



# HYGIENETECH

Hygiene Technologies International, Inc.

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July 31, 2008

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

Document No. 20803001.4

Attention: David Gau

Regarding: Limited Indoor Air Quality Survey  
10<sup>TH</sup> Floor

Dear Mr. Gau:

On various dates in March of 2008, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted a limited indoor air quality survey on the 10<sup>TH</sup> Floor of the California State Board of Equalization building located at the above mentioned address. At the time of the survey, various samples were collected and direct-reading instruments were used to assess the general indoor air quality on that floor, with a clear emphasis on establishing fungal growth exposure potential data. I have enclosed our report, which included general observations, sample and direct-reading results, a discussion of the data, conclusions, and recommendations.

If you have any comments or questions regarding the information contained in this report, please do not hesitate to contact our offices directly at (310) 370-8370.

Sincerely,

**HYGIENE TECHNOLOGIES INTERNATIONAL, INC.**

Brian P. Daly, CIH, PE  
President



# HYGIENETECH

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## LIMITED INDOOR AIR QUALITY SURVEY

**450 N STREET – 10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA**

### PREPARED FOR:

**CALIFORNIA STATE BOARD OF EQUALIZATION  
450 N STREET  
SACRAMENTO, CALIFORNIA**

### PREPARED BY:

**HYGIENE TECHNOLOGIES INTERNATIONAL, INC.  
3625 DEL AMO BOULEVARD, SUITE 180  
TORRANCE, CALIFORNIA**

**JULY 31, 2008**



## 1.0 BACKGROUND

On various dates in March of 2008, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted a limited indoor air quality survey on the 10<sup>TH</sup> Floor of the California State Board of Equalization Building located at 450 N Street in Sacramento, California. During the survey, a variety of samples were collected and direct-reading instruments were used to assess the general indoor air quality on the 10<sup>TH</sup> floor of the subject building. Various air and surface samples were collected in order to assess fungal growth exposure potentials and to establish fungal growth assessment information on selected building material surfaces. In addition, air samples were collected throughout the floor for fibrous dust, microbial volatile organic compounds (MVOCs), and total dust analysis and direct-reading instruments were used to determine airborne volatile organic compounds (VOCs), carbon dioxide (CO<sub>2</sub>), ozone (O<sub>3</sub>), air temperature, and relative humidity.

## 2.0 OBSERVATIONS

The interior building materials of the 10<sup>TH</sup> Floor included, but were not limited to, metal window frames; painted gypsum board and/or metal windowsills; metal doorjambs and door frames; painted gypsum board walls in the general work areas; tile covered walls and painted gypsum board ceilings in the restrooms; suspended 2' by 4' ceiling tiles in the general work areas; vinyl cove base; carpet flooring in the general work areas; and ceramic or vinyl tile flooring in the restrooms and break rooms.

The furnishings in the surveyed areas included desks, upholstered chairs, shelves, fabric covered cubicles, office supplies, computers, and other electronic office equipment. The furnishings did not appear to support fungal growth, nor did they appear to have been affected in any other manner by water intrusion. However, be advised that visible accumulation of debris, dust, and other particulates was observed on the reverse side of all sampled HVAC supply air registers.

## 3.0 SAMPLING AND ANALYSIS

Air samples were collected and 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. Other samples were collected for airborne fibers, MVOCs, and total dust determinations using SKC® brand Airchek® 52 sampling pumps and the appropriate sampling media. Pump flow rates were established and verified using a BIOS DryCal DC-Lite primary flow meter. Those samples were collected and analyzed along with blanks (identical sampling media through which no air was drawn), when necessary, at laboratories accredited by the American Industrial Hygiene Association (AIHA) through successful participation in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing Program. Direct-reading instruments were used to determine airborne O<sub>3</sub> and VOC levels, the results of which appear in Table 20803001-130 in Appendix A of this report. A discussion of the airborne CO<sub>2</sub> data, along with air temperature and relative humidity results, appears in Section 4.0 of this report. Additional information concerning the specific sampling and analytical methods appears below.



### **3.0 SAMPLING AND ANALYSIS (CONTINUED)**

#### **3.1 Airborne Total Fungi**

Air samples for airborne total (viable and nonviable) fungi determinations were collected using a Zefon brand Bio-Pump™ equipped with Allergenco-D™ cassettes. All such samples were collected at various indoor locations and two samples were collected outdoors on the applicable survey date for comparison purposes. The resultant data, which are presented in spores per cubic meter of air (spores/M<sup>3</sup>), appear in Table 20803001-124.

#### **3.2 Airborne Viable Fungi**

Air samples for airborne viable fungi determinations were collected on malt extract agar (MEA) using a Gast brand high volume air-sampling pump equipped with an Aerotech 6™ Single Stage Bioaerosol Sampler. Two outdoor samples were also collected on the applicable survey date for comparison purposes. The media was incubated prior to enumeration of colony-forming units per agar plate and the resultant data, presented in colony forming units per cubic meter of air (CFU/ M<sup>3</sup>), can be found in Table 20803001-126.

#### **3.3 Surface Fungal Growth Potentials**

Surface samples were collected for fungal growth assessment using Zefon brand Bio-tape™ surface samplers. Additionally, surface fungi samples were collected from various heating, ventilating, and air conditioning (HVAC) supply air register surfaces using Healthlink® Transporters™ (Rayon tipped swabs immersed in 0.5 ml modified Stuart's transport medium). These data are presented in Table 20803001-125.

#### **3.4 Airborne Fibrous Dust**

Area air samples for fibrous dust were collected at stationary locations on 25-millimeter diameter, 0.8-micrometer pore size, mixed cellulose ester filters. The samples were analyzed by phase contrast microscopy (PCM) in accordance with the NIOSH Method 7400. These data are presented in fibers per cubic centimeter (f/cc) of air in Table 20803001-127.

#### **3.5 Airborne Total Dust**

Area air samples for total dust determination were collected at stationary locations on filter cassettes containing pre-weighed 37-millimeter diameter, polyvinyl chloride filters having a pore size of five micrometers. The samples were analyzed by gravimetric method in accordance with the NIOSH Method 0500. These data are presented in milligrams per cubic meter of air (mg/M<sup>3</sup>) and appear in Table 20803001-128.

#### **3.6 Microbial Volatile Organic Compounds**

Area samples for MVOCs were collected on solid sorbent tubes equipped with Sagelock fittings. The samples were analyzed by gas chromatography/ mass spectrometry, modified for MVOCs following AIHA field guide. These data are presented in mg/M<sup>3</sup> and appear in Table 20803001-129.



### 3.0 SAMPLING AND ANALYSIS (CONTINUED)

#### 3.7 Airborne Volatile Organic Compounds

Direct-reading air measurements for VOCs were also recorded at various locations on the 10<sup>TH</sup> floor using a RAE Systems, Inc. Mini-RAE 2000 photoionization detector, which is capable of detecting a wide variety of unsaturated hydrocarbons at airborne concentrations ranging from 0.1 to 10,000 parts per million (ppm). Prior to the survey, this instrument was calibrated using a 100-ppm isobutylene gas standard. These data are presented in parts per million (ppm).

#### 3.8 Airborne Ozone

Direct-reading air measurements for O<sub>3</sub> were recorded at various locations using a Dräger colorimetric detector tube apparatus with the appropriate detector tubes. The data are presented in ppm.

#### 3.9 Airborne Carbon Dioxide

Direct-reading air measurements for airborne CO<sub>2</sub> concentration was recorded at a stationary location using a Telaire<sup>®</sup> 7001 Carbon Dioxide and Temperature Monitor along with the HOBO<sup>®</sup> data logger. The data are presented in ppm.

#### 3.10 Air Temperature and Relative Humidity

Air temperature and relative humidity data were recorded at a stationary location using a Telaire<sup>®</sup> 7001 Carbon Dioxide and Temperature Monitor along with the HOBO<sup>®</sup> data logger.

### 4.0 DISCUSSION

#### 4.1 Airborne Total Fungi

The airborne total fungi data showed common spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, *Oidium*, rusts, and/or smuts, with *Cladosporium* predominating in both samples. Indoors, the data showed low airborne concentrations of common fungal spores that included one or more of the following: *Alternaria*, ascospores, basidiospores, *Botrytis*, *Cladosporium*, colorless spores typical of *Penicillium* and *Aspergillus* species, other brown, rusts, and/or smuts. Indoors, the distribution of fungal spore types detected in the surveyed areas was consistent with those found outdoors, and the overall data within the tested areas were well below the overall data recorded outdoors. These data are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.



## 4.0 DISCUSSION (CONTINUED)

### 4.2 Airborne Viable Fungi

The viable fungi data recorded outdoors showed overall levels of 866 and 1,417 CFU/M<sup>3</sup> in the two samples collected, with *Cladosporium* predominating in both. Indoors, low levels of common fungi were found including *Aspergillus niger*, *Cladosporium*, non-sporulating fungi, and/or *Penicillium*. Again, the data recorded were unremarkable and are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.

### 4.3 Surface Fungal Growth Potentials

The surface assessment data involving the samples collected from various cubicle partitions throughout the 10<sup>TH</sup> Floor indicated no evidence of fungal growth or above-background levels of loose fungal spores on those surfaces. However, the surface assessment data involving samples collected from the HVAC supply air registers indicated fungal growth involving *Acremonium*, *Alternaria*, arthrospore-former, brown hyphae, and/or unknown hyphae on six of the eight registers sampled. Additionally, loose fungal spores of *Alternaria*, dark amorphous particles, and/or hyphal fragments were also indicated on the five of the eight samples collected from the HVAC supply air registers. Be advised that visible accumulation of debris, dust, and other particulates was observed on the reverse side of all sampled HVAC supply air registers, and that such conditions are indicative of an environment that may promote bacterial and fungal growth.

### 4.4 Airborne Fibrous Dust

The data recorded in the surveyed areas indicated that airborne fibrous dusts were either not detected at or above the laboratory detection limit of 0.004 f/cc or were detected at levels of 0.006 and 0.007 f/cc. Because the samples were collected at stationary locations at approximate breathing zone height, the resultant data are expected to represent building occupant *exposure potentials* for those persons working in or passing through the areas monitored. These data, which are expected to represent employee *exposure potentials* to fibers of various types, including man-made and natural mineral fibers, cellulose (paper or wood composition), gypsum, and other fibrous dusts common in the environment, are well below the current Cal-OSHA 8-hour TWA PEL for asbestos fibers of 0.1 f/cc, the most restrictive exposure limit for fibrous dusts.

### 4.5 Airborne Total Dust

Common dust that is typically identified in buildings usually contains a wide variety of materials including, but not limited to, gypsum crystals, cellulosic particles, fiberglass fragments, mineral grains from soil, fungi spores, fine glass fibers, textile and wood fibers, iron or steel fragments, dead skin cells, insect parts, animal dander, and pollens. Generally, exposure to low levels of such materials does not produce ill effects in most persons. In fact, these so-called *nuisance dusts* have a long history of little adverse effect to the lungs and are not known to produce significant diseases or toxic effects, such as collagen (scar tissue) formation, when exposure are kept under reasonable control.



## 4.0 DISCUSSION (CONTINUED)

### 4.5 Airborne Total Dust (Continued)

The data recorded in the surveyed areas showed that airborne total dust was either not detected at or above the respective laboratory analytical detection limits or was detected at a level of 0.31 mg/M<sup>3</sup>. Because the samples were collected at stationary locations at approximate breathing zone height, the resultant data are expected to represent building occupant *exposure potentials* for those persons working in or passing through the areas monitored. These data are well below the State of California, Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) 8-hour time-weighted average (TWA) permissible exposure limit (PEL) for total dust of 10 mg/M<sup>3</sup>, as defined in Title 8 of the California Code of Regulations, Section 5155 (T8, CCR § 5155). Note that these data are also well below the American Conference of Governmental Industrial Hygienists 8-hour TWA threshold limit value (TLV-TWA) for particulate (not otherwise classified) of 10 mg/M<sup>3</sup>; and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE) theoretical value for non-occupational environments of 1/10 of the TLV. Note that while the sample datum recorded in Room 1014 south of Cubicle 043 was marginally above the U.S. Environmental Protection Agency (EPA) National Ambient Air Quality Primary Standard of 0.26 mg/M<sup>3</sup> (24-hour standard), it is not expected to pose an increased health risk to building occupants in an occupational setting.

