



# ENTEK CONSULTING GROUP, INC.

4200 Rocklin Road, Suite 7 Rocklin, CA 95677

Telephone (916) 632-6800

Fax (916) 632-6812

October 26, 2007

Ms. Donna O'Brien  
Claims Representative  
State Compensation Insurance Fund  
P.O. Box 659011  
2450 Venture Oaks Way, Suite 500  
Sacramento, CA 95833-3291

Re: State Board of Equalization Mold Evaluation on 3<sup>rd</sup>, 11<sup>th</sup>, and 21<sup>st</sup> Floors; 450 N Street,  
Sacramento, CA

Dear Ms. O'Brien:

This report presents results of the very limited mold investigation by Entek Consulting Group, Inc. (Entek) at the State of California Board of Equalization (BOE) located at 450 N Street in Sacramento, CA. Ms. Judy Knight, Return to Work Coordinator of BOE requested our services to collect air samples on the 3<sup>rd</sup>, 11<sup>th</sup>, and the 21<sup>st</sup> floors of the building following work by others on the 23<sup>rd</sup> floor of the building at the perimeter walls. The investigation by Entek was very limited in scope and included limited sampling on these three floors to assist you with evaluation of mold spore levels.

The onsite inspection by Entek was conducted on September 29, 2007. I met with Ms. Judy Knight who provided me access to all office spaces for sampling and who was present during all of the sample collection. Environmental sampling was conducted at the building which included collection and analysis of 16 air samples for total non-culturable mold spores, two settled dust samples collected from the carpet and evaluated for mold spores, one vacuum bulk sample collected from the surface of a portable Honeywell HEPA filtered air cleaner for evaluation of particle identification by direct microscopic examination, and three bulk samples of suspect mold for evaluation of mold growth by direct microscopic examination.

Included in the total number of air samples indicated above, there were three air samples collected for non-culturable mold spores outside the building for comparison to the interior samples. The following is a discussion of each sampling technique and the results of the findings.

## **Air Sampling Results**

### Non-Culturable Mold Spores

Air sampling was conducted to evaluate non-culturable mold spores only on three floors in the building and was accomplished by collecting air samples onto "Air-O-Cell" sampling cassettes. The air sample is collected onto a coated plastic strip and visually evaluated by the analyst for all spores which stick to the coated slide. Since this technique includes evaluation for both non-culturable and culturable spores, the results will generally be higher than the sampling technique for culturable mold spores using the Anderson N6 impaction sampler, which relies on growth of spores onto a media.

There were 16 air samples collected and analyzed for non-culturable mold spores on this investigation, which included 13 air samples inside the building, and three air samples outside the building at the north side of the building by the picnic tables for comparison to the air samples collected inside. All of the sample times are noted on the chain of custody form for each location.



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The samples were assigned a unique sample number, and sent to Environmental Microbiology Laboratory (EML) in Sacramento, CA, where they were evaluated by an analyst. The total concentration of mold spores inside the building ranged between 27 spores/M<sup>3</sup> and 114 spores/M<sup>3</sup>, averaging 61 spores/M<sup>3</sup>. The average spore concentration on each of the different floors of the building tested are as follows: 3<sup>rd</sup> Floor --- 68 spores/M<sup>3</sup>, 11<sup>th</sup> Floor --- 35 spores/M<sup>3</sup>, and the 21<sup>st</sup> Floor --- 94 spores/M<sup>3</sup>. For comparison to the interior samples, the three outside air sample concentration of total mold spores were 4,850 spores/M<sup>3</sup>, 5,437 spores/M<sup>3</sup>, and 6,564 spores/M<sup>3</sup>, averaging 5,617 spores/M<sup>3</sup>.

The concentration of mold spores inside of the building at the areas tested compared to the concentration of mold spores outside of the building was significantly lower ranging between 0.5% to 2% of the outside levels.

It is also important to evaluate the distribution of mold spores seen inside a building compared to the outside air. If there is a significant increase in one or more individual spore types seen inside a building compared to the outside flora, it may be indicative of a mold source inside the building. The primary mold genera found in the outside air samples were *Cladosporium* followed by *Penicillium/Aspergillus* type spores, and Basidiospores (comprised primarily of mushroom type spores). Inside of the building, *Cladosporium* was also found to be the predominant genera detected; however, at concentrations much lower than that detected outdoors. There were no concentrations of specific genera of mold spores detected inside of the areas tested that were elevated above outside mold spore levels. This is also supportive of no significant mold source in the areas tested that would be contributing excessive spores to the office spaces.

### **MoldRANGE™ Extended Outdoor Comparison Report and MoldSTAT™ Supplementary Statistical Spore Trap Reports**

Attached to each set of laboratory reports is additional information provided by EML regarding mold spore concentrations typically found outdoors during the month sampled for comparison to the results from our testing. The MoldRANGE™ Extended Outdoor Comparison report provides a review of a large data base of air samples collated by EML for locations across the United States for comparison to air sampling on any given day. This large data base of MoldRANGE™ provides a secondary comparison to the air samples collected by Entek for greater assurance of the types of mold spores expected and actually detected on the air samples. The results of the air samples on our investigation found concentrations of similar mold spore types as expected and seen in other areas of the country.

Also provided by EML are the MoldSTAT™ Supplementary Statistical Spore Trap Reports which compare each of the indoor air samples to the outside air samples collected on the day of sampling. This statistical evaluation provides a review of the comparison of the total mold spore concentration and type of mold spores detected inside the building to that detected outside the building. The "Mold Score" analysis provided by EML in their reports provides a relative "score" ranging between 100 and 300 using a statistical algorithm method developed by EML. A "score" of 100 is considered low and indicates or supports the premise that the concentration and types of mold spores detected on the air sample has a greater likelihood of coming from outside of the building, from an outside source. A score of 300 is considered high and indicates a greater likelihood of the mold spores originating from inside of the building. All of the "Mold Scores" on the air samples inside of the building were scored "low", which is indicative of no significant mold source inside of the spaces tested that would be contributing excessive mold spores into the occupied spaces.

There will always be some variability found in air sampling, hour by hour, day by day, month by month, and especially during different seasons. There will also be variability in sampling due to the randomness in distribution of spores in the air, doors and windows being open, and intake and filtration by the heating, ventilating, and air-conditioning (HVAC) system. The results of the air sampling on this investigation demonstrate this wide range in variability in mold spores measured both inside and outside of the building.



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It is normal and typical to find the presence or absence of a few genera in small numbers with this type of sampling. To illustrate the wide range in mold spore levels sometimes found, the outside air concentrations of mold spores detected on May 17, 2007 averaged 1,428 spores/M<sup>3</sup>, compared to the average outside mold spore concentration of 5,617 spores/M<sup>3</sup> detected on September 29, 2007.

On the other hand, the interior mold spore levels inside of the building did not vary greatly with average mold spore concentration on May 17, 2007 at 110 spores/M<sup>3</sup>, compared to the average indoor mold spore concentration of 61 spores/M<sup>3</sup> detected on September 29, 2007.

The mechanical HVAC fan unit for the three floors tested was operating during the air sampling for non-culturable mold spores. Prior to our sampling, we met with one of the engineering staff in the elevator and he assured that the air was operating on the three floors we were testing. This was also verified by observing air leaving the supply registers located at the ceiling systems in the office spaces. The air sampling was conducted on a Saturday, so there were only a handful of employees we happened to see inside of the building during my visit.

#### **Other Biological Particles Results by Non-viable Methodology**

Also evaluated on the air samples collected onto the Air-O-Cell cassettes were other airborne particles from other sources including pollen, plant, animal (primarily skin cells), fungi, and other non-biological particles such as glass fiber, soot, starch and synthetic fibers. The primary airborne particles identified in all of the indoor air samples were epithelial skin cells, due to normal shedding of skin cells by occupants.

Other particles detected in lesser amounts inside of the building were glass fibers, cotton fibers (from clothes), and trichomes (plant hairs), which may be due to some of the plants found inside of the various offices.

Overall, the total biological particulate loading found on the 13 air samples inside of the building on the three floors were low, which is reflective most likely of the quality filtration associated with the mechanical heating, ventilating, and air-conditioning system.

#### **Bulk Sample Results**

##### Carpet Dust Samples

At the request of Ms. Judy Knight, two samples of carpet dust were collected to evaluate mold spore loading in the carpet in the Law Library located on the 22<sup>nd</sup> floor and in the open office area in Room 2206 near cubicle #095. The purpose of this limited sampling was to compare the total mold spore loading in these two locations following the carpet cleaning that was conducted since my initial sampling on May 17, 2007 in the same locations.

