Forensic Analytical Laboratories

Fungal Analysis by PCR

Sample Company	
Sample Contact Person	
000 Sample Street, Suite 000	
Sample City, CA 00000-0000	

Client ID:	0000
Report Number:	F000000
FALI Job ID:	0000-00
Date Received:	00/00/00
Date Analyzed:	00/00/00
Date Printed:	00/00/00
First Reported:	00/00/00

Sample Type: Bulk Dust
Analysis: PCR Environmental Relative Moldiness Index Panel
Job ID / Site: Sample Site

Lab Number	00000000
Sample ID	1
Location	Location A

Sample Date	00/00/00
Weight/Area	5.2 mg
Media	

Group 1

Organism	Sp Eq	Sp Eq/mg dust	%	Log Conc
Aspergillus flavus	5050	970	35.2	2.9867
Aspergillus fumigatus	ND	ND	-	-
Aspergillus niger	272	52	1.9	1.716
Aspergillus ochraceus	ND	ND	-	-
Aspergillus penicilloides	84	16	0.6	1.2041
Aspergillus restrictus	ND	ND	-	-
Aspergillus sclerotiorum	ND	ND	-	-
Aspergillus sydowii	ND	ND	-	-
Aspergillus unguis	ND	ND	-	-
Aspergillus veriscolor	4200	810	29.4	2.9084
Aureobasidium pullulans	197	38	1.4	1.5797
Chaetomium globosum	201	39	1.4	1.591
Cladosporium sphaerospermum	223	43	1.6	1.6334
Eurotium amstelodami	241	46	1.7	1.6627
Paecilomyces varioti	ND	ND	-	-
Penicillium brevicompactum	699	130	4.9	2.1139
Penicillium corylophilum	26	<10	0.2	0.6989
Penicillium crustosum	ND	ND	-	-
Penicillium purpurogenum	ND	ND	-	-
Penicillium spinulosum	ND	ND	-	-
Penicillium variabile	ND	ND	-	-
Scopulariopsis brevicaulis	ND	ND	-	-
Scopulariopsis chartarum	14	<10	0.1	0.4313
Stachybotrys chartarum	912	180	6.4	2.2552
Trichoderma viride	ND	ND	-	-
Wallemia sebi	29	<10	0.2	0.7481
Total for Both Groups	**14,282**	**2,700**		
Sum of Logs				**21.5294**
LOD				**0.19**

Group 2

Organism	Sp Eq	Sp Eq/mg dust	%	Log Conc
Acremonium strictum	ND	ND	-	-
Alternaria alternata	ND	ND	-	-
Aspergillus ustus	ND	ND	-	-
Cladosporium cladosporioides I	499	96	3.5	1.9822
Cladosporium cladosporioides II	103	20	0.7	1.301
Cladosporium herbarum	23	<10	0.2	0.6434
Epicoccum nigrum	1080	210	7.6	2.3222
Mucor racemosus	17	<10	0.1	0.5185
Penicillium chrysogenum	409	79	2.9	1.8976
Rhizopus stolonifer	<10	<10	-	-
Total for Both Groups	**14,282**	**2,700**		
Sum of Logs				**8.4284**
LOD				**0.19**

ERMI℠ Score

GROUP 1	**21.5294**
GROUP 2	**8.4284**
ERMI℠ SCORE †	**13.1**
LEVEL	**Level 4**

† ERMI℠ Score = Group 1 - Group 2

Comments

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Sample Type: Bulk Dust
Analysis: PCR Environmental Relative Moldiness Index Panel
Job ID / Site: Sample Site

Explanations:
ND   None Detected

Notes:
This test is performed pursuant to licensing arrangements with Roche Molecular Systems, Inc. and Applied Biosystems.

The Environmental Relative Moldiness Index (ERMI^{SM}) is a screening tool developed by the USEPA to assist in predicting the relative "mold burden" on a giving home. The ERMI^{SM} was developed by screening dust samples from 1096 homes across the United States as part of the 2006 HUD American Healthy Home Survey, and ranking these homes in a RMI (Relative Moldiness Index). The ERMI^{SM} score is determined by analyzing dust samples by quantitative PCR for 36 species of mold divided into two groups. Group I is composed of 26 species of molds commonly associated with water damage. Group II is composed of 10 species of common to indoor environments. By comparing the difference in Group I and Group II molds, an ERMI^{SM} score is generated which can then be compared to the nationwide RMI.

Several organizations, including: the American Conference of Governmental Industrial Hygienists (ACGIH); the American Industrial Hygiene Association (AIHA); the Indoor Air Quality Association (IAQA); the United States Environmental Protection Agency (USEPA); the Centers for Disease Control (CDC), as well as the California Department of Health Services (CADHS), have all published guidelines for assessment and interpretation of mold resulting from water intrusion in buildings.

ERMI^{SM} Score	Level or Risk	Likelihood of Mold Problem in Home
-10 to -4	Level 1	Lowest
-4 to 0	Level 2	Lower
0 to 5	Level 3	Moderate
FALI reports	Level 4	High

Melissa Piercey, Microbiology Laboratory Supervisor, Hayward Laboratory