### 4.6 Airborne Microbial Volatile Organic Compounds

Microbial Volatile Organic Compounds (MVOCs) are composed of low molecular weight alcohols, aldehydes, amines, ketones, terpenes, aromatic and chlorinated hydrocarbons, and sulfur-based compounds that are known to be byproducts of microbial metabolism. MVOCs have a very low odor threshold, thus, making them easily detectable by smell. They often have strong odors and are responsible for the smells generally associated with fungal growth.

The airborne MVOC data indicated the presence of 3-methylfuran at levels ranging from 8 ng/M<sup>3</sup> to 45 ng/M<sup>3</sup>, 2-methyl-1-propanol at levels ranging from 43 ng/M<sup>3</sup> to 119 ng/M<sup>3</sup>, 1-butanol at levels ranging from 130 ng/M<sup>3</sup> to 1,438 ng/M<sup>3</sup>, dimethyl disulfide at 12 ng/M<sup>3</sup>, 2-hexanone at levels ranging from 38 ng/m<sup>3</sup> to 56 ng/m<sup>3</sup>, and 2-heptanone at levels ranging from 47 ng/m<sup>3</sup> to 89 ng/m<sup>3</sup>. Microbial growth related 3-Methylfuran, 2-Methyl-1-Propanol, 1-butanol, Dimethyl disulfide, 2-hexanone, and 2-heptanone would not be expected to be present indoors without additional MVOCs such as ethanol, 1-octen-3-ol, 2-octen-1-ol, benzyl cyanide, 2-methyl-isoborneol, geosmin (1-10-dimethyl-*trans*-9-decalol), and/or terpenes also being present. The fact that 3-Methylfuran, 2-Methyl-1-Propanol, 1-butanol, Dimethyl disulfide, 2-hexanone, and 2-heptanone were detected at low levels without the other above mentioned MVOCs would indicate that its presence on the 10<sup>TH</sup> Floor was most likely not fungal growth related and attributable to personal products such as perfumes and other personal cosmetic products. All such data are well below the applicable Cal-OSHA 8-hour TWA PELs as defined in T8, CCR § 5155.



## 4.0 DISCUSSION (CONTINUED)

### 4.7 Airborne Volatile Organic Compounds

With the use of a direct-reading photoionization detector, VOCs were not detected at or above the instrument detection limit of 0.1 ppm. Because these data were recorded at stationary locations at approximate breathing zone height, the results are expected to represent building occupant *exposure* potentials for those persons occupying or passing through the areas monitored. These data were well below the surrogate Cal-OSHA PELs that are often used for comparative purposes regarding VOC exposures, such as those for gasoline, hexane, and varnish makers and painters (VM&P) naphtha.

### 4.8 Airborne Ozone

O<sub>3</sub> was not detected at or above the Dräger instrument detection limits of 0.05 ppm.

### 4.9 Airborne Carbon Dioxide

On March 24, 2008, the direct-reading results indicated that CO<sub>2</sub> was detected at levels ranging from 483 to 630 ppm on the 10<sup>TH</sup> Floor. While these data were somewhat higher than the expected outdoor CO<sub>2</sub> levels, which generally range between 320 and 350 ppm, they are considered normal for occupied indoor environments and they are all well below the Cal-OSHA 8-hour TWA PEL for CO<sub>2</sub> of 5000 ppm (T8, CCR, § 5155). They are also below the level of 1000 ppm, which is essentially equivalent to the recommended upper limit for building occupant comfort and odor control established by ASHRAE (not greater than 700 ppm above the outdoor CO<sub>2</sub> value) as stated in ASHRAE 62-2001.

Based on historic studies performed by HygieneTech, building occupant complaints of "stuffy" air often begin when CO<sub>2</sub> levels exceed 800 ppm. HygieneTech has also found that some sensitive persons may experience discomfort, including eye irritation and headache, when CO<sub>2</sub> levels reach 1,000 ppm. Such symptoms are not believed to be the result of an unhealthy exposure to CO<sub>2</sub>; rather, they are thought to be the result of exposure to other common indoor air pollutants which, if not exhausted and/or diluted, can accumulate over time.

### 4.10 Air Temperature and Relative Humidity

On March 24, 2008, the air temperatures ranged between 75.92 and 77.31 degrees Fahrenheit (°F). Based on the experience of HygieneTech, the air temperatures perceived as comfortable by most persons in office environments, and recommended by ASHRAE for occupant comfort, range between 68.0 and 74.5°F (winter) and 73.0 and 79.0°F (summer). The air temperatures recorded in the surveyed areas were generally higher than the comfort range recommended for the winter months. On that same date, relative humidity data were recorded indoors at levels ranging from 26.3 to 31.0 percent. Such levels were well within the humidity level range of 20 to 60 percent as recommended by ASHRAE for occupant comfort. Note that HygieneTech recommends that the relative humidity in buildings not exceed 50 percent in order to limit the potential for fungal growth.



## 5.0 CONCLUSIONS

- 5.1 The airborne total and viable fungi data recorded in the surveyed areas showed airborne fungi levels that were generally below those recorded outdoors and therefore considered unremarkable. These data are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.
- 5.2 The surface assessment data involving the samples collected from various cubicle partitions throughout the 10<sup>TH</sup> Floor indicated no evidence of fungal growth or above-background levels of loose fungal spores on those surfaces. However, the surface assessment data involving samples collected from the HVAC supply air registers indicated fungal growth involving *Acremonium*, *Alternaria*, arthrospore-former, brown hyphae, and/or unknown hyphae on six of the eight registers sampled, along with loose *Alternaria* spores, dark amorphous particles, and/or hyphal fragments. Be advised that visible accumulation of debris, dust, and other particulates was observed on the reverse side of all sampled HVAC supply air registers, and that such conditions are indicative of an environment that may promote bacterial and fungal growth.
- 5.3 The airborne total and fibrous dust, VOC, and O<sub>3</sub> recorded during the survey were unremarkable. Collectively, the data were well below applicable Cal-OSHA 8-hour TWA PELs and/or other occupational, non-occupational, ASHRAE, or foreign guidelines. The data are not expected to represent conditions that pose a measurable health risk to the building occupants.
- 5.4 The airborne MVOC data indicated the presence of 3-methylfuran at levels ranging from 8 ng/M<sup>3</sup> to 45 ng/M<sup>3</sup>, 2-methyl-1-propanol at levels ranging from 43 ng/M<sup>3</sup> to 119 ng/M<sup>3</sup>, 1-butanol at levels ranging from 130 ng/M<sup>3</sup> to 1,438 ng/M<sup>3</sup>, dimethyl disulfide at 12 ng/M<sup>3</sup>, 2-hexanone at levels ranging from 38 ng/m<sup>3</sup> to 56 ng/m<sup>3</sup>, and 2-heptanone at levels ranging from 47 ng/m<sup>3</sup> to 89 ng/m<sup>3</sup>. Microbial growth related 3-Methylfuran, 2-Methyl-1-Propanol, 1-butanol, Dimethyl disulfide, 2-hexanone, and 2-heptanone would not be expected to be present indoors without additional MVOCs such as ethanol, 1-octen-3-ol, 2-octen-1-ol, benzyl cyanide, 2-methyl-isoborneol, geosmin (1-10-dimethyl-*trans*-9-decalol), and/or terpenes also being present. The fact that 3-Methylfuran, 2-Methyl-1-Propanol, 1-butanol, Dimethyl disulfide, 2-hexanone, and 2-heptanone were detected at low levels without the other above mentioned MVOCs would indicate that its presence on the 10<sup>TH</sup> Floor was most likely not fungal growth related and attributable to personal products such as perfumes and other personal cosmetic products. All such data are well below the applicable Cal-OSHA 8-hour TWA PELs as defined in T8, CCR § 5155.
- 5.5 Air temperatures ranged between 75.92 and 77.31 degrees Fahrenheit (°F) on March 24, 2008. The air temperatures recorded in the surveyed areas were generally higher than the comfort range recommended by ASHRAE for the winter months. Relative humidity data were recorded indoors at levels ranging from 26.3 to 31.0 percent. Such levels were well within the humidity level range of 20 to 60 percent as recommended by ASHRAE for occupant comfort. Note that HygieneTech recommends that the relative humidity in buildings not exceed 50 percent in order to limit the potential for fungal growth.
- 5.6 Be advised that the data provided in this report only represent fungal growth and exposure potentials that existed at the time the survey was performed and at the precise sample locations only, the latter of which were selected based on the available background information provided. Note that fungal growth and exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors.



## 5.0 CONCLUSIONS (CONTINUED)

Also be advised that additional fungal growth may exist at one or more locations in the structure that were not specifically assessed during the survey.

## 6.0 RECOMMENDATIONS

All such recommendations are based strictly on the assessment information and analytical data that were available to HygieneTech at the time this report was prepared. Be advised that, in order to establish data that accurately reflects all the fungal growth sites on the 10<sup>TH</sup> Floor, additional assessment evaluations may be required as more information is known regarding the history of water intrusion episodes in discrete building areas.

- 6.1 If not yet established, an accurate record of all air monitoring results should be maintained in accordance with Cal-OSHA regulation found in T8, CCR § 3204. All affected employees should be informed that the *exposure potential* data in this report exist and that those persons, or their representatives, have a right to access relevant exposure data and medical records.
- 6.2 Routine cleaning of the HVAC supply air registers on the 10<sup>TH</sup> Floor should be performed to preclude the build-up of dust and debris, which may potentially contribute to fungal growth on those surfaces.
- 6.3 Air temperature levels on the 10<sup>TH</sup> Floor should be adjusted to the appropriate ranges recommended by ASHRAE for occupant comfort.
- 6.4 Also be advised that the exposure data recorded during the survey may not be sufficiently broad to adequately assess the suitability of the indoor air quality for all individuals, particularly those who are extremely sensitive to certain chemical and/or biological substances or for those individuals with immune system deficiencies. Although not expected, if persons occupying or passing through the 8<sup>th</sup> Floor do experience non-specific ill effects of unknown etiology, then those affected should be referred to a medical professional in order to determine or specify the possible cause(s) of such reactions. If more information becomes available, further investigation and air monitoring may be warranted.