Sampling of the dust was performed using a 0.45 micron mixed cellulose ester filter attached to a high volume pump with tygon tubing at a flow rate of greater than 15 liters per minute. The plastic top section of the filter cassette was removed, and the open filter cassette was placed onto the carpet surfaces being vacuumed. The sample was collected as a composite sample comprised of at least four different approximately one square foot locations until a large enough bulk sample was collected into the cassette, similar to the method used on May 17, 2007.

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The samples were individually labeled and submitted to EML of San Bruno, CA for evaluation by a staff analyst. The samples were diluted in a solution, and each were plated onto three different petri dishes containing different media, which included Cellulose, Malt Extract Agar (MEA), and Dichloran glycerol (DG 18). After several days of growth, the analyst identified the mold genera and species (if possible) and concentration. The following table provides a summary of the results of the carpet dust sampling conducted on May 17, 2007 and the more recent sampling on September 29, 2007 following cleaning of the carpets.

**Table of Sample Results of Carpet Dust Analysis for Mold Spores on May 17, 2007 Before Carpet was Cleaned and on September 29, 2007 After Carpet was Cleaned**

Location	Results of May 17, 2007 Prior to Carpet Cleaning (cfu/gram)	Results of September 29, 2007 After Carpet Cleaning (cfu/gram)
Room 2217 Law Library	7,232,400	246,000
Room 2206 near Cubicle #095	112,000	12,800

There are no standards for mold spore levels in carpet dust; however, they can assist in evaluating settled particles which may have been deposited over many weeks, months, or years depending upon the frequency and thoroughness of the carpet cleaning. Some of the mold spores considered primary water indicators include *Aspergillus*, *Penicillium*, *Chaetomium*, *Stachybotrys*, *Fusarium*, and *Ulocladium* to name a few of the more common mold genera. There were very few *Aspergillus*, *Penicillium* and *Fusarium* colonies observed and no *Stachybotrys*, *Ulocladium*, or *Chaetomium* colonies observed. It is common to find low levels of various mold genera with this type of sampling.

The results of these two carpet dust samples collected in September suggest the carpet cleaning conducted following the initial sampling in May have resulted in a significant reduction in total mold spore loading. Although only two samples were collected, it is indicative of the importance of good cleaning techniques described in my report of June 15, 2007. Assuming the carpet has been cleaned in other office areas in a similar fashion as in the two areas tested on September 29<sup>th</sup>, if additional carpet dust samples were collected, I would suspect similar results reflecting a similar reduction in the total mold spore burden.

#### **Results of Bulk Samples of Suspect Mold**

Three bulk samples were collected of suspect mold from building surfaces; two from the 22<sup>nd</sup> floor and one from the 23<sup>rd</sup> floor of the building. Samples were collected using clear scotch tape pressed onto the suspect discoloration to lift off the suspect mold and placed onto a clear microscope slide. Samples were identified with a unique sample number, placed in a sealed zip lock bag and submitted to EML of Sacramento, CA for evaluation by an analyst.

One sample was collected from the base of the south gypsum wall near the south east corner across from cubicle #095. *Stachybotrys* and *Acremonium* mold was observed by the laboratory. A second sample was collected from the base of the west gypsum wall near the door of Room 2238 and *Penicillium/Aspergillus* type spores were observed. The third sample was collected from the south perimeter wall east of cubicle #33 on the 23<sup>rd</sup> floor and *Aspergillus* type mold was observed by the laboratory. These three samples were collected in locations identified as having a mold issue by other investigators prior to my onsite visit. The one sample collected at the lower perimeter wall on the 23<sup>rd</sup> floor was able to be collected, since the office furniture had been removed from the perimeter wall prior to my visit allowing access.



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### **Results of Particulate Evaluation Associated with a Honeywell HEPA Filter Unit**

During my visit, Ms. Judy Knight requested an evaluation of the particulate associated with the surface of a portable Honeywell HEPA filter unit that was taken out of service and placed at Judy's cubicle.

Apparently, one employee was concerned with the particulate matter on the outside of the plastic housing associated with this portable filtration device. I collected one sample of settled particulate from the exterior surface of the Honeywell unit onto a 0.45 micron mixed cellulose ester (MCE) filter housed in a plastic cassette with a small piece of Tygon tubing attached to the end of the cassette. The micro-vacuum bulk sample was collected using a high volume sample pump to act as a vacuum cleaner to collect the sample. The sample was submitted to Forensic Analytical Specialties, Inc. of Hayward, CA for particle identification using polarized light microscopy (PLM).

Attached are the analytical results of the particle analysis, which includes a breakdown of the *Fibrous* and *Non-fibrous* fractions in the sample. Of the *fibrous* fraction, the sample was found to have major amounts (greater than 10%) of cotton fibers and cellulose. The primary source of cotton is from clothing worn by the employees. There were minor amounts (1-10%) of paper dust found on the sample. There were trace amounts (< 1%) of synthetic fibers, wool, mineral wool, trichomes (plant hairs), and cat hair.

Of the *non-fibrous* fraction, there were major amounts of epithelial (skin) cells detected, which is very common inside of occupied buildings. There were minor amounts of clear isotropics, which may be comprised of glass chips or aluminum corrosion products. There were trace amounts of pollen, iron oxide, limestone, feldspars, opaques, organic debris, paint chips, quartz, spray paint, starch, salt, and phenolic foam.

These analytical findings are very typical of indoor air particulate found on many other investigations by Entek and they will vary somewhat in the composition percentages in different buildings, but generally the variety and distribution of the different biological, mineral, and man-made particles is common. The particulate on the surface of the Honeywell fan unit is reflective of particles brought in from the outside environment or generated inside of the building, which are eventually released from the supply ducts during operation of the fan system due to air flow and vibration or brought in by the occupants (such as cat hair for example).

### **Summary**

The air sampling for mold spores by Entek Consulting Group, Inc. was limited in scope and included the 3<sup>rd</sup>, 11<sup>th</sup>, and the 21<sup>st</sup> floors of the building following work by others on the 23<sup>rd</sup> floor at the perimeter walls. Air sampling for total mold spores by non-culturable methods found levels to be much lower than the air samples collected outside of the building, indicative of no major mold source inside the areas tested that might be contributing significant mold spores into the occupied spaces.

There were 13 air samples collected inside of the building on this limited survey. The total concentration of mold spores inside the areas tested ranged between 27 spores/M<sup>3</sup> and 114 spores/M<sup>3</sup>, averaging 61 spores/M<sup>3</sup>. For comparison, the average concentration of total mold spores detected inside of the areas tested during my investigation on May 17, 2007 was 110 spores/m<sup>3</sup>. The results of the testing on September 29, 2007 are slightly lower, but within the same order of magnitude as found in May. The lower results may be due to a combination of the carpet cleaning efforts and the lack of employees present during the sampling in September, since sampling was conducted on a Saturday when very few employees were present with less activity by occupants such as walking around.

There were low levels of other biological particulate observed on the 13 air samples collected inside of the areas tested. The type of biological particulate is typical of indoor environments and will vary greatly with the type of mechanical HVAC equipment and filtration present. The more sophisticated the filtration associated with the HVAC system, the lower the levels of total particulate including biological particulate. The low



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concentrations of other biological particulate and mold spores illustrate the high efficiency in the filtration associated with the HVAC system at the Board of Equalization.

The bulk samples collected of suspect mold on several building components confirmed the presence of mold growth. Samples were collected from the base of gypsum wallboard in two samples and one sample was collected approximately 12-15" above floor level at the perimeter south wall on the 23<sup>rd</sup> floor where there has been a history of water intrusion.

At the time of my investigation, the 23<sup>rd</sup> floor was under various degrees of construction with plastic sheeting at the hallways to restrict access to the construction areas. It is my understanding painting of the walls was one of the objectives on the 23<sup>rd</sup> floor, resulting in the findings of mold after office furniture was removed from the perimeter walls and after removal of one or more layers of the gypsum wallboard (sheet rock). No air sampling was conducted on the 23<sup>rd</sup> floor, since there were open wall systems observed and the areas were cordoned off with the plastic barriers.

