

Hygenix, Inc
 49 Woodside St.
 Stamford, Connecticut 06902
 Project: **STAMFORD PUBLIC SCHOOLS - WESTOVER SCHOOL**
 Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 10/27/2018
 Date Received: 10/29/2018
 Date Analyzed: 10/30/2018
 Date Reported: 10/30/2018
 Project ID: 18041532
 Page 1 of 5

1054 Spore Trap Analysis: SOP 3.8

Client Sample Number	26609515				26611415			
Sample Location	ROOM D 226				ROOM D 224			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-001				18041532-002			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
basidiospores	1	53	8	-	-	-	-	-
Cladosporium	1	53	8	-	-	-	-	-
hyphal elements	1	53	8	-	-	-	-	-
Penicillium/Aspergillus group	6	320	50	-	7	373	88	-
Smuts,Periconia,Myxomycetes	3	160	25	-	1	53	12	-
	Debris Rating 2				Debris Rating 1			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m³				Analytical Sensitivity: 13 spr/m³			
Comments								
Total *See Footnotes	12	640	~100%	-	8	427	~100%	-

Client Sample Number	26611412				26611402			
Sample Location	ROOM D 222				ROOM D 220			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-003				18041532-004			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
Alternaria	-	-	-	-	1	53	9	-
ascospores	-	-	-	-	1	53	9	-
basidiospores	1	53	8	-	1	53	9	-
Cladosporium	1	53	8	-	1	53	9	-
Penicillium/Aspergillus group	10	533	83	-	6	320	55	-
Smuts,Periconia,Myxomycetes	-	-	-	-	1	53	9	-
	Debris Rating 2				Debris Rating 1			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m³				Analytical Sensitivity: 13 spr/m³			
Comments								
Total *See Footnotes	12	640	~100%	-	11	587	~100%	-

Hygenix, Inc
 49 Woodside St.
 Stamford, Connecticut 06902
 Project: **STAMFORD PUBLIC SCHOOLS - WESTOVER SCHOOL**
 Condition of Sample(s) Upon Receipt: Acceptable

 Date Collected: 10/27/2018
 Date Received: 10/29/2018
 Date Analyzed: 10/30/2018
 Date Reported: 10/30/2018
 Project ID: 18041532
 Page 2 of 5

Client Sample Number	26611401				26611404			
Sample Location	ROOM D 218				ROOM C 217			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-005				18041532-006			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
ascospores	1	53	8	-	-	-	-	-
basidiospores	1	53	8	-	-	-	-	-
Cladosporium	3	160	23	-	1	53	13	-
Penicillium/Aspergillus group	7	373	54	-	6	320	75	-
Smuts,Periconia,Myxomycetes	1	53	8	-	1	53	13	-
	Debris Rating 1				Debris Rating 1			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m ³				Analytical Sensitivity: 13 spr/m ³			
Comments								
Total *See Footnotes	13	693	~100%	-	8	427	~100%	-

Client Sample Number	26611398				26611405			
Sample Location	ROOM C 215				ROOM C 214			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-007				18041532-008			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
basidiospores	-	-	-	-	1	53	7	-
Cladosporium	-	-	-	-	3	160	20	-
Curvularia	-	-	-	-	1	53	7	-
Penicillium/Aspergillus group	3	160	75	-	9	480	60	-
Smuts,Periconia,Myxomycetes	1	53	25	-	-	-	-	-
Unknown	-	-	-	-	1	53	7	-
	Debris Rating 1				Debris Rating 1			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m ³				Analytical Sensitivity: 13 spr/m ³			
Comments								
Total *See Footnotes	4	213	~100%	-	15	800	~100%	-

Hygenix, Inc
 49 Woodside St.
 Stamford, Connecticut 06902
 Project: **STAMFORD PUBLIC SCHOOLS - WESTOVER SCHOOL**
 Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 10/27/2018
 Date Received: 10/29/2018
 Date Analyzed: 10/30/2018
 Date Reported: 10/30/2018
 Project ID: 18041532
 Page 3 of 5

Client Sample Number	26611409				26611521			
Sample Location	ROOM C 212				ROOM C 210			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-009				18041532-010			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
ascospores	1	53	8	-	1	53	8	-
basidiospores	-	-	-	-	1	53	8	-
hyphal elements	1	53	8	-	1	53	8	-
Penicillium/Aspergillus group	8	427	67	-	9	480	69	-
Smuts,Periconia,Myxomycetes	2	107	17	-	1	53	8	-
	Debris Rating 1				Debris Rating 2			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m ³				Analytical Sensitivity: 13 spr/m ³			
Comments								
Total *See Footnotes	12	640	~100%	-	13	693	~100%	-

Client Sample Number	26611403				26611428			
Sample Location	ROOM C 206				ROOM C 204			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-011				18041532-012			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
ascospores	1	53	8	-	1	53	4	-
basidiospores	2	107	15	-	1	53	4	-
Cladosporium	1	53	8	-	1	53	4	-
Penicillium/Aspergillus group	7	373	54	-	19	1013	70	-
Pestalotia	-	-	-	-	1	53	4	-
Smuts,Periconia,Myxomycetes	1	53	8	-	4	213	15	-
Unknown	1	53	8	-	-	-	-	-
	Debris Rating 2				Debris Rating 2			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m ³				Analytical Sensitivity: 13 spr/m ³			
Comments								
Total *See Footnotes	13	693	~100%	-	27	1440	~100%	-

Hygenix, Inc
49 Woodside St.
Stamford, Connecticut 06902
Project: **STAMFORD PUBLIC SCHOOLS - WESTOVER SCHOOL**
Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 10/27/2018
Date Received: 10/29/2018
Date Analyzed: 10/30/2018
Date Reported: 10/30/2018
Project ID: 18041532
Page 4 of 5

