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM23	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM24	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM25	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM26	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)
21605001-1TM27	75 L	Air-O-Cell	Spore Trap Analysis ( Total Fungi)

Special Instructions : Random Sampling ( Round 4 )1. Sampled by: L. Sandhu on 05-31-16 @ 1348 hrsReceived by: Joyce Pradyo 513116 16302. Relinquished by: L. Sandhu on 05-31-16 @ 1630 hrs

Received by: \_\_\_\_\_

3. Relinquished by: \_\_\_\_\_

Received by: \_\_\_\_\_

Please include signature, date, and time

Lab Use Only:

Los Angeles • San Francisco • Sacramento • Dallas • San Diego

Chicago • Cleveland • Norfolk • New York

Anuja • Beijing



ESS Organic Chemistry  
WSLH Air Canister Sampling Sheet

Bill To Hygiene Technologies Int'l Inc.  
3625 Delamo Blvd, Ste #180  
Torrance, CA 90503

Report To Hygiene Technologies Int'l Inc.  
3625 Delamo Blvd, Ste #180  
Torrance, CA 90503

Phone # (310) 370-8370  
FAX # (310) 370-2474

Horizon #: 344140

Collected By L. Sandhu  
Date Sampled 04/01/16

Project \_\_\_\_\_  
P.O. # \_\_\_\_\_

Email Lsandhu@hygienetech.com  
Address(s) khsi@hygienetech.com

Tracer used (Y/N) N  
Which Tracer? N/A

Sample Type: AR - Outdoor Air  
AI - Indoor Air  
SB-Sub-Slab

SPECIAL INSTRUCTIONS:  
 TO15 Ben/Car

LAB USE ONLY	WSLH SAMPLE #	CUSTOMER FIELD #	SAMPLE TYPE (AR, AI, SB)	SAMPLE DATE	TIME ON	TIME OFF	INITIAL PRESSURE	FINAL PRESSURE	CANISTER NUMBER	PID READING	SAMPLER NUMBER
	001	21603001-5 VOC01 OUT	AR	4/1/16	0838	1638	-29	-9	7545	N/A	5403
	002	21603001-5 VOC02	AI	4/1/16	0840	1640	-30	-4	6706	N/A	2432
	003	21603001-5 VOC03	AI	4/1/16	0847	1647	-30	-27	12556	N/A	5407
	004	21603001-5 VOC04	AI	4/1/16	0857	1657	-25	0	12563	N/A	5398
	005	21603001-5 VOC05	AI	4/1/16	0902	1702	-30	-5	11818	N/A	5408
	006	21603001-5 VOC06	AI	4/1/16	0907	1707	-30	-7	12562	N/A	5344
	007	21603001-5 VOC07	AI	4/1/16	0917	1712	-30	0	7575	N/A	5404
	008	21603001-5 VOC08	AI	4/1/16	0923	1724	-30	-4	11198	N/A	5405
	009	21603001-5 VOC09	AI	4/1/16	0928	1728	-30	-5	12564	N/A	5838
	010	21603001-5 VOC10	AI	4/1/16	0933	1734	-30	-5	11197	N/A	5406
	011	21603001-5 VOC11	AI	4/1/16	0937	1737	-30	-4	7554	N/A	5557
	012	21603001-5 VOC12	AI	4/1/16	0947	1748	-30	-9	7425	N/A	5835
	013	21603001-5 VOC13 OUT	AR	4/1/16	0952	1752	-29	-3	14128	N/A	5468

2xdf

2xdf

5526  
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5524

L. Sandhu

Date: 04/02/16 Received: \_\_\_\_\_

ly: Relinquished

247611  
04/08/16 11:25  
344140

04/08/16 11:25  
VOC01 OUT  
247611001