The results of the two carpet dust sample analysis found a significant reduction in total mold spores compared to the testing conducted on May 17, 2007. The purpose of the carpet dust samples was to evaluate the total mold spore loading following the carpet cleaning. The total concentration of mold spores in the sample collected at the Law Library on September 29, 2007 were less than 1% of the total mold spore loading found in our sampling on May 17, 2007. Similarly, the total concentration of mold spores in the sample collected in Room 2206 near cubicle #095 on September 29, 2007 were less than 5% of the total mold spore loading found in our sampling on May 17, 2007.

These reductions in total mold spore loading in the carpet illustrate the significance of thorough cleaning of carpeted areas inside of buildings. The frequency of cleaning, thoroughness of cleaning, and cleaning techniques (HEPA vacuuming or steam extraction cleaning) is critical in reducing total particulate burden (including mold spores) in carpets. Continual efforts should be in place to address the carpet cleaning in the building on all floors, not just the various floors of recent concern.

The results of the analysis of the settled dust associated with the Honeywell HEPA filter cleaning unit is reflective of normal particulate seen inside of buildings. The plastic housing on many office equipment can also become electrostatically charged, further attracting particulate onto the surfaces. Settled brown or black particulate seen on supply or return registers, computer terminals, and other office equipment typically will have a similar profile of various particles as seen in the limited sampling conducted on September 29, 2007.

It has been my pleasure working with you on this investigation. Thank you for choosing Entek Consulting Group, Inc. for your environmental needs. Please call me at ((16) 632-6800 if you have any questions regarding this report.

Sincerely,

A handwritten signature in cursive script that reads "Richard Beall".

Richard Beall, CIH, CSP  
President

Enclosures



# NON-CULTURABLE MOLD SPORE

## AIR SAMPLING RESULTS

**ENTEK CONSULTING GROUP, INC.**  
 4200 Rocklin Road, Suite 7  
 Rocklin, CA 95677  
 (916) 632-6800  
 (916) 632-6812 FAX

**TABLE OF AIR SAMPLING RESULTS  
 NON-CULTURABLE MOLD SPORES AND OTHER BIOLOGICAL PARTICULATE**

**Date of Sampling:** 09/29/07

**Lab:** EML - Sacramento

**Job Number:** 07-534A

**Turnaround Time:** Standard

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
 450 N Street  
 Sacramento, CA

SAMPLE NUMBER	SAMPLE LOCATION	TIME ON/OFF	RESULTS SPORES/M <sup>3</sup>
ECG-07-534A-500	3 <sup>rd</sup> Floor Room 322 Cubicle #56	13:52:52 14:02:52	94
ECG-07-534A-501	3 <sup>rd</sup> Floor Room 317 Cubicle #35 at Isle Way	13:48:38 13:58:38	102
ECG-07-534A-502	3 <sup>rd</sup> Floor Room 311 Staging Area #129	14:12:12 14:22:12	34
ECG-07-534A-503	3 <sup>rd</sup> Floor Room 327 Cubicle #94	14:09:45 14:19:45	41
ECG-07-534A-504	11 <sup>th</sup> Floor Room 1104 Cubicle #56	14:29:48 14:39:48	27
ECG-07-534A-505	11 <sup>th</sup> Floor Room 1104 Cubicle #32	14:33:53 14:43:53	60
ECG-07-534A-506	11 <sup>th</sup> Floor Room 1104 Cubicle #28	14:48:44 14:58:44	27
ECG-07-534A-507	11 <sup>th</sup> Floor Room 1104 Cubicle #4.0	14:51:27 15:01:27	27
ECG-07-534A-508	21 <sup>st</sup> Floor Room South East Area Cubicle #3	15:43:53 15:53:53	107
ECG-07-534A-509	21 <sup>st</sup> Floor Room South West Area Cubicle #30	15:29:45 15:39:45	114
ECG-07-534A-510	21 <sup>st</sup> Floor Room North East Area Cubicle #119	15:09:19 15:19:19	34
ECG-07-534A-511	21 <sup>st</sup> Floor Room West Area Cubicle #55	15:27:05 15:37:05	87
ECG-07-534A-512	21 <sup>st</sup> Floor Room North Area Cubicle #109	15:11:37 15:21:37	34





## Ratio of Indoor to Outdoor Mold Spore Concentrations Other Biological Particulate

**Date of Sampling:** 09/29/07

**Lab:** EML - Sacramento

**Job Number:** 07-534A

**Turnaround Time:** Standard

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
450 N Street  
Sacramento, CA

Location Room	Mold Spore Concentrations Measured		
	CFU/M <sup>3</sup>	<u>[Inside]</u> <u>[Outside]</u>	% of <u>[Outside]</u>
Outside Ambient Air	5,617		
3 <sup>rd</sup> Floor Room 322 Cubicle #56	94	0.017	1.7
3 <sup>rd</sup> Floor Room 317 Cubicle #35 at Isle Way	102	0.018	1.8
3 <sup>rd</sup> Floor Room 311 Staging Area #129	34	0.006	0.6
3 <sup>rd</sup> Floor Room 327 Cubicle #94	41	0.007	0.7
11 <sup>th</sup> Floor Room 1104 Cubicle #56	27	0.005	0.5
11 <sup>th</sup> Floor Room 1104 Cubicle #32	60	0.011	1.1
11 <sup>th</sup> Floor Room 1104 Cubicle #28	27	0.005	0.5
11 <sup>th</sup> Floor Room 1104 Cubicle #4.0	27	0.005	0.5
21 <sup>st</sup> Floor Room South East Area Cubicle #3	107	0.019	1.9
21 <sup>st</sup> Floor Room South West Area Cubicle #30	114	0.020	2.0
21 <sup>st</sup> Floor Room North East Area Cubicle #119	34	0.006	0.6
21 <sup>st</sup> Floor Room West Area Cubicle #55	87	0.015	1.5
21 <sup>st</sup> Floor Room North Area Cubicle #109	34	0.006	0.6

Z:\Clients\State Comp Ins Fund\07-534A Board of Equal 450 N Street\MoldRatio.500.wpd

\*Outside Ambient Air is a average of samples ECG-07-534A-0513, ECG-07-534A-0514, & ECG-07-534A-0515. Total of samples were 16,851 ÷ 3 making 5,617 the overall average.

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**TABLE OF AIR SAMPLING RESULTS  
 NON-CULTURABLE MOLD SPORES AND OTHER BIOLOGICAL PARTICULATE**

**Date of Sampling:** 09/29/07

**Lab:** EML - Sacramento

**Job Number:** 07-534A

**Turnaround Time:** Standard

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
 450 N Street  
 Sacramento, CA

SAMPLE NUMBER	SAMPLE LOCATION	TIME ON/OFF	RESULTS SPORES/M <sup>3</sup>
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ECG-07-534A-503	3 <sup>rd</sup> Floor Room 327 Cubicle #94	14:09:45 14:19:45	
ECG-07-534A-504	11 <sup>th</sup> Floor Room 1104 Cubicle #56	14:29:48 14:39:48	
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ECG-07-534A-507	11 <sup>th</sup> Floor Room 1104 Cubicle #4.0	14:51:27 15:01:27	
ECG-07-534A-508	21 <sup>st</sup> Floor Room South East Area Cubicle #3	15:43:53 15:53:53	
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ECG-07-534A-511	21 <sup>st</sup> Floor Room West Area Cubicle #55	15:27:05 15:37:05	
ECG-07-534A-512	21 <sup>st</sup> Floor Room North Area Cubicle #109	15:11:37 15:21:37	



Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

Location:	ECG-07-534A-500: 3rd floor room 322 cubicle #56		ECG-07-534A-501: 3rd floor room 317 cubicle #35 at Isle Way		ECG-07-534A-502: 3rd floor room 311 staging area #129		ECG-07-534A-503: 3rd floor room 327 cubicle #94	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1499735-1		1499736-1		1499737-1		1499738-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria							1	7
Arthrimum								
Ascospores*			1	27				
Aureobasidium								
Basidiospores*								
Bipolaris/Drechslera group								
Chaetomium								
Cladosporium	2	53	1	27	1	27	1	27
Curvularia			1	7				
Epicoccum								
Fusarium								
Nigrospora	1	7						
Oidium								
Other brown								
Penicillium/Aspergillus types†	1	27	1	27				
Pithomyces								
Rusts*					1	7		
Smuts*, Periconia, Myxomycetes*	1	7	1	7			1	7
Stemphylium								
Torula								
Ulocladium			1	7				
Unknown								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	13		7		13		7	
Pollen/m3	13		13		13		<7	
Skin cells (1-4+)	1+		1+		1+		1+	
Sample volume (liters)	150		150		150		150	
<b>TOTAL SPORE/m3</b>		94		102		34		41