### HYGIENE TECHNOLOGIES INTERNATIONAL, INC.



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Kenny K. Hsi, CIH  
Technical Director

Date: July 31, 2008



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Brian P. Daly, CIH, PE  
President

Date: July 31, 2008

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

Page 1

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

SAMPLE NUMBER	20803001-TM09AC	20803001-TM10AC	20803001-TM11AC	20803001-TM12AC
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; area between Columns N22 and K22; Cubicle 058; within ceiling plenum/Sampling activities only	Room 1014; Column N22 area; Cubicle 063; within ceiling plenum/Sampling activities only	Room 1014; Column N21 area; about three feet south of northern perimeter; approximately ten feet east of western perimeter; within ceiling plenum/Sampling activities only	Room 1014; Column N19 area; Cubicle 101; within ceiling plenum/Sampling activities only
<b>DATE</b>	03-04-08	03-04-08	03-04-08	03-04-08
<b>START/STOP</b>	10:46:00/10:51:00	10:47:00/10:52:00	10:56:00/11:01:00	11:05:00/11:10:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	
Arthrinium				
Ascospores				
Aureobasidium				
Basidiospores	53			53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	107	107	107	53
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown			13	107
Penicillium/Aspergillus types	107	53	160	
Pithomyces				
Rusts				13
Smuts (Periconia, Myxomycetes)	13		27	13
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	27	<13	40	40
Background particulates*	4+	2+	4+	3+
<b>TOTAL**</b>	280	160	320	239

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

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TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

Page 2

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

SAMPLE NUMBER	20803001-TM13AC	20803001-TM14AC	20803001-TM15AC	20803001-TM16AC
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column N18 area; about three feet southwest of northeastern corner; within ceiling plenum/Sampling activities only	Room 1014; area between Columns N18 and K18; Cubicle 147; within ceiling plenum/Sampling activities only	Room 1014; Column K18 area; Cubicle 006; within ceiling plenum/Sampling activities only	Room 1014; Column K21 area; Cubicle 017; within ceiling plenum/Sampling activities only
<b>DATE</b>	03-04-08	03-04-08	03-04-08	03-04-08
<b>START/STOP</b>	11:11:00/11:16:00	11:16:00/11:21:00	11:23:00/11:28:00	11:27:00/11:32:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	27		13	
Arthrinium				
Ascospores				
Aureobasidium				
Basidiospores		107	53	
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	107	53	160	107
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown			13	
Penicillium/Aspergillus types	107	107	53	107
Pithomyces				
Rusts			13	
Smuts (Periconia, Myxomycetes)	13	13		
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	13	27	13	40
Background particulates*	3+	3+	3+	4+
<b>TOTAL **</b>	254	280	305	214

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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# APPENDIX A



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10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

Page 3

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

SAMPLE NUMBER	20803001-TM25JLOUT	20803001-TM26JL	20803001-TM27JL	20803001-TM28JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 25 feet east of building; approximately five feet above ground/Normal outdoor activities	Room 1014; area between Columns K22 and N22; about two feet east of Cubicle 60; approximately five feet above floor/Normal office activities	Room 1014; Column K22 area; about five feet east of Cubicle 56; approximately five feet above floor/Normal office activities	Room 1014; Column K22 area; about five feet south of Cubicle 29; approximately five feet above floor/Normal office activities
<b>DATE</b>	03-19-08	03-19-08	03-19-08	03-19-08
<b>START/STOP</b>	14:13:00/14:18:00	14:24:00/14:29:00	14:30:00/14:35:00	14:41:00/14:46:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrimum				
Ascospores	160			
Aureobasidium				
Basidiospores	480		53	
Bipolaris/Drechslera group				
Botrytis		13		
Chaetomium	27			
Cladosporium	1,550	53		
Curvularia				
Epicoccum				
Nigrospora				
Oidium				
Other brown				13
Penicillium/Aspergillus types	640	53		53
Pithomyces				
Rusts		13		13
Smuts (Periconia, Myxomycetes)	13	13	13	
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	27	<13	<13	<13
Background particulates*	2+	2+	2+	2+
<b>TOTAL**</b>	2,870	145	66	79

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

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

SAMPLE NUMBER	20803001-TM29JL	20803001-TM30JL	20803001-TM31JL	20803001-TM32JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column K20 area; about two feet south of Cubicle 25; approximately five feet above floor/Normal office activities	Room 1014; Column K20 area; about two feet north of Cubicle 36; approximately five feet above floor/Normal office activities	Room 1014; Column K19 area; about two feet north of Cubicle 33; approximately five feet above floor/Normal office activities	Room 1014; Column K18 area; about five feet south of Cubicle 004; approximately five feet above floor/Normal office activities
<b>DATE</b>	03-19-08	03-19-08	03-19-08	03-19-08
<b>START/STOP</b>	14:49:00/14:54:00	14:56:00/15:01:00	15:04:00/15:09:00	15:13:00/15:18:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores				
Aureobasidium				
Basidiospores				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium				
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types				
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	27	<13	<13	<13
Background particulates*	2+	2+	2+	2+
<b>TOTAL **</b>	<13	<13	<13	<13

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

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

SAMPLE NUMBER	20803001-TM33JL	20803001-TM34JL	20803001-TM35JL	20803001-TM36JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column K19 area; about two feet south of Cubicle 021; approximately five feet above floor/Normal office activities	Room 1014; area between Columns N18 and K18; about two feet west of Cubicle 147; approximately five feet above floor/Normal office activities	Room 1014; Column N18 area; about two feet west of Cubicle 142; approximately five feet above floor/Normal office activities	Room 1014; Column N18 area; about two feet south of Cubicle 114; approximately five feet above floor/Normal office activities
<b>DATE</b>	03-19-08	03-19-08	03-19-08	03-19-08
<b>START/STOP</b>	15:17:00/15:22:00	15:25:00/15:30:00	15:33:00/15:38:00	15:40:00/15:45:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	13			
Arthrimum				
Ascospores		53		
Aureobasidium				
Basidiospores			53	
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium		53		53
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types	53	53	53	
Pithomyces				
Rusts		13		
Smuts (Periconia, Myxomycetes)	13			13
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	13	<13	<13	<13
Background particulates*	2+	2+	2+	2+
<b>TOTAL**</b>	79	172	106	66

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

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

SAMPLE NUMBER	20803001-TM37JL	20803001-TM38JL	20803001-TM39JL	20803001-TM40JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column N19 area; about two feet east of Cubicle124; approximately five feet above floor/Normal office activities	Room 1014; Column N20 area; about six feet south of Cubicle 98; approximately five feet above floor/Normal office activities	Room 1014; Column N18 area; about two feet south of Cubicle 10; approximately five feet above floor/Normal office activities	Room 1014; Column N22 area; about five feet south of Cubicle 92; approximately five feet above floor/Normal office activities
<b>DATE</b>	03-19-08	03-19-08	03-19-08	03-19-08
<b>START/STOP</b>	15:52:00/15:57:00	15:58:00/16:03:00	16:06:00/16:11:00	16:13:00/16:18:00
<b>SAMPLE TIME</b>	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores				
Aureobasidium				
Basidiospores	53	53		53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium				
Curvularia				
Epicoccum				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types	53		53	53
Pithomyces				
Rusts		13		
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	<13	<13	<13	<13
Background particulates*	2+	2+	2+	2+
<b>TOTAL **</b>	106	66	53	106

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-124  
AIRBORNE TOTAL FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4 AND 19, 2008

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

SAMPLE NUMBER	20803001-TM41JL	20803001-TM42OUTJL		
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column N21 area; about three feet south of cubicle 81; approximately five feet above floor/Normal office activities	Outdoors; about 25 feet east of building; approximately five feet above ground/Normal outdoor activities	This column intentionally left blank	This column intentionally left blank
<b>DATE</b>	03-19-08	03-19-08		
<b>START/STOP</b>	16:22:00/16:27:00	16:34:00/16:39:00		
<b>SAMPLE TIME</b>	5 minutes	5 minutes		
Alternaria				
Arthrinium				
Ascospores		267		
Aureobasidium				
Basidiospores		640		
Bipolaris/Drechslera group				
Botrytis				
Chaetomium		53		
Cladosporium		1,760		
Curvularia				
Epicoccum				
Nigrospora				
Oidium		13		
Other brown				
Penicillium/Aspergillus types	53	1,330		
Pithomyces				
Rusts	13	27		
Smuts (Periconia, Myxomycetes)		13		
Stachybotrys				
Torula				
Ulocladium				
Hyphal fragments	<13	27		
Background particulates*	2+	3+		
<b>TOTAL**</b>	66	4,103		

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

**TABLE 20803001-126**  
**AIRBORNE VIABLE FUNGI RESULTS**  
**10<sup>TH</sup> FLOOR**  
**SACRAMENTO, CALIFORNIA**  
**MARCH 19, 2008**

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**Results reported in colony forming units per cubic meter of air (CFU/M<sup>3</sup>)**

SAMPLE NUMBER	20803001-VM01OUTJL	20803001-VM02JL	20803001-VM03JL	20803001-VM04JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Outdoors; about 25 feet east of building; approximately five feet above ground/Normal outdoor activities	Room 1014; area between Column N22 and K22; about two feet east of Cubicle 60; approximately five feet above floor/Normal office activities	Room 1014; Column K22 area; about five feet south of Cubicle 29; approximately five feet above floor/Normal office activities	Room 1014; Column K20 area; about two feet north of Cubicle 36; approximately five feet above floor/Normal office activities
<b>START/STOP</b>	14:13:00/14:15:00	14:24:00/14:26:00	14:43:00/14:45:00	14:58:00/15:00:00
<b>SAMPLE TIME</b>	2 minutes	2 minutes	2 minutes	2 minutes
Acremonium				
Alternaria				
Aspergillus flavus				
Aspergillus niger			18	
Aspergillus other				
Aspergillus versicolor				
Aureobasidium				
Beauveria				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	830	35	18	18
Curvularia				
Epicoccum				
Nigrospora				
Memnoniella				
Myrothecium				
Non-sporulating fungi	18	18		
Others				
Paecilomyces				
Penicillium	18			
Phoma/coelomycetes				
Sporobolomyces				
Stachybotrys				
Ulocladium				
Yeasts				
<b>TOTAL</b>	866	53	36	18

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-126  
AIRBORNE VIABLE FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
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## Results reported in colony forming units per cubic meter of air (CFU/M<sup>3</sup>)

SAMPLE NUMBER	20803001-VM05JL	20803001-VM06JL	20803001-VM07JL	20803001-VM08JL
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column K18 area; about five feet south of Cubicle 004; approximately five feet above floor/Normal office activities	Room 1014; area between Column N18 and K18; about two feet west of Cubicle 147; approximately five feet above floor/Normal office activities	Room 1014; Column N18 area; two feet south of Cubicle 114; approximately five feet above floor/Normal office activities	Room 1014; Column N20 area; about six feet south of Cubicle 98; approximately five feet above floor/Normal office activities
<b>START/STOP</b>	15:13:00/15:15:00	15:28:00/15:30:00	15:43:00/15:45:00	16:01:00/16:03:00
<b>SAMPLE TIME</b>	2 minutes	2 minutes	2 minutes	2 minutes
Acremonium				
Alternaria				
Aspergillus flavus				
Aspergillus niger				
Aspergillus other				
Aspergillus versicolor				
Aureobasidium				
Beauveria				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	35		18	18
Curvularia				
Epicoccum				
Fusarium				
Memnoniella				
Myrothecium				
Non-sporulating fungi				
Others				
Paecilomyces				
Penicillium	18			
Phoma/coelomycetes				
Sporobolomyces				
Stachybotrys				
Ulocladium				
Yeasts				
<b>TOTAL</b>	53	<18	18	18

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-126  
AIRBORNE VIABLE FUNGI RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 19, 2008

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**Results reported in colony forming units per cubic meter of air (CFU/M<sup>3</sup>)**

SAMPLE NUMBER	20803001-VM09JL	20803001-VM10OUTJL		
<b>SAMPLING LOCATION/ACTIVITIES</b>	Room 1014; Column N22 area; about five feet south of Cubicle 92; approximately five feet above floor/Normal office activities	Outdoors; about 25 feet east of building; approximately five feet above ground/Normal outdoor activities	This column intentionally left blank	This column intentionally left blank
<b>START/STOP</b>	16:15:00/16:17:00	16:36:00/16:38:00		
<b>SAMPLE TIME</b>	2 minutes	2 minutes		
Acremonium				
Alternaria				
Aspergillus flavus				
Aspergillus fumigatus		18		
Aspergillus glaucus		18		
Aspergillus niger				
Aspergillus other				
Aspergillus versicolor				
Aureobasidium				
Beauveria				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium		1,240		
Cladosporium				
Curvularia				
Epicoccum				
Fusarium				
Memnoniella				
Mucor				
Myrothecium				
Non-sporulating fungi		35		
Paecilomyces		18		
Penicillium		88		
Phoma/coelomycetes				
Sporobolomyces				
Stachybotrys				
Ulocladium				
Yeasts				
<b>TOTAL</b>	<18	1,417		

