














Client: EMLab P&K (QA)
C/O: Mr. Quality Control
Re: Sample Report

Date of Sampling: 01-11-2013
Date of Receipt: 01-11-2013
Date of Report: 01-11-2013

MoldSTAT™: Supplementary Statistical Spore Trap Report









Outdoor Summary: 1: Outside Reference

Species detected	Outdoor sample spores/m3				Typical outdoor ranges (North America)	Freq. %
	<100	1K	10K	>100K		
Alternaria				13	7 - 33 - 570	46
Ascospores				320	13 - 190 - 5,400	77
Basidiospores				750	13 - 430 - 22,000	92
Botrytis				27	7 - 20 - 270	6
Cladosporium				1,200	27 - 480 - 10,000	91
Epicoccum				13	7 - 20 - 330	25
Fusarium				13	7 - 27 - 370	3
Penicillium/Aspergillus types				640	13 - 160 - 2,700	69
Pyricularia				13	7 - 13 - 320	3
Rusts				13	7 - 20 - 340	20
Smuts, Periconia, Myxomycetes				40	7 - 47 - 970	64
Ulocladium				13	7 - 13 - 93	4
Total				3,000		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurrence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 2

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 158%	dF: 1 Result: 0.1250 Critical value: 3.8415 Inside Similar: Yes	Result: 0.5263	dF: 14 Result: 0.6000 Critical value: 0.4593 Outside Similar: Yes	Score: 271 Result: High
Species Detected		Spores/m3		
		<100	1K	>100K
Ascospores				53
Basidiospores				110
Chaetomium				27
Cladosporium				2,500
Penicillium/Aspergillus types				2,100
Smuts, Periconia, Myxomycetes				13
Stachybotrys				53
Total				4,800

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Location: 3

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 45%	dF: 1 Result: 0.1250 Critical value: 3.8415 Inside Similar: Yes	Result: 0.6667	dF: 12 Result: 0.8934 Critical value: 0.4965 Outside Similar: Yes	Score: 147 Result: Low
Species Detected		Spores/m3		
		<100	1K	10K
Alternaria				13
Ascospores				53
Basidiospores				210
Cladosporium				480
Penicillium/Aspergillus types				590
Smuts, Periconia, Myxomycetes				40
Total				1,400

* 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. Eurofins Built Environment Testing 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 Eurofins Built Environment Testing 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. Eurofins Built Environment Testing hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

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PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Malcolm Moody

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