**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 actually higher than reported. Background debris also affects the reporting limit for some spore types. The reporting limit is dependent on spore size, background debris, sample volume, and the percentage of the trace analyzed. It is important to account for sample volumes when evaluating dust levels.  
 The Limit of Detection and Minimum Reporting Limit is a raw count of 1. 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: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

Location:	ECG-07-534A-504: 11th floor room 1104 cubicle #56		ECG-07-534A-505: 11th floor room 1104 cubicle #32		ECG-07-534A-506: 11th floor room 1104 cubicle #28		ECG-07-534A-507: 11th floor room 1104 cubicle #4.0	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1499739-1		1499740-1		1499741-1		1499742-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria			1	7				
Arthrinium								
Ascospores*								
Aureobasidium								
Basidiospores*								
Bipolaris/Drechslera group								
Chaetomium								
Cladosporium	1	27	2	53	1	27	1	27
Curvularia								
Epicoccum								
Fusarium								
Nigrospora								
Oidium								
Other brown								
Penicillium/Aspergillus types†								
Pithomyces								
Rusts*								
Smuts*, Periconia, Myxomycetes*								
Stachybotrys								
Stemphylium								
Torula								
Ulocladium								
Unknown								
Background debris (1-4+)††	2+		2+		2+		1+	
Hyphal fragments/m3	7		7		7		<7	
Pollen/m3	7		<7		<7		<7	
Skin cells (1-4+)	1+		1+		1+		<1+	
Sample volume (liters)	150		150		150		150	
<b>TOTAL SPORE/m3</b>		27		60		27		27

**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 actually higher than reported. Background debris also affects the reporting limit for some spore types. The reporting limit is dependent on spore size, background debris, sample volume, and the percentage of the trace analyzed. It is important to account for sample volumes when evaluating dust levels.  
 The Limit of Detection and Minimum Reporting Limit is a raw count of 1. 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: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-02-2007

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

Location:	ECG-07-534A-508: 21st floor room south east area cubicle #3		ECG-07-534A-509: 21st floor room south west area cubicle #30		ECG-07-534A-510: 21st floor room north east area cubicle #119		ECG-07-534A-511: 21st floor room west area cubicle # 55	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	1499743-1		1499744-1		1499745-1		1499746-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria			1	7				
Arthrinium								
Ascospores*	1	27						
Aureobasidium								
Basidiospores*								
Bipolaris/Drechslera group								
Chaetomium							1	7
Cladosporium	2	53	4	107	1	27	3	80
Curvularia								
Epicoccum								
Fusarium								
Nigrospora								
Oidium								
Other brown								
Penicillium/Aspergillus types†	1	27						
Pithomyces								
Rusts*								
Smuts*, Periconia, Myxomycetes*					1	7		
Stemphylium								
Torula								
Ulocladium								
Unknown								
Background debris (1-4+)††	2+		2+		2+		1+	
Hyphal fragments/m3	<7		<7		<7		<7	
Pollen/m3	<7		<7		<7		7	
Skin cells (1-4+)	1+		1+		1+		1+	
Sample volume (liters)	150		150		150		150	
<b>TOTAL SPORE/m3</b>		107		114		34		87

**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 actually higher than reported. Background debris also affects the reporting limit for some spore types. The reporting limit is dependent on spore size, background debris, sample volume, and the percentage of the trace analyzed. It is important to account for sample volumes when evaluating dust levels.  
 The Limit of Detection and Minimum Reporting Limit is a raw count of 1. 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: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-02-2007

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

Location:	ECG-07-534A-512: 21st floor room north area cubicle # 109		ECG-07-534A-513: Outside ambient air, north side outside of cafeteria		ECG-07-534A-514: Outside ambient air, north side outside of cafeteria		ECG-07-534A-515: Outside ambient air, north side outside of cafeteria	
Comments (see below)	None		None		None		A	
Lab ID-Version‡:	1499747-1		1499748-1		1499749-1		1499750-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria			9	60	6	40	7	47
Ascospores*			3	80	2	53	3	80
Aureobasidium								
Basidiospores*			14	373	10	267	9	240
Bipolaris/Drechslera group								
Chaetomium					1	7		
Cladosporium	1	27	175	4,670	160	4,270	174	4,640
Curvularia			1	7	3	20		
Epicoccum			2	13	2	13	1	7
Fusarium								
Nigrospora			3	20	14	93	7	47
Oidium					1	7	2	13
Other brown			1	7	1	7		
Penicillium/Aspergillus types†			4	107			194	1,430
Pithomyces								
Rusts*			4	27	2	13	4	27
Smuts*, Periconia, Myxomycetes*	1	7	11	73	6	40	3	20
Stemphylium								
Torula								
Ulocladium					3	20	2	13
Unknown								
Background debris (1-4+)††	1+		3+		3+		3+	
Hyphal fragments/m3	< 7		73		53		13	
Pollen/m3	< 7		67		40		13	
Skin cells (1-4+)	1+		1+		1+		1+	
Sample volume (liters)	150		150		150		150	
<b>TOTAL SPORE/m3</b>		34		5,437		4,850		6,564

Comments: A) 187 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump.

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

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

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be actually higher than reported. Background debris also affects the reporting limit for some spore types. The reporting limit is dependent on spore size, background debris, sample volume, and the percentage of the trace analyzed. It is important to account for sample volumes when evaluating dust levels.

The Limit of Detection and Minimum Reporting Limit is a raw count of 1. 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: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance FundDate of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-02-2007**MoldRANGE™: Extended Outdoor Comparison****Outdoor Location: ECG-07-534A-513, Outside ambient air, north side outside of cafeteria**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: September				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
<b>Generally able to grow indoors*</b>									
Alternaria	60	7	38	540	66	7	27	230	61
Bipolaris/Drechslera group	-	7	13	210	26	7	13	120	14
Chaetomium	-	7	13	120	17	7	13	110	19
Cladosporium	4,670	53	800	12,000	98	53	640	6,500	98
Curvularia	7	7	27	820	31	7	13	190	7
Epicoccum	13	7	22	430	28	7	13	160	21
Nigrospora	20	7	20	360	25	7	13	180	8
Other brown	7	7	13	110	39	7	13	88	38
Penicillium/Aspergillus types	107	47	290	3,700	92	50	210	2,600	89
Stachybotrys	-	7	13	280	4	7	13	350	5
Torula	-	7	13	120	16	7	13	150	13
Ulocladium	-	7	13	160	9	7	13	110	9
<b>Seldom found growing indoors**</b>									
Ascospores	80	13	170	5,500	80	13	110	1,700	73
Basidiospores	373	20	390	23,000	96	13	270	7,000	95
Oidium	-	7	13	170	15	7	13	200	20
Rusts	27	7	22	340	29	7	13	270	29
Smuts, Periconia, Myxomycetes	73	10	53	730	81	8	40	480	72
<b>TOTAL SPORES/M3</b>	<b>5,437</b>								

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

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

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

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

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

Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance FundDate of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-02-2007**MoldRANGE™: Extended Outdoor Comparison****Outdoor Location: ECG-07-534A-514, Outside ambient air, north side outside of cafeteria**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: September				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
<b>Generally able to grow indoors*</b>									
Alternaria	40	7	38	540	66	7	27	230	61
Bipolaris/Drechslera group	-	7	13	210	26	7	13	120	14
Chaetomium	7	7	13	120	17	7	13	110	19
Cladosporium	4,270	53	800	12,000	98	53	640	6,500	98
Curvularia	20	7	27	820	31	7	13	190	7
Epicoccum	13	7	22	430	28	7	13	160	21
Nigrospora	93	7	20	360	25	7	13	180	8
Other brown	7	7	13	110	39	7	13	88	38
Penicillium/Aspergillus types	-	47	290	3,700	92	50	210	2,600	89
Stachybotrys	-	7	13	280	4	7	13	350	5
Torula	-	7	13	120	16	7	13	150	13
Ulocladium	20	7	13	160	9	7	13	110	9
<b>Seldom found growing indoors**</b>									
Ascospores	53	13	170	5,500	80	13	110	1,700	73
Basidiospores	267	20	390	23,000	96	13	270	7,000	95
Oidium	7	7	13	170	15	7	13	200	20
Rusts	13	7	22	340	29	7	13	270	29
Smuts, Periconia, Myxomycetes	40	10	53	730	81	8	40	480	72
<b>TOTAL SPORES/M3</b>	<b>4,850</b>								