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-125  
SURFACE FUNGAL GROWTH POTENTIALS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4, 2008

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20803001-TL01AC	Room 1014; Column K19 area; Cubicle 006; western partition at southern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL02AC	Room 1014; Column K19 area; Cubicle 031; northern cubicle partition at eastern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL03AC	Room 1014; Column K20 area; Cubicle 012; western cubicle partition at southern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL04AC	Room 1014; Column K21 area; Cubicle 015; western cubicle partition at southern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL05AC	Room 1014; Column K20 area; Cubicle 052; southern cubicle partition; about center; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL06AC	Room 1014; Column K22 area; Cubicle 019; northern cubicle partition at western end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL07AC	Room 1014; Column K22 area; Cubicle 056; western partition at southern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL08AC	Room 1014; area between Column N22 and K22; Cubicle 058; eastern cubicle partition; about center; from top horizontal surface	Scant	None	None	None	Background

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

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-125  
SURFACE FUNGAL GROWTH POTENTIALS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4, 2008

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20803001-TL09AC	Room 1014; area between Column N22 and K22; Cubicle 061; western cubicle partition; about center; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL10AC	Room 1014; Column N22 area; Cubicle 066; western cubicle partition ; about center; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL11AC	Room 1014; Column N22 area; Cubicle 92; southern cubicle partition at western end; from top horizontal surface	Scant	Very few	None	None	Background
20803001-TL12AC	Room 1014; Column N21 area; Cubicle 95; northern cubicle partition; about center; from top horizontal surface	Moderate	Very few	None	None	Background
20803001-TL13AC	Room 1014; Column N20 area; Cubicle 78; eastern cubicle partition; about center; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL14AC	Room 1014; Column N20 area; Cubicle 99; northern cubicle partition; about center; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL15AC	Room 1014; Column N19 area; Cubicle 101; eastern cubicle partition at northern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL16AC	Room 1014; Column N19 area; Cubicle 131; eastern cubicle partition; about center; from top horizontal surface	Light	Very few	None	None	Background

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

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-125  
SURFACE FUNGAL GROWTH POTENTIALS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4, 2008

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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20803001-TL17AC	Room 1014; Column N18 area; Cubicle 141; eastern cubicle partition at northern end; from top horizontal surface	Light	Very few	None	None	Background
20803001-TL18AC	Room 1014; Column N18 area; Cubicle 140 eastern cubicle partition; about center; from top horizontal surface	Scant	None	None	None	Background
20803001-TL19AC	Room 1014; area between Column N18 and K18; Cubicle 146; eastern cubicle partition; about center; from top horizontal surface	Scant	None	None	None	Background
20803001-TL20AC	Room 1014; Column K18 area; Cubicle 002; eastern cubicle partition; about center; from top horizontal surface	Moderate	Very few	None	None	Background
20803001-S09AC	Room 1014; area between Column N22 and K22; Cubicle 058; ceiling; from reverse side of HVAC supply air register	Heavy	Very few	<1+ <i>Alternaria</i> species (spores, hyphae, conidiophores)	Many dark amorphous particles detected, not biological in appearance	Minimal fungal growth
20803001-S10AC	Room 1014; Column N22 area; Cubicle 063; ceiling; from reverse side of HVAC supply air register	Heavy	Very few	1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Fungal growth
20803001-S11AC	Room 1014; Column N21 area; about three feet south of northern perimeter; approximately ten feet east of western perimeter; ceiling; from reverse side of HVAC supply air register	Moderate	Very few	<1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Minimal fungal growth
20803001-S12AC	Room 1014; Column N19 area; Cubicle 101; ceiling; from reverse side of HVAC supply air register	Heavy	Few	None	A few hyphal fragments detected	Background

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

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-125  
SURFACE FUNGAL GROWTH POTENTIALS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
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SAMPLE NUMBER	SAMPLING LOCATION	AMORPHOUS DEBRIS	MISCELLANEOUS FUNGI/POLLEN*	FUNGI SEEN WITH UNDERLYING MYCELIAL AND/OR SPORULATING STRUCTURES**	OTHER COMMENTS	GENERAL IMPRESSION
20803001-S13AC	Room 1014; Column N18 area; about three feet southwestern of northeastern corner; ceiling; from reverse side of HVAC supply air register	Moderate	Very few	2+ arthrospores-former (hyphae)  2+ <i>Acremonium</i> species (spores, hyphae, conidiophores)	None	Fungal growth
20803001-S14AC	Room 1014; area between Column N18 and K18; Cubicle 147; ceiling; from reverse side of HVAC supply air register	Moderate	Variety	None	A few hyphal fragments detected	Background
20803001-S15AC	Room 1014; Column K18 area; Cubicle 006; ceiling; from reverse side of HVAC supply air register	Moderate	Very few	2+ brown hyphae with no associated spores, ID unknown (hyphae)	A few <i>Alternaria</i> spores detected	Fungal growth
20803001-S16AC	Room 1014; Column K21 area; Cubicle 017; ceiling; from reverse side of HVAC supply air register	Heavy	Few	2+ brown hyphae with no associated spores, ID unknown (hyphae)	A few <i>Alternaria</i> spores detected	Fungal growth

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

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

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



TABLE 20803001-127  
AIRBORNE FIBERS RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 4, 2008

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (f/cc)	PEL (f/cc)
Area Sample	Room 1014; Column K22 area; about four feet south of Cubicle 043; approximately six feet above floor/Normal office activities	N/A	20803001- F01AC	9:32/ 17:32	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; Column K21 area; Cubicle 15; about center; approximately six feet above floor/Normal office activities	N/A	20803001- F02AC	9:36/ 17:36	480 minutes	Fibers	0.007	0.1
Area Sample	Room 1014; Column K19 area; Cubicle 006; about center; approximately six feet above floor/Normal office activities	N/A	20803001- F03AC	9:41/ 17:41	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; area between Columns N18 and K18; Cubicle 147; about center; approximately six feet above floor/Normal office activities	N/A	20803001- F04AC	9:45/ 17:45	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; Column N18 area; Cubicle 139; about center; approximately six feet above floor/Normal office activities	N/A	20803001- F05AC	9:47/ 17:47	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; Column N20 area; about 15 feet south of Cubicle 98; approximately six feet above floor/Normal office activities	N/A	20803001- F06AC	9:50/ 17:50	480 minutes	Fibers	0.006	0.1
Area Sample	Room 1014; Column N22 area; about three feet east of Cubicle 86; approximately six feet above floor/Normal office activities	N/A	20803001- F07AC	9:53/ 17:53	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; Column N22 area; about three feet east of Cubicle 63; approximately six feet above floor/Normal office activities	N/A	20803001- F08AC	9:55/ 17:55	480 minutes	Fibers	<0.004	0.1
Area Sample	Room 1014; area between Columns N22 and K22; Cubicle 058; approximately six feet above floor/Normal office activities	N/A	20803001- F09AC	9:57/ 17:57	480 minutes	Fibers	0.007	0.1
Blank	N/A	N/A	20803001- F10AC BLANK	N/A	N/A	Fibers	All data blank corrected	N/A

## LEGEND

PPE: Personal protective equipment

N/A: Not applicable

PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

<: Less than

f/cc: Fibers per cubic centimeter of air

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



**TABLE 20803001-128  
AIRBORNE TOTAL DUST RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008**

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (mg/M <sup>3</sup> )	PEL (mg/M <sup>3</sup> )
Area Sample	Room 1014; Column K22 area; about four feet south of Cubicle 043; approximately six feet above floor/Normal office activities	N/A	20803001-TD12CL	9:54/ 14:14	260 minutes	Total dust	<b>0.31</b>	10
Area Sample	Room 1014; Column K21 area; Cubicle 015; about center; approximately six feet above floor/Normal office activities	N/A	20803001-TD13CL	9:59/ 14:16	257 minutes	Total dust	<b>&lt;0.19</b>	10
Area Sample	Room 1014; Column K19 area; Cubicle 006; about center; approximately six feet above floor/Normal office activities	N/A	20803001-TD14CL	10:02/ 14:17	255 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; area between Columns N18 and K18; Cubicle 147; about center; approximately six feet above floor/Normal office activities	N/A	20803001-TD15CL	10:04/ 14:19	255 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; Column N18 area; Cubicle 141; about center; approximately six feet above floor/Normal office activities	N/A	20803001-TD16CL	10:06/ 14:21	255 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; Column N20 area; about 15 feet south of Cubicle 098; approximately six feet above floor/Normal office activities	N/A	20803001-TD17CL	10:08/ 14:22	254 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; Column N22 area; about three feet east of Cubicle 086; approximately six feet above floor/Normal office activities	N/A	20803001-TD18CL	10:10/ 14:24	254 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; Column N22 area; about three feet east of Cubicle 063; approximately six feet above floor/Normal office activities	N/A	20803001-TD19CL	10:13/ 14:26	253 minutes	Total dust	<b>&lt;0.20</b>	10
Area Sample	Room 1014; area between Columns N22 and K22; Cubicle 058; approximately six feet above floor/Normal office activities	N/A	20803001-TD20CL	10:15/ 14:28	253 minutes	Total dust	<b>&lt;0.20</b>	10
Blank	N/A	N/A	20803001-TD21CLBLANK	N/A	N/A	Total dust	All data blank corrected	10

## LEGEND

PPE: Personal protective equipment

N/A: Not applicable

PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

<: Less than

mg/M<sup>3</sup>: Milligrams per cubic meter

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



TABLE 20803001-129  
MICROBIAL VOLATILE ORGANIC COMPOUNDS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008

Page 1

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (mg/M <sup>3</sup> )	PEL (mg/M <sup>3</sup> )
Area Sample	Room 1014; Column K20 area; Cubicle 25; about center; approximately five feet above floor/Normal office activities	N/A	20803001- M03AC	15:21/ 16:59	98 minutes	3-Methylfuran	8 x10 <sup>-6</sup>	N/A
						2-Methyl-1-propanol	119 x10 <sup>-6</sup>	N/A
						1-Butanol	130 x10 <sup>-6</sup>	300
						3-Methyl-2-butanol	nd	N/A
						2-Pentanol	nd	N/A
						3-Methyl-2-butanol	nd	N/A
						Methyl disulfide	nd	N/A
						Ethyl isobutyrate	nd	N/A
						2-Hexanone	38 x10 <sup>-6</sup>	410
						2-Heptanone	47 x10 <sup>-6</sup>	468
						5-Methyl-3-heptanone	nd	130
						1-Octen-3-ol	nd	N/A
						3-Octanone	nd	N/A
						3-Octanol	nd	N/A
						2-Pentylfuran	nd	N/A
						2-Octen-1-ol	nd	N/A
						2-Methoxy-3-1(methylethyl) pyrazine	nd	N/A
						2-Nonanone	nd	N/A
						Fenchone	nd	N/A
						2-Methyl-isoborneol	nd	N/A
a-Terpineol	nd	N/A						
Borneol	nd	N/A						
Geosmin	nd	N/A						
Thujopsene	nd	N/A						

## LEGEND

PPE: Personal protective equipment  
N/A: Not applicable  
mg/M<sup>3</sup>: Milligrams per cubic meter