Client Sample Number	26611482				26611414			
Sample Location	ROOM C 202				ROOM C 200			
Sample Volume (L)	75				75			
Lab Sample Number	18041532-013				18041532-014			
Spore Identification	Raw Ct	spr/m ³	% Ttl	In/Out	Raw Ct	spr/m ³	% Ttl	In/Out
Alternaria	1	53	6	-	-	-	-	-
ascospores	1	53	6	-	1	53	5	-
basidiospores	1	53	6	-	1	53	5	-
Cladosporium	1	53	6	-	1	53	5	-
Penicillium/Aspergillus group	12	640	67	-	18	960	82	-
Smuts,Periconia,Myxomycetes	1	53	6	-	1	53	5	-
Unknown	1	53	6	-	-	-	-	-
	Debris Rating 2				Debris Rating 2			
Analytical Sensitivity	Analytical Sensitivity: 13 spr/m³				Analytical Sensitivity: 13 spr/m³			
Comments								
Total *See Footnotes	18	960	~100%	-	22	1173	~100%	-

Hygenix, Inc
49 Woodside St.
Stamford, Connecticut 06902
Project: **STAMFORD PUBLIC SCHOOLS - WESTOVER SCHOOL**
Condition of Sample(s) Upon Receipt: Acceptable

Date Collected: 10/27/2018
Date Received: 10/29/2018
Date Analyzed: 10/30/2018
Date Reported: 10/30/2018
Project ID: 18041532
Page 5 of 5

Footnotes and Additional Report Information

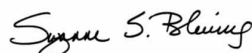
Debris Rating Table

1	Minimal (<5%) particulate present	Reported values are minimally affected by particulate load.
2	5% to 25% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
3	26% to 75% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
4	75% to 90% of the trace occluded with particulate	Negative bias is expected. The degree of bias increases directly with the percent of the trace that is occluded.
5	Greater than 90% of the trace occluded with particulate	Quantification not possible due to large negative bias. A new sample should be collected at a shorter time interval or other measures taken to reduce particulate load.

1. Penicillium/Aspergillus group spores are characterized by their small size, round to ovoid shape, being unicellular, and usually colorless to lightly pigmented. There are numerous genera of fungi whose spore morphology is similar to that of the Penicillium/Aspergillus type. Two common examples would be Paecilomyces and Acremonium. Although the majority of spores placed in this group are Penicillium, Aspergillus, or a combination of both. Keep in mind that these are not the only two possibilities.
2. Ascospores are sexually produced fungal spores formed within an ascus. An ascus is a sac-like structure designed to discharge the ascospores into the environment, e.g. Ascobolus.
3. Basidiospores are typically blown indoors from outdoors and rarely have an indoor source. However, in certain situations a high basidiospore count indoors may be indicative of a wood decay problem or wet soil.
4. The colorless group contains colorless spores which were unidentifiable to a specific genus. Examples of this group include Acremonium, Aphanocladium, Beauveria, Chrysosporium, Engyodontium microconidia, yeast, some arthrospores, as well as many others.
5. Hyphae are the vegetative mode of fungi. Hyphal elements are fragments of individual Hyphae. They can break apart and become airborne much like spores and are potentially allergenic. A mass of hyphal elements is termed the mycelium. Hyphae in high concentration may be indicative of colonization.
6. Dash (-) in this report, under raw count column means 'not detected (ND)'; otherwise 'not applicable' (NA).
7. The positive-hole correction factor is a statistical tool which calculates a probable count from the raw count, taking into consideration that multiple particles can impact on the same hole; for this reason the sum of the calculated counts may be less than the positive hole corrected total.
8. Due to rounding totals may not equal 100%.
9. Analytical Sensitivity for each spores is different for Non-viable sample when the spores are read at different percentage. Analytical Sensitivity is calculated as spr/m^3 divided by raw count. $\text{spr}/\text{m}^3 = \text{raw counts} \times (100/\% \text{ read}) \times (1000/\text{Sample volume})$. If Analytical Sensitivity is 13 spr/m^3 at 100% read, Analytical Sensitivity at 50% read would be 27 spr/m^3 , which is 2 times higher. Analytical Sensitivity provided on the report is based on an assumed 100% of the trace being analyzed.
10. Minimum Reporting Limits (MRL) for BULKS, DUSTS, SWABS, and WATER samples are a calculation based on the sample size and the dilution plate on which the organism was counted. Results are a compilation of counts taken from multiple dilutions and multiple medias. This means that every genus of fungi or bacteria recovered can be counted on the plate on which it is best represented.
11. If the final quantitative result is corrected for contamination based on the blank, the blank correction is stated in the sample comments section of the report.
12. The results in this report are related to this project and these samples only.
13. For samples with an air volume of < 100L, the number of significant figures in the result should be considered (2) two. For samples with air volumes between 100-999L, the number of significant figures in the result should be considered (3) three. For example, a sample with a result of 55,443 spr/m^3 from a 75L sample using significant figures should be considered 55,000. The same result of 55,443 from a 150L sample using significant figures should be considered 55,400 spr/m^3 .
14. If the In/Out ratio is greater than 100 times it is indicated >100/1, rather than showing the real value.

Terminology Used in Direct Exam Reporting

Conidiophores are a type of modified hyphae from which spores are born. When seen on a surface sample in moderate to numerous concentrations they may be indicative of fungal growth.



Suzanne S. Blevins, B.S., SM (ASCP)
Laboratory Director