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

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

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

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

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Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance FundDate of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-02-2007**MoldRANGE™: Extended Outdoor Comparison****Outdoor Location: ECG-07-534A-515, Outside ambient air, north side outside of cafeteria**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: September				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
<b>Generally able to grow indoors*</b>									
Alternaria	47	7	38	540	66	7	27	230	61
Bipolaris/Drechslera group	-	7	13	210	26	7	13	120	14
Chaetomium	-	7	13	120	17	7	13	110	19
Cladosporium	4,640	53	800	12,000	98	53	640	6,500	98
Curvularia	-	7	27	820	31	7	13	190	7
Epicoccum	7	7	22	430	28	7	13	160	21
Nigrospora	47	7	20	360	25	7	13	180	8
Other brown	-	7	13	110	39	7	13	88	38
Penicillium/Aspergillus types	1,430	47	290	3,700	92	50	210	2,600	89
Stachybotrys	-	7	13	280	4	7	13	350	5
Torula	-	7	13	120	16	7	13	150	13
Ulocladium	13	7	13	160	9	7	13	110	9
<b>Seldom found growing indoors**</b>									
Ascospores	80	13	170	5,500	80	13	110	1,700	73
Basidiospores	240	20	390	23,000	96	13	270	7,000	95
Oidium	13	7	13	170	15	7	13	200	20
Rusts	27	7	22	340	29	7	13	270	29
Smuts, Periconia, Myxomycetes	20	10	53	730	81	8	40	480	72
<b>TOTAL SPORES/M3</b>	<b>6,564</b>								

† 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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Client: Entek Consulting Group  
 C/O: Mr. Rick Beall

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007

Re: 07-534A; State Compensation Insurance Fund

Date of Report: 10-02-2007

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

**Outdoor Summary: ECG-07-534A-513: Outside ambient air, north side outside of cafeteria**

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria	[Bar chart showing 60 spores/m3]				7 - 27 - 370	55
Ascospores	[Bar chart showing 80 spores/m3]				13 - 160 - 4,300	76
Basidiospores	[Bar chart showing 373 spores/m3]				13 - 320 - 14,000	93
Cladosporium	[Bar chart showing 4,670 spores/m3]				53 - 530 - 8,300	95
Curvularia	[Bar chart showing 7 spores/m3]				7 - 22 - 670	16
Epicoccum	[Bar chart showing 13 spores/m3]				7 - 13 - 280	23
Nigrospora	[Bar chart showing 20 spores/m3]				7 - 13 - 230	13
Other brown	[Bar chart showing 7 spores/m3]				7 - 13 - 93	36
Penicillium/Aspergillus types	[Bar chart showing 107 spores/m3]				27 - 210 - 2,600	87
Rusts	[Bar chart showing 27 spores/m3]				7 - 13 - 280	23
Smuts, Periconia, Myxomycetes	[Bar chart showing 73 spores/m3]				7 - 40 - 760	70
<b>Total</b>	[Bar chart showing 5,437 spores/m3]					

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: ECG-07-534A-500: 3rd floor room 322 cubicle #56**

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.5333	dF: 11 Result: 0.5727 Critical value: 0.5273 Outside Similar: Yes	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium	[Bar chart showing 53 spores/m3]			
	Nigrospora	[Bar chart showing 7 spores/m3]			
	Penicillium/Aspergillus types	[Bar chart showing 27 spores/m3]			
	Smuts, Periconia, Myxomycetes	[Bar chart showing 7 spores/m3]			
	<b>Total</b>	[Bar chart showing 94 spores/m3]			

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-501: 3rd floor room 317 cubicle #35 at Isle Way

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.5882	dF: 12 Result: 0.4283 Critical value: 0.4965 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					27
Cladosporium					27
Curvularia					7
Penicillium/Aspergillus types					27
Smuts, Periconia, Myxomycetes					7
Ulocladium					7
<b>Total</b>					102

**Location:** ECG-07-534A-502: 3rd floor room 311 staging area #129

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5023 Critical value: 0.5273 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Rusts					7
<b>Total</b>					34





Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-509: 21st floor room south west area cubicle #30

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5477 Critical value: 0.5273 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					7
Cladosporium					107
<b>Total</b>					114

**Location:** ECG-07-534A-510: 21st floor room north east area cubicle #119

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5932 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					34

**Location:** ECG-07-534A-511: 21st floor room west area cubicle #55

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1538	dF: 12 Result: 0.3287 Critical value: 0.4965 Outside Similar: No	Score: 111 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Chaetomium					7
Cladosporium					80
<b>Total</b>					87

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-512: 21st floor room north area cubicle #109

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5932 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					34

\* 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: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Outdoor Summary:** ECG-07-534A-514: Outside ambient air, north side outside of cafeteria

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria	[Bar chart showing 40 spores/m3]				7 - 27 - 370	55
Ascospores	[Bar chart showing 53 spores/m3]				13 - 160 - 4,300	76
Basidiospores	[Bar chart showing 267 spores/m3]				13 - 320 - 14,000	93
Chaetomium	[Bar chart showing 7 spores/m3]				7 - 13 - 120	13
Cladosporium	[Bar chart showing 4,270 spores/m3]				53 - 530 - 8,300	95
Curvularia	[Bar chart showing 20 spores/m3]				7 - 22 - 670	16
Epicoccum	[Bar chart showing 13 spores/m3]				7 - 13 - 280	23
Nigrospora	[Bar chart showing 93 spores/m3]				7 - 13 - 230	13
Oidium	[Bar chart showing 7 spores/m3]				7 - 13 - 210	16
Other brown	[Bar chart showing 7 spores/m3]				7 - 13 - 93	36
Penicillium/Aspergillus types	[Bar chart showing ND spores/m3]				27 - 210 - 2,600	87
Rusts	[Bar chart showing 13 spores/m3]				7 - 13 - 280	23
Smuts, Periconia, Myxomycetes	[Bar chart showing 40 spores/m3]				7 - 40 - 760	70
Ulocladium	[Bar chart showing 20 spores/m3]				7 - 13 - 110	6
<b>Total</b>	[Bar chart showing 4,850 spores/m3]					

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:** ECG-07-534A-500: 3rd floor room 322 cubicle #56

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3529	dF: 14 Result: 0.3901 Critical value: 0.4593 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium	[Bar chart showing 53 spores/m3]			
	Nigrospora	[Bar chart showing 7 spores/m3]			
	Penicillium/Aspergillus types	[Bar chart showing 27 spores/m3]			
	Smuts, Periconia, Myxomycetes	[Bar chart showing 7 spores/m3]			
	<b>Total</b>	[Bar chart showing 94 spores/m3]			

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-501: 3rd floor room 317 cubicle #35 at Isle Way

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.5263	dF: 14 Result: 0.2879 Critical value: 0.4593 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Ascospores				27
	Cladosporium				27
	Curvularia				7
	Penicillium/Aspergillus types				27
	Smuts, Periconia, Myxomycetes				7
	Ulocladium				7
	<b>Total</b>				102

**Location:** ECG-07-534A-502: 3rd floor room 311 staging area #129

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2667	dF: 13 Result: 0.4602 Critical value: 0.4780 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				27
	Rusts				7
	<b>Total</b>				34



Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-506: 11th floor room 1104 cubicle #28

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1429	dF: 13 Result: 0.6168 Critical value: 0.4780 Outside Similar: Yes	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Cladosporium					27
<b>Total</b>					27

**Location:** ECG-07-534A-507: 11th floor room 1104 cubicle #4.0

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1429	dF: 13 Result: 0.6168 Critical value: 0.4780 Outside Similar: Yes	Score: 100 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Cladosporium					27
<b>Total</b>					27

**Location:** ECG-07-534A-508: 21st floor room south east area cubicle #3

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2500	dF: 14 Result: 0.3934 Critical value: 0.4593 Outside Similar: No	Score: 104 Result: Low	
<b>Species Detected</b>		<b>Spores/m3</b>			
		<100	1K	10K	>100K
Ascospores					27
Cladosporium					53
Penicillium/Aspergillus types					27
<b>Total</b>					107

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-509: 21st floor room south west area cubicle #30

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2667	dF: 13 Result: 0.5920 Critical value: 0.4780 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					7
Cladosporium					107
<b>Total</b>					114