<: Less than  
PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



TABLE 20803001-129  
MICROBIAL VOLATILE ORGANIC COMPOUNDS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008

Page 2

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (mg/M <sup>3</sup> )	PEL (mg/M <sup>3</sup> )
Area Sample	Room 1014; area between Columns N18 and K18; Cubicle 145; about center; approximately five feet above floor/Normal office activities	N/A	20803001- M04AC	15:24/ 17:01	97 minutes	3-Methylfuran	11 x10 <sup>-6</sup>	N/A
						2-Methyl-1-propanol	43 x10 <sup>-6</sup>	N/A
						1-Butanol	219 x10 <sup>-6</sup>	300
						3-Methyl-2-butanol	nd	N/A
						2-Pentanol	nd	N/A
						3-Methyl-2-butanol	nd	N/A
						Methyl disulfide	nd	N/A
						Ethyl isobutyrate	nd	N/A
						2-Hexanone	47 x10 <sup>-6</sup>	410
						2-Heptanone	69 x10 <sup>-6</sup>	468
						5-Methyl-3-heptanone	nd	130
						1-Octen-3-ol	nd	N/A
						3-Octanone	nd	N/A
						3-Octanol	nd	N/A
						2-Pentylfuran	nd	N/A
						2-Octen-1-ol	nd	N/A
						2-Methoxy-3-1(methylethyl) pyrazine	nd	N/A
						2-Nonanone	nd	N/A
						Fenchone	nd	N/A
						2-Methyl-isoborneol	nd	N/A
a-Terpineol	nd	N/A						
Borneol	nd	N/A						
Geosmin	nd	N/A						
Thujopsene	nd	N/A						

## LEGEND

PPE: Personal protective equipment  
N/A: Not applicable  
mg/M<sup>3</sup>: Milligrams per cubic meter

<: Less than  
PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



TABLE 20803001-129  
MICROBIAL VOLATILE ORGANIC COMPOUNDS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008

Page 3

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (mg/M <sup>3</sup> )	PEL (mg/M <sup>3</sup> )
Area Sample	Room 1014; Column N20 area; photocopying area; about center; approximately five feet above floor/Normal office activities	N/A	20803001- M05AC	15:26/ 16:59	93 minutes	3-Methylfuran	45 x10 <sup>-6</sup>	N/A
						2-Methyl-1-propanol	71 x10 <sup>-6</sup>	N/A
						1-Butanol	864 x10 <sup>-6</sup>	300
						3-Methyl-2-butanol	nd	N/A
						2-Pentanol	nd	N/A
						3-Methyl-2-butanol	nd	N/A
						Methyl disulfide	nd	N/A
						Ethyl isobutyrate	nd	N/A
						2-Hexanone	56 x10 <sup>-6</sup>	410
						2-Heptanone	89 x10 <sup>-6</sup>	468
						5-Methyl-3-heptanone	nd	130
						1-Octen-3-ol	nd	N/A
						3-Octanone	nd	N/A
						3-Octanol	nd	N/A
						2-Pentylfuran	nd	N/A
						2-Octen-1-ol	nd	N/A
						2-Methoxy-3-1(methylethyl) pyrazine	nd	N/A
						2-Nonanone	nd	N/A
						Fenchone	nd	N/A
						2-Methyl-isoborneol	nd	N/A
a-Terpineol	nd	N/A						
Borneol	nd	N/A						
Geosmin	nd	N/A						
Thujopsene	nd	N/A						

## LEGEND

PPE: Personal protective equipment  
N/A: Not applicable  
mg/M<sup>3</sup>: Milligrams per cubic meter

<: Less than  
PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

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

# APPENDIX A



TABLE 20803001-129  
MICROBIAL VOLATILE ORGANIC COMPOUNDS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008

Page 4

NAME/ REFERENCE	LOCATION/ ACTIVITIES	PPE USED	SAMPLE NUMBER	START/ STOP	SAMPLE TIME	CONTAMINANT	RESULTS (mg/M <sup>3</sup> )	PEL (mg/M <sup>3</sup> )
Area Sample	Room 1014; area between Columns N22 and K22 area; Cubicle 60; about center; approximately five feet above floor/Normal office activities	N/A	20803001-M06AC	15:28/ 17:05	97 minutes	3-Methylfuran	13 x10 <sup>-6</sup>	N/A
						2-Methyl-1-propanol	nd	N/A
						1-Butanol	1,438 x10 <sup>-6</sup>	300
						3-Methyl-2-butanol	nd	N/A
						2-Pentanol	nd	N/A
						3-Methyl-2-butanol	nd	N/A
						Dimethyl disulfide	12x10 <sup>-6</sup>	N/A
						Ethyl isobutyrate	nd	N/A
						2-Hexanone	44 x10 <sup>-6</sup>	410
						2-Heptanone	62 x10 <sup>-6</sup>	468
						5-Methyl-3-heptanone	nd	130
						1-Octen-3-ol	nd	N/A
						3-Octanone	nd	N/A
						3-Octanol	nd	N/A
						2-Pentylfuran	nd	N/A
						2-Octen-1-ol	nd	N/A
						2-Methoxy-3-1(methylethyl) pyrazine	nd	N/A
						2-Nonanone	nd	N/A
						Fenchone	nd	N/A
						2-Methyl-isoborneol	nd	N/A
a-Terpineol	nd	N/A						
Borneol	nd	N/A						
Geosmin	nd	N/A						
Thujopsene	nd	N/A						

## LEGEND

PPE: Personal protective equipment  
N/A: Not applicable  
mg/M<sup>3</sup>: Milligrams per cubic meter

<: Less than  
PEL: Cal-OSHA 8-hour time-weighted average permissible exposure limit

# HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

# APPENDIX A



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

TABLE 20803001-130  
DIRECT-READING RESULTS  
10<sup>TH</sup> FLOOR  
SACRAMENTO, CALIFORNIA  
MARCH 5, 2008

LOCATION/SITE ACTIVITIES	SAMPLE TIME	CONTAMINANT	RESULTS (ppm)	COMMENTS
Room 1014; general area between Columns K18 and K22; approximately five feet above floor/Normal office activities	10:15/10:25	Volatile Organic Compounds	ND < 0.1	N/A
		Ozone	ND < 0.05	
Room 1014; general area between Columns K18 and N18; approximately five feet above floor/Normal office activities	10:26/10:36	Volatile Organic Compounds	ND <0.1	N/A
		Ozone	ND <0.05	
Room 1014; general area between Columns N18 and N22; approximately five feet above floor/Normal office activities	10:37/10:47	Volatile Organic Compounds	ND < 0.1	N/A
		Ozone	ND <0.05	
Room 1014; general between Columns N22 and K22; approximately five feet above floor/Normal office activities	10:48/10:58	Volatile Organic Compounds	ND < 0.1	N/A
		Ozone	ND <0.05	

## LEGEND

ND: Not detected  
<: Less than

N/A: Not applicable  
ppm: Parts per million



**EMLab P&K**

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Report for:

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

---

Regarding:      Project: 20803001  
                      EML ID: 401900

Approved by:

Lab Manager  
Dr. Kamashwaran Ramanathan

Dates of Analysis:  
Spore trap analysis: 03-24-2008

Project SOPs: Spore trap analysis (I100000)

---

This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

---

Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-24-2008

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

Location:	20803001-TM25outJL		20803001-TM26JL		20803001-TM27JL		20803001-TM28JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764579-1		1764580-1		1764581-1		1764582-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Arthrinium								
Ascospores*	3	160						
Aureobasidium								
Basidiospores*	9	480			1	53		
Bipolaris/Drechslera group								
Botrytis			1	13				
Chaetomium	2	27						
Cladosporium	29	1,550	1	53				
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium								
Other brown							1	13
Other colorless								
Penicillium/Aspergillus types†	12	640	1	53			1	53
Pithomyces								
Rusts*			1	13			1	13
Smuts*, Periconia, Myxomycetes*	1	13	1	13	1	13		
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	27		< 13		< 13		< 13	
Pollen/m3	333		27		13		13	
Skin cells (1-4+)	< 1+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		<b>2,870</b>		<b>145</b>		<b>66</b>		<b>79</b>

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.  
 † The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.  
 †† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-24-2008

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

Location:	20803001-TM29JL		20803001-TM30JL		20803001-TM31JL		20803001-TM32JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764583-1		1764584-1		1764585-1		1764586-1	
	raw ct.	spores/m3						
Alternaria								
Arthrinium								
Ascospores*								
Aureobasidium								
Basidiospores*								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium								
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium								
Other brown								
Other colorless								
Penicillium/Aspergillus types†								
Pithomyces								
Rusts*								
Smuts*, Periconia, Myxomycetes*								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	27		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		< 13	
Skin cells (1-4+)	2+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		< 13		< 13		< 13		< 13

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.  
 † The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.  
 †† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-24-2008

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

Location:	20803001-TM33JL		20803001-TM34JL		20803001-TM35JL		20803001-TM36JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764587-1		1764588-1		1764589-1		1764590-1	
	raw ct.	spores/m3						
Alternaria	1	13						
Arthrinium								
Ascospores*			1	53				
Aureobasidium								
Basidiospores*					1	53		
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium			1	53			1	53
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium								
Other brown								
Other colorless								
Penicillium/Aspergillus types†	1	53	1	53	1	53		
Pithomyces								
Rusts*			1	13				
Smuts*, Periconia, Myxomycetes*	1	13					1	13
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	13		< 13		< 13		< 13	
Pollen/m3	13		13		< 13		< 13	
Skin cells (1-4+)	2+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		79		172		106		66

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.  
 † The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.  
 †† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-24-2008

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

Location:	20803001-TM37JL		20803001-TM38JL		20803001-TM39JL		20803001-TM40JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764591-1		1764592-1		1764593-1		1764594-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria								
Arthrinium								
Ascospores*								
Aureobasidium								
Basidiospores*	1	53	1	53			1	53
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium								
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Oidium								
Other brown								
Other colorless								
Penicillium/Aspergillus types†	1	53			1	53	1	53
Pithomyces								
Rusts*			1	13				
Smuts*, Periconia, Myxomycetes*								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	< 13		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		< 13	
Skin cells (1-4+)	2+		2+		2+		2+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		<b>106</b>		<b>66</b>		<b>53</b>		<b>106</b>

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

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

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

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

Client: Hygiene Technologies International, Inc.:  
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 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
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**SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**

Location:	20803001-TM41JL		20803001-TM42outJL	
Comments (see below)	None		None	
Lab ID-Version‡:	1764595-1		1764596-1	
	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria				
Arthrinium				
Ascospores*			5	267
Aureobasidium				
Basidiospores*			12	640
Bipolaris/Drechslera group				
Botrytis				
Chaetomium			4	53
Cladosporium			33	1,760
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium			1	13
Other brown				
Other colorless				
Penicillium/Aspergillus types†	1	53	25	1,330
Pithomyces				
Rusts*	1	13	2	27
Smuts*, Periconia, Myxomycetes*			1	13
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Zygomycetes				
Background debris (1-4+)††	2+		3+	
Hyphal fragments/m3	< 13		27	
Pollen/m3	13		213	
Skin cells (1-4+)	1+		< 1+	
Sample volume (liters)	75		75	
<b>TOTAL SPORE/m3</b>		<b>66</b>		<b>4,103</b>

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

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

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for sample volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

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**MoldRANGE™: Extended Outdoor Comparison****Outdoor Location: 20803001-TM25outJL**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: March				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
<b>Generally able to grow indoors*</b>									
Alternaria	-	7	27	210	43	7	27	230	60
Bipolaris/Drechslera group	-	7	13	120	12	7	13	120	14
Chaetomium	27	7	13	120	8	7	13	110	19
Cladosporium	1,550	27	320	4,300	91	53	640	6,500	98
Curvularia	-	7	13	210	7	7	13	210	7
Nigrospora	-	7	13	110	7	7	13	170	8
Penicillium/Aspergillus types	640	27	160	1,600	82	40	210	2,500	88
Stachybotrys	-	7	13	310	3	7	13	330	5
Torula	-	7	13	170	8	7	13	150	13
<b>Seldom found growing indoors**</b>									
Ascospores	160	13	130	2,000	74	13	110	1,800	73
Basidiospores	480	13	320	5,700	90	13	270	6,900	95
Oidium	-	7	13	330	14	7	13	200	20
Rusts	-	7	13	320	17	7	13	270	29
Smuts, Periconia, Myxomycetes	13	7	27	310	54	8	40	470	71
<b>TOTAL SPORES/M3</b>	2,870								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m<sup>3</sup>. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