**Location:** ECG-07-534A-510: 21st floor room north east area cubicle #119

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2667	dF: 13 Result: 0.5920 Critical value: 0.4780 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					34

**Location:** ECG-07-534A-511: 21st floor room west area cubicle #55

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2667	dF: 13 Result: 0.3777 Critical value: 0.4780 Outside Similar: No	Score: 111 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Chaetomium					7
Cladosporium					80
<b>Total</b>					87

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-512: 21st floor room north area cubicle #109

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.2667	dF: 13 Result: 0.5920 Critical value: 0.4780 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
	Cladosporium				27
	Smuts, Periconia, Myxomycetes				7
	<b>Total</b>				34

\* 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: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Outdoor Summary:** ECG-07-534A-515: Outside ambient air, north side outside of cafeteria

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria	[Bar chart showing distribution]				7 - 27 - 370	55
Ascospores	[Bar chart showing distribution]				13 - 160 - 4,300	76
Basidiospores	[Bar chart showing distribution]				13 - 320 - 14,000	93
Cladosporium	[Bar chart showing distribution]				53 - 530 - 8,300	95
Epicoccum	[Bar chart showing distribution]				7 - 13 - 280	23
Nigrospora	[Bar chart showing distribution]				7 - 13 - 230	13
Oidium	[Bar chart showing distribution]				7 - 13 - 210	16
Penicillium/Aspergillus types	[Bar chart showing distribution]				27 - 210 - 2,600	87
Rusts	[Bar chart showing distribution]				7 - 13 - 280	23
Smuts, Periconia, Myxomycetes	[Bar chart showing distribution]				7 - 40 - 760	70
Ulocladium	[Bar chart showing distribution]				7 - 13 - 110	6
<b>Total</b>	[Bar chart showing distribution]					

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:** ECG-07-534A-500: 3rd floor room 322 cubicle #56

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.5333	dF: 11 Result: 0.6091 Critical value: 0.5273 Outside Similar: Yes	Score: 104 Result: Low		
Species Detected		Spores/m3				
		<100	1K	10K	>100K	
Cladosporium		[Bar chart showing distribution]				53
Nigrospora		[Bar chart showing distribution]				7
Penicillium/Aspergillus types		[Bar chart showing distribution]				27
Smuts, Periconia, Myxomycetes		[Bar chart showing distribution]				7
<b>Total</b>		[Bar chart showing distribution]				94

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-501: 3rd floor room 317 cubicle #35 at Isle Way

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.5882	dF: 12 Result: 0.4196 Critical value: 0.4965 Outside Similar: No	Score: 107 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					27
Cladosporium					27
Curvularia					7
Penicillium/Aspergillus types					27
Smuts, Periconia, Myxomycetes					7
Ulocladium					7
<b>Total</b>					102

**Location:** ECG-07-534A-502: 3rd floor room 311 staging area #129

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5045 Critical value: 0.5273 Outside Similar: No	Score: 100 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Rusts					7
<b>Total</b>					34

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-503: 3rd floor room 327 cubicle #94

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.4286	dF: 11 Result: 0.4250 Critical value: 0.5273 Outside Similar: No	Score: 104 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					7
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					<b>41</b>

**Location:** ECG-07-534A-504: 11th floor room 1104 cubicle #56

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.6295 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
<b>Total</b>					<b>27</b>

**Location:** ECG-07-534A-505: 11th floor room 1104 cubicle #32

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5727 Critical value: 0.5273 Outside Similar: Yes	Score: 103 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					7
Cladosporium					53
<b>Total</b>					<b>60</b>

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-506: 11th floor room 1104 cubicle #28

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.6295 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
<b>Total</b>					27

**Location:** ECG-07-534A-507: 11th floor room 1104 cubicle #4.0

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.6295 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
<b>Total</b>					27

**Location:** ECG-07-534A-508: 21st floor room south east area cubicle #3

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.4286	dF: 11 Result: 0.7659 Critical value: 0.5273 Outside Similar: Yes	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Ascospores					27
Cladosporium					53
Penicillium/Aspergillus types					27
<b>Total</b>					107

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-509: 21st floor room south west area cubicle #30

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.5727 Critical value: 0.5273 Outside Similar: Yes	Score: 102 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Alternaria					7
Cladosporium					107
<b>Total</b>					114

**Location:** ECG-07-534A-510: 21st floor room north east area cubicle #119

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.4591 Critical value: 0.5273 Outside Similar: No	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					34

**Location:** ECG-07-534A-511: 21st floor room west area cubicle #55

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.1538	dF: 12 Result: 0.3304 Critical value: 0.4965 Outside Similar: No	Score: 111 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Chaetomium					7
Cladosporium					80
<b>Total</b>					87

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

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

**Location:** ECG-07-534A-512: 21st floor room north area cubicle #109

% 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: 12 Result: 7.6813 Critical value: 21.0261 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.4591 Critical value: 0.5273 Outside Similar: No	Score: 101 Result: Low	
Species Detected		Spores/m3			
		<100	1K	10K	>100K
Cladosporium					27
Smuts, Periconia, Myxomycetes					7
<b>Total</b>					<b>34</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.



# BIOLOGICAL PARTICULATE

## AIR SAMPLING RESULTS

Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-25-2007

**OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY**

Location:	ECG-07-534A-500: 3rd floor room 322 cubicle #56	ECG-07-534A-501: 3rd floor room 317 cubicle #35 at Isle Way	ECG-07-534A-502: 3rd floor room 311 staging area #129	ECG-07-534A-503: 3rd floor room 327 cubicle #94				
Comments (see below)	None	None	None	None				
Lab ID-Version‡:	1539501-1	1539502-1	1539503-1	1539504-1				
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
<b>POLLEN</b>								
Ash (Fraxinus)								
Birch (Betula)								
Cedar/Juniper (Cupressaceae)								
Chenopods (Chenopodiaceae)								
Elm (Ulmus)	2	13	2	13				
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other					2	13		
Pine (Pinaceae)								
Ragweed (Ambrosiaceae)								
Sycamore (Platanus)								
<b>OTHER PLANT</b>								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)	2	13	1	7	3	20	1	7
<b>OTHER PARTICLES:</b>								
<b>ANIMAL</b>								
Epithelial (skin) cells	147	980	56	373	64	427	131	873
Hair								
Insect parts								
Mites								
<b>FUNGI</b>								
Hyphal fragments	2	13	1	7	2	13	1	7
<b>NON-BIOLOGICAL</b>								
Cotton fibers							2	13
Glass fiber								
Soot								
Background debris (1-4+)†	1+		1+		1+		1+	
Sample volume (liters)	150		150		150		150	

**Comments:**

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

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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

Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-25-2007

**OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY**

Location:	ECG-07-534A-504: 11th floor room 1104 cubicle #56		ECG-07-534A-505: 11th floor room 1104 cubicle #32		ECG-07-534A-506: 11th floor room 1104 cubicle #28		ECG-07-534A-507: 11th floor room 1104 cubicle #4.0	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1539505-1		1539506-1		1539507-1		1539508-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
<b>POLLEN</b>								
Alder (Alnus)								
Ash (Fraxinus)								
Birch (Betula)								
Cedar/Juniper (Cupressaceae)								
Chenopods (Chenopodiaceae)								
Elm (Ulmus)	1	7						
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other								
Pine (Pinaceae)								
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
<b>OTHER PLANT</b>								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)	2	13	2	13			1	7
<b>OTHER PARTICLES:</b>								
<b>ANIMAL</b>								
Epithelial (skin) cells	121	807	142	947	101	673	73	487
Hair								
Insect parts								
Mites								
<b>FUNGI</b>								
Hyphal fragments	1	7	1	7	1	7		
<b>NON-BIOLOGICAL</b>								
Cotton fibers	2	13			3	20	3	20
Glass fiber	1	7	1	7	1	7		
Soot								
Background debris (1-4+)†	1+		1+		1+		1+	
Sample volume (liters)	150		150		150		150	

**Comments:**

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

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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

Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-25-2007

**OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY**

Location:	ECG-07-534A-508: 21st floor room south east area cubicle #3	ECG-07-534A-509: 21st floor room south west area cubicle #30	ECG-07-534A-510: 21st floor room north east area cubicle #119	ECG-07-534A-511: 21st floor room west area cubicle # 55
Comments (see below)	None	None	None	None
Lab ID-Version‡:	1539509-1	1539510-1	1539511-1	1539512-1
	raw ct. particles/m3	raw ct. particles/m3	raw ct. particles/m3	raw ct. particles/m3
<b>POLLEN</b>				
Ash (Fraxinus)				
Birch (Betula)				
Cedar/Juniper (Cupressaceae)				
Chenopods (Chenopodiaceae)				
Elm (Ulmus)				1 7
Eucalyptus (Eucalyptus)				
Grass (Poaceae)				
Mulberry (Morus)				
Oak (Quercus)				
Other				
Pine (Pinaceae)				
Ragweed (Ambrosieae)				
Sycamore (Platanus)				
<b>OTHER PLANT</b>				
Algae				
Diatoms				
Fern, moss, etc. spores				
Other (wood, trichomes, etc.)	2 13		1 7	1 7
<b>OTHER PARTICLES:</b>				
<b>ANIMAL</b>				
Epithelial (skin) cells	110 733	88 587	67 447	54 360
Hair				
Insect parts				
Mites				
<b>FUNGI</b>				
Hyphal fragments				
<b>NON-BIOLOGICAL</b>				
Cotton fibers	4 27	3 20	1 7	3 20
Glass fiber		1 7		
Soot				
Background debris (1-4+)†	1+	1+	1+	1+
Sample volume (liters)	150	150	150	150

**Comments:**

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

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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

Client: Entek Consulting Group  
C/O: Mr. Rick Beall  
Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
Date of Receipt: 10-01-2007  
Date of Report: 10-25-2007

**OTHER BIOLOGICAL PARTICLES REPORT: NON-VIABLE METHODOLOGY**

Location:	ECG-07-534A-512: 21st floor room north area cubicle # 109		ECG-07-534A-513: Outside ambient air, north side outside of cafeteria		ECG-07-534A-514: Outside ambient air, north side outside of cafeteria		ECG-07-534A-515: Outside ambient air, north side outside of cafeteria	
Comments (see below)	None		None		None		None	
Lab ID-Version‡:	1539513-1		1539514-1		1539515-1		1539516-1	
	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3	raw ct.	particles/m3
<b>POLLEN</b>								
Birch (Betula)								
Cedar/Juniper (Cupressaceae)								
Chenopods (Chenopodiaceae)								
Elm (Ulmus)			8	53	4	27	2	13
Eucalyptus (Eucalyptus)								
Grass (Poaceae)								
Mulberry (Morus)								
Oak (Quercus)								
Other			2	13	1	7		
Pine (Pinaceae)					1	7		
Ragweed (Ambrosieae)								
Sycamore (Platanus)								
<b>OTHER PLANT</b>								
Algae								
Diatoms								
Fern, moss, etc. spores								
Other (wood, trichomes, etc.)	1	7	22	147	19	127	11	73
<b>OTHER PARTICLES:</b>								
<b>ANIMAL</b>								
Epithelial (skin) cells	54	360	17	113	34	227	16	107
Hair								
Insect parts								
Mites								
<b>FUNGI</b>								
Hyphal fragments			11	73	8	53	2	13
<b>NON-BIOLOGICAL</b>								
Cotton fibers	2	13	1	7	2	13	3	20
Glass fiber	1	7	1	7	2	13	4	27
Soot			6	40	7	47	9	60
Background debris (1-4+)†	1+		2+		2+		2+	
Sample volume (liters)	150		150		150		150	

**Comments:**

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

Note: Interpretation is left to the company and/or persons who conducted the field work.

† Background debris is an indication of the amounts of non-biological particulate matter present on the slide (dust in the air) and is graded from 1+ to 4+ with 4+ indicating the largest amounts. To evaluate dust levels it is important to account for differences in sample volume.

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



BULK SAMPLING RESULTS  
CARPET DUST CULTURE  
FOR MOLD SPORES



**BULK MATERIAL** Analysis Report Form for **ENTEK CONSULTING GROUP, INC.**

4200 Rocklin Road, Suite 7  
Rocklin, CA 95677  
(916) 632-6800  
(916) 632-6812 Fax

**Date of Sampling:** 09/29/07

**Lab:** EML - San Bruno

**Job Number:** 07-534A

**Analysis Requested:** Biological Evaluation - Culture

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
450 N Street  
Sacramento, CA

**Turnaround Time:** Standard

SAMPLE #	RESULTS	MATERIAL DESCRIPTION/LOCATION
ECG-07-534A-600	SEE ATTACHED LABORATORY REPORT	Carpet Dust Sample From Room 2217 Law Library; 22 <sup>nd</sup> Floor; Approximately 4 Square Feet
ECG-07-534A-601	SEE ATTACHED LABORATORY REPORT	Carpet Dust Sample From Open Office Area Near Room 2206 and Cubicle #095

Note: Samples Collected on to 0.45µ MCE Filters in 25mm Cassettes at a Flow of Approximately 12-15 LPM.

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-02-2007  
 Date of Report: 10-11-2007

**FUNGAL CULTURE REPORT**

Location:	ECG-07-534A-600: Carpet dust sample from room 2217 law library, 22nd floor, approximately 4 square feet			ECG-07-534A-601: Carpet dust sample from open office area near room 2206 and cubicle #095		
Comments (see below)	None			None		
Sample type	Dust sample			Dust sample		
Media used	Cellulose/DG18/MEA			Cellulose/DG18/MEA		
Lab ID-Version‡:	1500991-1			1500992-1		
	sample ct. †	%	cfu*/unit	sample ct. †	%	cfu*/unit
Acremonium						
Alternaria	200	3	8,000	20	6	800
Aspergillus flavus						
Aspergillus fumigatus						
Aspergillus nidulans						
Aspergillus niger	100	2	4,000			
Aspergillus ochraceus						
Aspergillus versicolor	400	7	16,000			
Aureobasidium						
Bipolaris/Drechslera group						
Botrytis						
Cladosporium	2,800	45	110,000	160	50	6,400
Curvularia	100	2	4,000			
Epicoccum	200	3	8,000	30	9	1,200
Fusarium	100	2	4,000			
Non-sporulating fungi				20	6	800
Paecilomyces						
Penicillium	1,200	20	48,000	80	25	3,200
Rhizopus				10	3	400
Stachybotrys chartarum						
Ulocladium						
Yeasts	1,100	18	44,000			
Dilutions††	1:10, 1:100, 1:1,000 & 1:10,000			1:10, 1:100, 1:1,000 & 1:10,000		
Sample size	0.025			0.025		
Unit	1 gram			1 gram		
<b>TOTAL CFU*/unit</b>			<b>246,000</b>			<b>12,800</b>

\* cfu = colony forming units

Caution should be used when interpreting percentages. Totals may not equal 100 due to rounding.

**Comments:**

† Sample count is the calculated number of colonies that would have grown if the entire selected sample size analyzed were plated out.

†† Results represent a compiled result from multiple media and multiple dilutions. Sensitivity of the results depends largely upon the dilutions used and the size of the sample. For example, a dilution of 1:100 means that 1 colony on a plate represents a sample count of 100. For a sample of 0.025 grams, this would represent 4,000 cfu/gram. For a sample of 0.002 grams, this would represent 50,000 cfu/gram.

When detected, the minimum detection and reporting limit is a colony count of 1 at the lowest dilution plated.

Interpretation is left to the company and/or persons who conducted the field work.

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

BULK SAMPLING RESULTS FOR MOLD  
BY  
DIRECT MOUNT MICROSCOPIC EVALUATION



**BULK MATERIAL** Analysis Report Form

ENTEK CONSULTING GROUP, INC.  
4200 Rocklin Road, Suite 7  
Rocklin, CA 95677  
(916) 632-6800  
(916) 632-6812 FAX

**Date of Sampling:** 09/29/07

**Lab:** EML - Sacramento

**Job Number:** 07-534A

**Analysis Requested:** Mold by Direct Mount

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
450 N Street  
Sacramento, CA

**Turnaround Time:** Standard

SAMPLE #	RESULTS	MATERIAL DESCRIPTION/LOCATION
ECG-07-534A-100	SEE ATTACHED LABORATORY REPORT	South Wall Base Wall Near South East Corner - 22 <sup>nd</sup> Floor Across From Cubicle 095 - Suspect Black Mold
ECG-07-534A-101	SEE ATTACHED LABORATORY REPORT	Base of West Wall Near Door of Room 2238 on Floor 22; Suspect Brown Behind Base Cove
ECG-07-534A-102	SEE ATTACHED LABORATORY REPORT	South Wall of Cubicle East of #33 at Opening Room 2305; 23 <sup>rd</sup> Floor; Suspect Brown Mold

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

**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‡: 1499761-1: Tape sample ECG-07-534A-100: South wall base wall near south east corner, 22nd floor across from cubicle 095, suspect black mold				
Light	Very few	4+ <i>Stachybotrys</i> species 2+ <i>Acremonium</i> species	None	Mold growth
Lab ID-Version: 1499762-1: Tape sample ECG-07-534A-101: Base of west wall near door of room 2238 on floor 22, suspect brown behind base cove				
Heavy	Very few	1+ colorless spores typical of <i>Penicillium / Aspergillus</i>	None	Mold growth
Lab ID-Version: 1499763-1: Tape sample ECG-07-534A-102: South wall of cubicle east of #33 at opening room 2305, 23rd floor, suspect brown mold				
Light	Very few	4+ <i>Aspergillus</i> species	None	Mold growth

\* Indicative of normal conditions, i.e. seen on surfaces everywhere. 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. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded 1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

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

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

**DIRECT MICROSCOPIC EXAMINATION REPORT**

Location:	ECG-07-534A-100: South wall base wall near south east corner, 22nd floor across from cubicle 095, suspect black mold	ECG-07-534A-101: Base of west wall near door of room 2238 on floor 22, suspect brown behind base cove	ECG-07-534A-102: South wall of cubicle east of #33 at opening room 2305, 23rd floor, suspect brown mold
Sample type:	Tape sample	Tape sample	Tape sample
Lab ID-Version‡:	1499761-1	1499762-1	1499763-1
<b>MOLD/FUNGAL GROWTH*:</b> Molds seen growing with underlying mycelial and/or sporulating structures			
Acremonium	2+		
Alternaria			
Aspergillus			4+
Aureobasidium			
Basidiospores			
Chaetomium			
Cladosporium			
Colorless spores typical of Penicillium / Aspergillus		1+	
Fusarium			
Other colorless, ID unknown			
Stachybotrys	4+		
Torula			
Ulocladium			
Miscellaneous spores**	Very few	Very few	Very few
Other comments†	None	None	None
Background debris or Description††	Light	Heavy	Light
General impression	Mold growth	Mold growth	Mold growth

\* See Mold/Fungal Growth Details table on the last page.

\*\* See Miscellaneous Spores table on the last page.

† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

†† Background debris is an indication of the amounts of non biological particulate matter present. This background amorphous material is graded and described as scant, light, moderate, heavy, or very heavy. (Very heavy background debris may obscure visibility.)

Interpretation is left to the company and/or persons who conducted the field work.

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

Client: Entek Consulting Group  
 C/O: Mr. Rick Beall  
 Re: 07-534A; State Compensation Insurance Fund

Date of Sampling: 09-29-2007  
 Date of Receipt: 10-01-2007  
 Date of Report: 10-02-2007

**Mold/Fungal Growth Rating Details**

Growth Rating	Quantities of molds indicating growth are listed in the MOLD/FUNGAL GROWTH section. Judgement is used in determining the amount of growth present in the sample. For example, if only one portion of the sample has evidence of heavy growth, then it will receive a rating of heavy growth even though, strictly speaking, on a percentage basis of the entire sample, the amount of growth is low.	
	Swab/Tape/Dust/Wipe sample	Bulk Sample
< 1+ (Very Light Growth)	Evidence of very light growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in less than 10% of the microscopic fields examined.	Areas of very light growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
1+ (Light Growth)	Evidence of light growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 10 to 25% of the microscopic fields examined.	Areas of light growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
2+ (Moderate Growth)	Evidence of moderate growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 26 to 50% of the microscopic fields examined.	Areas of moderate growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
3+ (Heavy Growth)	Evidence of heavy growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found in 51 to 75% of the microscopic fields examined.	Areas of heavy growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.
4+ (Very Heavy Growth)	Evidence of very heavy growth observed on the sample as indicated by spores of one type seen with underlying mycelial and/or with their sporulating structures found to be nearly confluent in the majority of the microscopic fields examined.	Areas of very heavy growth detected by the presence of spores of one type seen with underlying mycelial and/or with their sporulating structures in the bulk sample.

**Miscellaneous Spores**

Slides/specimens are examined for the presence of mold spores and pollen, noting the quantities and distribution of spore types found. A designation of 'normal trapping' is made when a mix of spore types is present with the same general distribution as is usually found outdoors. In other words, the biological component of the sample surface is like that found everywhere. Types of spores present would include basidiospores (mushroom spores), myxomycetes (slime molds), plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Many of these spore types would not be found growing indoors on building materials since many plant pathogens require living plants for growth, and mushrooms require compost, leaf duff of various types, or associations with roots of certain trees, etc. Due to these factors, when a mix of spores seen include these types as well as pollen, the rational source is the outside air, rather than indoor mold growth. The numbers of miscellaneous spores seen are graded and described as shown below as none, very few, few, variety, and wide variety.

None	Very Few	Few	Variety	Wide Variety
No spores detected	Very few spores detected	A few spores detected	Many spores containing a variety of different genera detected	Many spores containing a wide variety of different genera detected

BIOLOGICAL PARTICULATE  
SETTLED DUST SAMPLING RESULTS  
BY  
POLARIZED LIGHT MICROSCOPY



**BULK MATERIAL** Analysis Report Form for **ENTEK CONSULTING GROUP, INC.**

4200 Rocklin Road, Suite 7  
Rocklin, CA 95677  
(916) 632-6800  
(916) 632-6812 Fax

**Date of Sampling:** 09/29/07

**Lab:** Forensic Analytical Specialties, Inc.

**Job Number:** 07-534A

**Analysis Requested:** Particle ID Analysis

**Client Name:** State Compensation Insurance Fund

**Collected by:** Rick Beall

**Site Address:** Board of Equalization  
450 N Street  
Sacramento, CA

**Turnaround Time:** Standard

SAMPLE #	RESULTS	MATERIAL DESCRIPTION/LOCATION
ECG-07-534A-700	SEE ATTACHED LABORATORY REPORT	Settled Dust / Particulate on Honeywell HEPA Filter Unit at Judy Knights Office in Room 317 at Cubicle #44

**BULK MATERIAL** Analysis Request Form for **ENTEK CONSULTING GROUP, INC.**

4200 Rocklin Road, Suite 7  
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**Site Address:** Board of Equalization  
450 N Street  
Sacramento, CA

**Turnaround Time:** Standard  
**Special Instructions:** Attn: Mark Floyd

SAMPLE #	MATERIAL DESCRIPTION/LOCATION
ECG-07-534A-700	Settled Dust / Particulate on Honeywell HEPA Filter Unit at Judy Knights Office in Room 317 at Cubicle #44

Delivered by: BOE VIA FEDEX Date: 10-1-07 Time: 1:15PM

Received by: AJG Date: FLOYD RECEIVED Time: OCT 02 2007



**Forensic Analytical**

3777 Depot Road, Suite 409, Hayward, California 94545 Phone: 510-887-8828, Fax: 510-887-4218

**PARTICLE IDENTIFICATION ANALYSIS  
by Polarized Light Microscopy (PLM)**

Entek Consulting Group  
Rick Beall  
4200 Rocklin Rd, Suite 7  
Rocklin CA 95677

Page: 1/1  
Client Number: A31353  
Report Number: T013590  
SP Number: 07109  
Date Received: 10/2/07

Site: Board of Equalization, Sacramento  
Job #: 07-534A, State Fund Compensation Insurance

Date Reported: 6/14/07  
Analyst: LW

PARTICLE IDENTIFICATION ANALYSIS RESULTS		
Client Sample No.	ECG-07-534A-700	
Lab Sample No.	20052294	
Description:	Settled dust/Particulate on Honeywell HEPA Filter Unit at Judy Knight's office, Room 317, Cubicle #44	
<b>Fibrous</b>	Major	Cotton Cellulose
	Minor	Paper
	Trace	Synthetics Wool Mineral wool Trichomes Hair, feline
<b>Non-Fibrous</b>	Major	Epithelial cells
	Minor	Clear isotropics*
	Trace	Pollen: pinaceae, poaceae Iron oxide Limestone Feldspars Opagues Organic debris Paint chips Quartz Spray paint Starch, agglomerated Salt (NaCl) Phenolic foam

Quantitation: Major: >10%, minor: 1-10%, trace: <1%.

\* Clear isotropics may be glass chips or aluminum corrosion products

Mark Floyd, EM Supervisor, Hayward Laboratory