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

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

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

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

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**MoldRANGE™: Extended Outdoor Comparison****Outdoor Location: 20803001-TM42outJL**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: March				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
<b>Generally able to grow indoors*</b>									
Alternaria	-	7	27	210	43	7	27	230	60
Bipolaris/Drechslera group	-	7	13	120	12	7	13	120	14
Chaetomium	53	7	13	120	8	7	13	110	19
Cladosporium	1,760	27	320	4,300	91	53	640	6,500	98
Curvularia	-	7	13	210	7	7	13	210	7
Nigrospora	-	7	13	110	7	7	13	170	8
Penicillium/Aspergillus types	1,330	27	160	1,600	82	40	210	2,500	88
Stachybotrys	-	7	13	310	3	7	13	330	5
Torula	-	7	13	170	8	7	13	150	13
<b>Seldom found growing indoors**</b>									
Ascospores	267	13	130	2,000	74	13	110	1,800	73
Basidiospores	640	13	320	5,700	90	13	270	6,900	95
Oidium	13	7	13	330	14	7	13	200	20
Rusts	27	7	13	320	17	7	13	270	29
Smuts, Periconia, Myxomycetes	13	7	27	310	54	8	40	470	71
<b>TOTAL SPORES/M3</b>	4,103								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m<sup>3</sup>. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

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

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

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

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

**Outdoor Summary:** 20803001-TM25outJL:

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores					13 - 160 - 4,200	76
Basidiospores					13 - 320 - 14,000	92
Chaetomium					7 - 13 - 120	13
Cladosporium					40 - 530 - 8,400	94
Penicillium/Aspergillus types					27 - 210 - 2,600	85
Smuts, Periconia, Myxomycetes					7 - 40 - 760	70
<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:** 20803001-TM26JL

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5455	dF: 8 Result: 0.3095 Critical value: 0.6190 Outside Similar: No	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Botrytis					13
Cladosporium					53
Penicillium/Aspergillus types					53
Rusts					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					145

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

**Location: 20803001-TM27JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: -0.1143 Critical value: 0.7714 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					66

**Location: 20803001-TM28JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.2222	dF: 8 Result: -0.0714 Critical value: 0.6190 Outside Similar: No	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Penicillium/Aspergillus types					53
Rusts					13
<b>Total</b>					79

**Location: 20803001-TM29JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

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

**Location: 20803001-TM30JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

**Location: 20803001-TM31JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

**Location: 20803001-TM32JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

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

**Location:** 20803001-TM33JL

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4444	dF: 7 Result: -0.1161 Critical value: 0.6786 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					13
Penicillium/Aspergillus types					53
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					79

**Location:** 20803001-TM34JL

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.6000	dF: 7 Result: 0.5714 Critical value: 0.6786 Outside Similar: No	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					53
Cladosporium					53
Penicillium/Aspergillus types					53
Rusts					13
<b>Total</b>					172

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

**Location: 20803001-TM35JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.5000 Critical value: 0.7714 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

**Location: 20803001-TM36JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.2857 Critical value: 0.7714 Outside Similar: No	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					66

**Location: 20803001-TM37JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.5000 Critical value: 0.7714 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

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

**Location: 20803001-TM38JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.2500	dF: 7 Result: 0.0000 Critical value: 0.6786 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Rusts					13
<b>Total</b>					66

**Location: 20803001-TM39JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.2857	dF: 6 Result: 0.5429 Critical value: 0.7714 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					53
<b>Total</b>					53

**Location: 20803001-TM40JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.5000	dF: 6 Result: 0.5000 Critical value: 0.7714 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

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

**Location:** 20803001-TM41JL

<b>% of outdoor total spores/m3</b>	<b>Friedman chi-square* (indoor variation)</b>	<b>Agreement ratio** (indoor/outdoor)</b>	<b>Spearman rank correlation*** (indoor/outdoor)</b>	<b>MoldSCORE**** (indoor/outdoor)</b>
Result: 2%	dF: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.2500	dF: 7 Result: 0.1429 Critical value: 0.6786 Outside Similar: No	Score: 106 Result: Low
<b>Species Detected</b>		<b>Spores/m3</b>		
		<100	1K	10K
				>100K
	Penicillium/Aspergillus types			
	Rusts			
	<b>Total</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.

\*\*\* The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

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

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

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

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

**Outdoor Summary: 20803001-TM42outJL:**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Ascospores				267	13 - 160 - 4,200	76
Basidiospores				640	13 - 320 - 14,000	92
Chaetomium				53	7 - 13 - 120	13
Cladosporium				1,760	40 - 530 - 8,400	94
Oidium				13	7 - 13 - 230	15
Penicillium/Aspergillus types				1,330	27 - 210 - 2,600	85
Rusts				27	7 - 14 - 310	23
Smuts, Periconia, Myxomycetes				13	7 - 40 - 760	70
<b>Total</b>				4,103		

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: 20803001-TM26JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.6154	dF: 9 Result: 0.3292 Critical value: 0.5833 Outside Similar: No	Score: 103 Result: Low

Species Detected	Spores/m3				
	<100	1K	10K	>100K	
Botrytis					13
Cladosporium					53
Penicillium/Aspergillus types					53
Rusts					13
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					145

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

**Location: 20803001-TM27JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.1250 Critical value: 0.6190 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					66

**Location: 20803001-TM28JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.0958 Critical value: 0.5833 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Other brown					13
Penicillium/Aspergillus types					53
Rusts					13
<b>Total</b>					79

**Location: 20803001-TM29JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

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

**Location: 20803001-TM30JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

**Location: 20803001-TM31JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

**Location: 20803001-TM32JL**

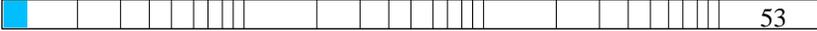
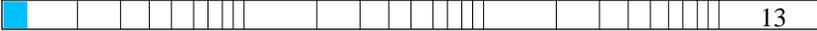
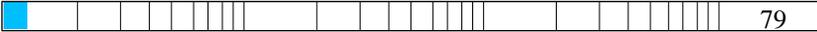
% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)	
Result: < 1%	dF: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
<b>None Detected</b>					N/A

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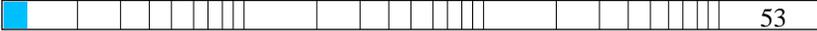
Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

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

**Location:** 20803001-TM33JL

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: -0.0042 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					
Penicillium/Aspergillus types					
Smuts, Periconia, Myxomycetes					
<b>Total</b>					

**Location:** 20803001-TM34JL

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.6667	dF: 8 Result: 0.6964 Critical value: 0.6190 Outside Similar: Yes	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					
Cladosporium					
Penicillium/Aspergillus types					
Rusts					
<b>Total</b>					

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Date of Sampling: 03-19-2008  
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**MoldSTAT™: Supplementary Statistical Spore Trap Report**

**Location: 20803001-TM35JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6012 Critical value: 0.6190 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

**Location: 20803001-TM36JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.3393 Critical value: 0.6190 Outside Similar: No	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					53
Smuts, Periconia, Myxomycetes					13
<b>Total</b>					66

**Location: 20803001-TM37JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6012 Critical value: 0.6190 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

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

**Location: 20803001-TM38JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.2500 Critical value: 0.6190 Outside Similar: No	Score: 105 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Rusts					13
<b>Total</b>					66

**Location: 20803001-TM39JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.2222	dF: 8 Result: 0.5774 Critical value: 0.6190 Outside Similar: No	Score: 106 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					53
<b>Total</b>					53

**Location: 20803001-TM40JL**

% 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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.6012 Critical value: 0.6190 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Basidiospores					53
Penicillium/Aspergillus types					53
<b>Total</b>					106

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

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

**Location:** 20803001-TM41JL

<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: 15 Result: 9.9608 Critical value: 24.9958 Inside Similar: Yes	Result: 0.4000	dF: 8 Result: 0.3571 Critical value: 0.6190 Outside Similar: No	Score: 105 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Penicillium/Aspergillus types					
Rusts					
<b>Total</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.

\*\*\* 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.



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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM27JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††					1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					1	13				103
<b>Total</b>						<b>66</b>				<b>Final MoldSCORE 104</b>

**Location:** 20803001-TM28JL

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				106
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>79</b>				<b>Final MoldSCORE 106</b>

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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM29JL

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

**Location:** 20803001-TM30JL

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

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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM31JL

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

**Location:** 20803001-TM32JL

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

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM33JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					1	13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					ND	< 13				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					1	53				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				
Basidiospores††					ND	< 13				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					1	13				
<b>Total</b>						<b>79</b>	<b>Final MoldSCORE 108</b>			

**Location:** 20803001-TM34JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					1	53				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					1	53				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores††					1	53				
Basidiospores††					ND	< 13				
Rusts					1	13				
Smuts, Periconia, Myxomycetes††					ND	< 13				
<b>Total</b>						<b>172</b>	<b>Final MoldSCORE 102</b>			

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM35JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				105
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>	<b>Final MoldSCORE 105</b>			

**Location:** 20803001-TM36JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium	█				1	53				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††	█				1	13				103
<b>Total</b>						<b>66</b>	<b>Final MoldSCORE 103</b>			

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM37JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				105
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>				<b>Final MoldSCORE 105</b>

**Location:** 20803001-TM38JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts	█				1	13				105
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>66</b>				<b>Final MoldSCORE 104</b>

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM39JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				107
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 107</b>

**Location:** 20803001-TM40JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				105
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>				<b>Final MoldSCORE 105</b>

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Date of Sampling: 03-19-2008  
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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM41JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█				1	53	█			106
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>66</b>	<b>Final MoldSCORE 106</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.

††Most of these spore types are not seen with culturable methods (Anderson sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.



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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM27JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†					ND	< 13	█			100
Stachybotrys					ND	< 13	█			100
Torula					ND	< 13	█			100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13	█			100
Basidiospores††	█				1	53	█			105
Rusts					ND	< 13	█			100
Smuts, Periconia, Myxomycetes††	█				1	13	█			103
<b>Total</b>						<b>66</b>	<b>Final MoldSCORE 105</b>			

**Location:** 20803001-TM28JL

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	█			104
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>79</b>	<b>Final MoldSCORE 105</b>			

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 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM29JL

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

**Location:** 20803001-TM30JL

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

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM31JL

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

**Location:** 20803001-TM32JL

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

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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM33JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					1	13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					ND	< 13				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					1	53				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				
Basidiospores††					ND	< 13				
Rusts					ND	< 13				
Smuts, Periconia, Myxomycetes††					1	13				
<b>Total</b>						<b>79</b>	<b>Final MoldSCORE 108</b>			

**Location:** 20803001-TM34JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				
Bipolaris/Drechslera group					ND	< 13				
Chaetomium					ND	< 13				
Cladosporium					1	53				
Curvularia					ND	< 13				
Nigrospora					ND	< 13				
Penicillium/Aspergillus types†					1	53				
Stachybotrys					ND	< 13				
Torula					ND	< 13				
<b>Seldom found growing indoors**</b>										
Ascospores††					1	53				
Basidiospores††					ND	< 13				
Rusts					1	13				
Smuts, Periconia, Myxomycetes††					ND	< 13				
<b>Total</b>						<b>172</b>	<b>Final MoldSCORE 100</b>			

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**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM35JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				103
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>	<b>Final MoldSCORE 104</b>			

**Location:** 20803001-TM36JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium	█				1	53				102
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††					ND	< 13				100
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††	█				1	13				103
<b>Total</b>						<b>66</b>	<b>Final MoldSCORE 103</b>			

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 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM37JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				103
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>				<b>Final MoldSCORE 104</b>

**Location:** 20803001-TM38JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†					ND	< 13				100
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				105
Rusts	█				1	13				105
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>66</b>				<b>Final MoldSCORE 105</b>

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM39JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				106
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 106</b>

**Location:** 20803001-TM40JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13				100
Bipolaris/Drechslera group					ND	< 13				100
Chaetomium					ND	< 13				100
Cladosporium					ND	< 13				100
Curvularia					ND	< 13				100
Nigrospora					ND	< 13				100
Penicillium/Aspergillus types†	█				1	53				103
Stachybotrys					ND	< 13				100
Torula					ND	< 13				100
<b>Seldom found growing indoors**</b>										
Ascospores††					ND	< 13				100
Basidiospores††	█				1	53				104
Rusts					ND	< 13				100
Smuts, Periconia, Myxomycetes††					ND	< 13				100
<b>Total</b>						<b>106</b>				<b>Final MoldSCORE 104</b>

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-24-2008

**MoldSCORE™: Spore Trap Report**

**Location:** 20803001-TM41JL

Fungi Identified	Indoor sample spores/m3				Raw count	Spores/m3	MoldSCORE‡			
	<100	1K	10K	>100K			100	200	300	Score
<b>Generally able to grow indoors*</b>										
Alternaria					ND	< 13	█			100
Bipolaris/Drechslera group					ND	< 13	█			100
Chaetomium					ND	< 13	█			100
Cladosporium					ND	< 13	█			100
Curvularia					ND	< 13	█			100
Nigrospora					ND	< 13	█			100
Penicillium/Aspergillus types†	█				1	53	█			105
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>66</b>	<b>Final MoldSCORE 105</b>			

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

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

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

††Most of these spore types are not seen with culturable methods (Anderson sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.



**EMLab P&K**

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Report for:

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

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Regarding:      Project: 20803001  
                         EML ID: 401900

Approved by:

Lab Manager  
Dr. Kamashwaran Ramanathan

Dates of Analysis:  
Culturable air fungi (Incl. Asp spp.): 03-26-2008  
Spore trap analysis: 03-24-2008

Project SOPs: Culturable air fungi (Incl. Asp spp.) (I100002), Spore trap analysis (I100000)

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This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

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Document Number: 200091 - Revision Number: 5

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-26-2008

**CULTURABLE AIR FUNGI REPORT**

Location:	20803001-VM01outJL		20803001-VM02JL		20803001-VM03JL		20803001-VM04JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764569-1		1764570-1		1764571-1		1764572-1	
	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3
Acremonium								
Alternaria								
Aspergillus flavus								
Aspergillus fumigatus								
Aspergillus glaucus								
Aspergillus nidulans								
Aspergillus niger					1	18		
Aspergillus ochraceus								
Aspergillus versicolor								
Aureobasidium								
Basidiomycetes								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	44	830	2	35	1	18	1	18
Curvularia								
Epicoccum								
Fusarium								
Non-sporulating fungi	1	18	1	18				
Paecilomyces								
Penicillium	1	18						
Phoma								
Rhizopus								
Stachybotrys chartarum								
Ulocladium								
Yeasts								
Positive Hole	400		400		400		400	
Sample volume (liters)	56.6		56.6		56.6		56.6	
<b>TOTAL CFU*/M3</b>		<b>866</b>		<b>53</b>		<b>36</b>		<b>18</b>

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

**Comments:**

Note: Interpretation is left to the company and/or persons who conducted the field work. Variation is an inherent part of biological sampling. The presence or absence of a few genera in small numbers should not be considered abnormal.  
 NORMAL SPORE LEVELS: Indoor spore levels usually average 30 to 80% of the outdoor spore level at the time of sampling, with the same general distribution of spore types. Filtered air, air-conditioned air, or air remote from outside sources may average 5 to 15% of the outside air at the time of sampling. (These percentages are guidelines, only. A major factor is the accessibility of outdoor air. A residence with open doors and windows and heavy foot traffic may average 95% of the outdoor level while high rise office buildings with little air exchange may average 2%. Dusty interiors may exceed 100% of the outdoors to some degree, but will still mirror the outdoor distribution of spore types.)  
 PROBLEM INTERIORS: A substantial increase of one or two spore types which are inconsistent with and non-reflective of the outside distribution of spore types is usually indicative of an indoor reservoir of mold growth.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
 ‡ A "Version" greater than 1 indicates amended data.

Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-19-2008  
Date of Receipt: 03-20-2008  
Date of Report: 03-26-2008

**CULTURABLE AIR FUNGI REPORT**

Location:	20803001-VM05JL		20803001-VM06JL		20803001-VM07JL		20803001-VM08JL	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1764573-1		1764574-1		1764575-1		1764576-1	
	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3	raw ct.	cfu*/m3
Acremonium								
Alternaria								
Aspergillus flavus								
Aspergillus fumigatus								
Aspergillus glaucus								
Aspergillus nidulans								
Aspergillus niger								
Aspergillus ochraceus								
Aspergillus versicolor								
Aureobasidium								
Basidiomycetes								
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	2	35			1	18	1	18
Curvularia								
Epicoccum								
Fusarium								
Non-sporulating fungi								
Paecilomyces								
Penicillium	1	18						
Phoma								
Rhizopus								
Stachybotrys chartarum								
Ulocladium								
Yeasts								
Positive Hole	400		400		400		400	
Sample volume (liters)	56.6		56.6		56.6		56.6	
<b>TOTAL CFU*/M3</b>		<b>53</b>		<b>&lt; 18</b>		<b>18</b>		<b>18</b>

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

**Comments:**

Note: Interpretation is left to the company and/or persons who conducted the field work. Variation is an inherent part of biological sampling. The presence or absence of a few genera in small numbers should not be considered abnormal.  
 NORMAL SPORE LEVELS: Indoor spore levels usually average 30 to 80% of the outdoor spore level at the time of sampling, with the same general distribution of spore types. Filtered air, air-conditioned air, or air remote from outside sources may average 5 to 15% of the outside air at the time of sampling. (These percentages are guidelines, only. A major factor is the accessibility of outdoor air. A residence with open doors and windows and heavy foot traffic may average 95% of the outdoor level while high rise office buildings with little air exchange may average 2%. Dusty interiors may exceed 100% of the outdoors to some degree, but will still mirror the outdoor distribution of spore types.)  
 PROBLEM INTERIORS: A substantial increase of one or two spore types which are inconsistent with and non-reflective of the outside distribution of spore types is usually indicative of an indoor reservoir of mold growth.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
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Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-19-2008  
 Date of Receipt: 03-20-2008  
 Date of Report: 03-26-2008

**CULTURABLE AIR FUNGI REPORT**

Location:	20803001-VM09JL		20803001-VM10outJL	
Comments (see below)	None		None	
Lab ID-Version‡:	1764577-1		1764578-1	
	raw ct.	cfu*/m3	raw ct.	cfu*/m3
Acremonium				
Alternaria				
Aspergillus flavus				
Aspergillus fumigatus			1	18
Aspergillus glaucus			1	18
Aspergillus nidulans				
Aspergillus niger				
Aspergillus ochraceus				
Aspergillus versicolor				
Aureobasidium				
Basidiomycetes				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium			64	1,240
Curvularia				
Epicoccum				
Fusarium				
Non-sporulating fungi			2	35
Paecilomyces			1	18
Penicillium			5	88
Phoma				
Rhizopus				
Stachybotrys chartarum				
Ulocladium				
Yeasts				
Positive Hole	400		400	
Sample volume (liters)	56.6		56.6	
<b>TOTAL CFU*/M3</b>		<b>&lt; 18</b>		<b>1,417</b>

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

**Comments:**

Note: Interpretation is left to the company and/or persons who conducted the field work. Variation is an inherent part of biological sampling. The presence or absence of a few genera in small numbers should not be considered abnormal.  
 NORMAL SPORE LEVELS: Indoor spore levels usually average 30 to 80% of the outdoor spore level at the time of sampling, with the same general distribution of spore types. Filtered air, air-conditioned air, or air remote from outside sources may average 5 to 15% of the outside air at the time of sampling. (These percentages are guidelines, only. A major factor is the accessibility of outdoor air. A residence with open doors and windows and heavy foot traffic may average 95% of the outdoor level while high rise office buildings with little air exchange may average 2%. Dusty interiors may exceed 100% of the outdoors to some degree, but will still mirror the outdoor distribution of spore types.)  
 PROBLEM INTERIORS: A substantial increase of one or two spore types which are inconsistent with and non-reflective of the outside distribution of spore types is usually indicative of an indoor reservoir of mold growth.  
 The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.  
 ‡ A "Version" greater than 1 indicates amended data.



# HYGIENE TECH

Hygiene Technologies International, Inc.

3825 Del Amo Boulevard, Suite 180  
Torrance, California 90503-1843  
(310) 370-8370  
(310) 370-2474 FAX  
www.hygienotech.com

## Request For Analysis

Project Number/Purchase Order: 20803001 Date Submitted: 3/19/08  
 Project Contact: Wes Frey Turnaround Required: Standard  
 Lab Destination: EM lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001-VM01outSL	56.6L	MEA	Viable fungi ID
-VM02SL	↓	↓	↓
-VM03SL	↓	↓	↓
-VM04SL	↓	↓	↓
-VM05SL	↓	↓	↓
-VM06SL	↓	↓	↓
-VM07SL	↓	↓	↓
-VM08SL	↓	↓	↓
-VM09SL	↓	↓	↓
-VM10outSL	↓	↓	↓
-TM25outSL	75L	allergenco D	Total fungi ID
-TM26SL	↓	↓	↓
-TM27SL	↓	↓	↓
-TM28SL	↓	↓	↓
-TM29SL	↓	↓	↓
-TM30SL	↓	↓	↓

Special Instructions: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

1. Sampled by: John Le 3/19/08 1700 Received by: [Signature] 3/20/08 PM  
 2. Relinquished by: [Signature] 3/19/08 17:30 Received by: \_\_\_\_\_  
 3. Relinquished by: Dwp Box Received by: \_\_\_\_\_  
 Please include signature, date, and time

Lab Use Only: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

4/19/08



# HYGIENE TECH

Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180  
Torrance, California 90503-1643  
(310) 370-8370  
(310) 370-2474 FAX  
www.hygienetech.com

## Request For Analysis

Project Number/Purchase Order: 20803001 Date Submitted: 3/19/08  
 Project Contact: Wes Frey Turnaround Required: standard  
 Lab Destination: EM lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001-TM31SL	75L	allergenco D	total fungi ID
-TM32SL			
-TM33SL			
-TM34SL			
-TM35SL			
-TM36SL			
-TM37SL			
-TM38SL			
-TM39SL			
-TM40SL			
-TM41SL			
-TM42outSL			

Special Instructions: \_\_\_\_\_

1. Sampled by: John Le 3/19/08 1700 Received by: STANDENBERG 3/20/08 1 PM
  2. Relinquished by: Mickler 3/20/08 17:30 Received by: \_\_\_\_\_
  3. Relinquished by: Drop for box Received by: \_\_\_\_\_
- Please include signature, date, and time

Lab Use Only:

401900



Report for:

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

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Regarding:      Project: 20803001  
                         EML ID: 396289

Approved by:

Lab Manager  
Dr. Kamashwaran Ramanathan

Dates of Analysis:  
Direct microscopic exam (Qualitative): 03-10-2008  
Spore trap analysis: 03-10-2008

Project SOPs: Direct microscopic exam (Qualitative) (I100005), Spore trap analysis (I100000)

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For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

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Client: Hygiene Technologies International, Inc.:  
Northern California  
C/O: Mr. Wes Frey  
Re: 20803001

Date of Sampling: 03-04-2008  
Date of Receipt: 03-06-2008  
Date of Report: 03-10-2008

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

Location:	20803001-TM09AC		20803001-TM10AC		20803001-TM11AC		20803001-TM12AC	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1740378-1		1740379-1		1740380-1		1740381-1	
	raw ct.	spores/m3						
Alternaria					1	13		
Arthrinium								
Ascospores*								
Aureobasidium								
Basidiospores*	1	53					1	53
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	2	107	2	107	2	107	1	53
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other brown					1	13		
Other colorless								
Penicillium/Aspergillus types†	2	107	1	53	3	160	2	107
Pithomyces								
Rusts*							1	13
Smuts*, Periconia, Myxomycetes*	1	13			2	27	1	13
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	4+		2+		4+		3+	
Hyphal fragments/m3	27		< 13		40		40	
Pollen/m3	< 13		< 13		13		< 13	
Skin cells (1-4+)	3+		2+		4+		2+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		<b>280</b>		<b>160</b>		<b>320</b>		<b>239</b>

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

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

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

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

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-04-2008  
 Date of Receipt: 03-06-2008  
 Date of Report: 03-10-2008

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

Location:	20803001-TM13AC		20803001-TM14AC		20803001-TM15AC		20803001-TM16AC	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1740382-1		1740383-1		1740384-1		1740385-1	
	raw ct.	spores/m3						
Alternaria	2	27			1	13		
Arthrinium								
Ascospores*								
Aureobasidium								
Basidiospores*			2	107	1	53		
Bipolaris/Drechslera group								
Botrytis								
Chaetomium								
Cladosporium	2	107	1	53	3	160	2	107
Curvularia								
Epicoccum								
Fusarium								
Myrothecium								
Nigrospora								
Other brown					1	13		
Other colorless								
Penicillium/Aspergillus types†	2	107	2	107	1	53	2	107
Pithomyces								
Rusts*					1	13		
Smuts*, Periconia, Myxomycetes*	1	13	1	13				
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Zygomycetes								
Background debris (1-4+)††	3+		3+		3+		4+	
Hyphal fragments/m3	13		27		13		40	
Pollen/m3	< 13		13		< 13		13	
Skin cells (1-4+)	3+		2+		3+		3+	
Sample volume (liters)	75		75		75		75	
<b>TOTAL SPORE/m3</b>		<b>254</b>		<b>280</b>		<b>305</b>		<b>214</b>

**Comments:**

\* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

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

††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

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

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-04-2008  
 Date of Receipt: 03-06-2008  
 Date of Report: 03-10-2008

**DIRECT MICROSCOPIC EXAMINATION REPORT**

(Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740370-1: Swab sample 20803001-S09AC				
Heavy	Very few	< 1+ <i>Alternaria</i> species (spores, hyphae, conidiophores)	Many dark amorphous particles detected, not biological in appearance.	Minimal mold growth
Lab ID-Version: 1740371-1: Swab sample 20803001-S10AC				
Heavy	Very few	1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Mold growth
Lab ID-Version: 1740372-1: Swab sample 20803001-S11AC				
Moderate	Very few	< 1+ brown hyphae with no associated spores, ID unknown (hyphae)	None	Minimal mold growth
Lab ID-Version: 1740373-1: Swab sample 20803001-S12AC				
Heavy	Few	None	A few hyphal fragments detected.	Mold growth in vicinity?
Lab ID-Version: 1740374-1: Swab sample 20803001-S13AC				
Moderate	Very few	2+ arthrospore-former (hyphae) 2+ <i>Acremonium</i> species (spores, hyphae, conidiophores)	None	Mold growth
Lab ID-Version: 1740375-1: Swab sample 20803001-S14AC				
Moderate	Variety	None	A few hyphal fragments detected.	Mold growth in vicinity?
Lab ID-Version: 1740376-1: Swab sample 20803001-S15AC				
Moderate	Very few	2+ brown hyphae with no associated spores, ID unknown (hyphae)	A few <i>Alternaria</i> spores detected.	Mold growth

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740377-1: Swab sample 20803001-S16AC				
Heavy	Few	2+ brown hyphae with no associated spores, ID unknown (hyphae)	A few <i>Alternaria</i> spores detected.	Mold growth

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



## Request For Analysis

Project Number/Purchase Order: 20803001 Date Submitted: 3/5/08  
 Project Contact: Wes Frey / Austin Chan Turnaround Required: Normal  
 Lab Destination: EM Lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001 - TMD9AC	75 L	Allegiance-D	Total Fungi ID
- TM10AC	↓	↓	↓
- TM11AC	↓	↓	↓
- TM12AC	↓	↓	↓
- TM13AC	↓	↓	↓
- TM14AC	↓	↓	↓
- TM15AC	↓	↓	↓
- TM16AC	↓	↓	↓
- S09AC	N/A	Swab	Surface Fungi ID [Qualitative]
- S10AC	↓	↓	↓
- S11AC	↓	↓	↓
- S12AC	↓	↓	↓
- S13AC	↓	↓	↓
- S14AC	↓	↓	↓
- S15AC	↓	↓	↓
- S16AC	↓	↓	↓

Special Instructions: e-mail results to W.Frey @ hygienetech.com  
A.Chan @ hygienetech.com

1. Sampled by: Austin Chan 3/4/08 17:00 Received by: GLL 3/4/08  
 2. Relinquished by: \_\_\_\_\_ Received by: Wes Frey 3/6/08 800 AM  
 3. Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Please include signature, date, and time

Lab Use Only:



Report for:

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

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Regarding:      Project: 20803001  
                         EML ID: 396298

Approved by:

Lab Manager  
Dr. Kamashwaran Ramanathan

Dates of Analysis:

Direct microscopic exam (Qualitative): 03-10-2008

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

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This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

---

Client: Hygiene Technologies International, Inc.:  
 Northern California  
 C/O: Mr. Wes Frey  
 Re: 20803001

Date of Sampling: 03-04-2008  
 Date of Receipt: 03-06-2008  
 Date of Report: 03-10-2008

**DIRECT MICROSCOPIC EXAMINATION REPORT**  
 (Wet Mount)

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740482-1: Tape sample 20803001-TL01AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740484-1: Tape sample 20803001-TL02AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740485-1: Tape sample 20803001-TL03AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740487-1: Tape sample 20803001-TL04AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740489-1: Tape sample 20803001-TL05AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740490-1: Tape sample 20803001-TL06AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740492-1: Tape sample 20803001-TL07AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740494-1: Tape sample 20803001-TL08AC				
Scant	None	None	None	No mold spores detected
Lab ID-Version: 1740496-1: Tape sample 20803001-TL09AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740497-1: Tape sample 20803001-TL10AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740499-1: Tape sample 20803001-TL11AC				
Scant	Very few	None	None	Normal trapping

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740500-1: Tape sample 20803001-TL12AC Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1740501-1: Tape sample 20803001-TL13AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740502-1: Tape sample 20803001-TL14AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740503-1: Tape sample 20803001-TL15AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740504-1: Tape sample 20803001-TL16AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740505-1: Tape sample 20803001-TL17AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740506-1: Tape sample 20803001-TL18AC Scant	None	None	None	No mold spores detected
Lab ID-Version: 1740507-1: Tape sample 20803001-TL19AC Scant	None	None	None	No mold spores detected
Lab ID-Version: 1740508-1: Tape sample 20803001-TL20AC Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1740509-1: Tape sample 20803001-TL21AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740510-1: Tape sample 20803001-TL22AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740511-1: Tape sample 20803001-TL23AC Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740512-1: Tape sample 20803001-TL24AC Light	Very few	None	None	Normal trapping

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740513-1: Tape sample 20803001-TL25AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740514-1: Tape sample 20803001-TL26AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740515-1: Tape sample 20803001-TL27AC				
Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1740516-1: Tape sample 20803001-TL28AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740517-1: Tape sample 20803001-TL29AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740518-1: Tape sample 20803001-TL30AC				
Moderate	Very few	None	None	Normal trapping
Lab ID-Version: 1740519-1: Tape sample 20803001-TL31AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740520-1: Tape sample 20803001-TL32AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740521-1: Tape sample 20803001-TL33AC				
Scant	Very few	None	None	Normal trapping
Lab ID-Version: 1740522-1: Tape sample 20803001-TL34AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740523-1: Tape sample 20803001-TL35AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740524-1: Tape sample 20803001-TL36AC				
Scant	Very few	None	None	Normal trapping
Lab ID-Version: 1740525-1: Tape sample 20803001-TL37AC				
Scant	Very few	None	None	Normal trapping

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 1740526-1: Tape sample 20803001-TL38AC				
Scant	Very few	None	None	Normal trapping
Lab ID-Version: 1740527-1: Tape sample 20803001-TL39AC				
Light	Very few	None	None	Normal trapping
Lab ID-Version: 1740528-1: Tape sample 20803001-TL40AC				
Moderate	Very few	None	A few colorless spores typical of <i>Penicillium</i> / <i>Aspergillus</i> detected.	Mold growth in vicinity?

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



# HYGIENE TECH

Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180  
Torrance, California 90503-1643  
(310) 370-8370  
(310) 370-2474 FAX  
www.hygienetech.com

## Request For Analysis

Project Number/Purchase Order: 20803001 Date Submitted: 3/5/08  
 Project Contact: Wes Frey / Austin Chan Turnaround Required: Normal  
 Lab Destination: EM Lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001 - TL01AC	N/A	BioTape	Surface Fungi ID (Qualitative)
- TL02AC			
- TL03AC			
- TL04AC			
- TL05AC			
- TL06AC			
- TL07AC			
- TL08AC			
- TL09AC			
- TL10AC			
- TL11AC			
- TL12AC			
- TL13AC			
- TL14AC			
- TL15AC			
- TL16AC			

Special Instructions: e-mail results to W.Frey@hygienetech.com  
A.Chan@hygienetech.com

1. Sampled by: Austin Chan 3/4/08 17:00 Received by: GLR 3/5/08  
 2. Relinquished by: \_\_\_\_\_ Received by: Mary 3/6/08 8:00 AM  
 3. Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Please include signature, date, and time

Lab Use Only: 396298



# HYGIENE TECH

Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180  
Torrance, California 90503-1843  
(310) 370-8370  
(310) 370-2474 FAX  
www.hygienotech.com

## Request For Analysis

Project Number/Purchase Order: 20803001 Date Submitted: 3/5/08  
 Project Contact: Wes Frey / Austin Chan Turnaround Required: Normal  
 Lab Destination: EM Lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001 - TL17AC	N/A	BioTape	Surface Fungi ID (Qualitative)
- TL18AC			
- TL19AC			
- TL20AC			
- TL21AC			
- TL22AC			
- TL23AC			
- TL24AC			
- TL25AC			
- TL26AC			
- TL27AC			
- TL28AC			
- TL29AC			
- TL30AC			
- TL31AC			
- TL32AC			

Special Instructions: e-mail results to W Frey @ hygienotech.com  
A Chan @ hygienotech.com

1. Sampled by: Art De 3/4/08 17:00 Received by: Glen 3/5/08  
 2. Relinquished by: \_\_\_\_\_ Received by: Mungy 3/6/08 800 AM  
 3. Relinquished by: \_\_\_\_\_ Received by: \_\_\_\_\_  
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Project Number/Purchase Order: 20803001 Date Submitted: 3/5/08  
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 Lab Destination: EM Lab Lab Contact: \_\_\_\_\_

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
20803001 - TL33AC	N/A	BioTape	Surface Eng: ID (Quantitative)
- TL34AC			
- TL35AC			
- TL36AC			
- TL37AC			
- TL38AC			
- TL39AC			
- TL40AC			
N/A			

Special Instructions: e-mail results to W.Frey @ hygienetech.com  
AChan @ hygienetech.com

1. Sampled by: Ant Q 3/4/08 17:00 Received by: Elu 3/5/08  
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