



Customer Name:	AGX, Inc.	Sample Date:	August 19, 2020
Customer Address:	207 Pine Creek Road Wexford, PA 15090	Date Received:	August 20, 2020
		Date of Report:	August 25, 2020
Customer Phone:	(724) 934-4249	Fax:	(724) 934-5677
PO Number:		Attention:	Amber Brancolini
Project Name/Number:	Butler Junior High School		

Customer sample numbers below are uniquely identified by prefixing Laboratory # 86767-20

**Airborne Spore Trap Analysis - AllergencoD
 Analytical Method: MIC 01**

Total Volume (L)	75				75				75			
	BJH-01				BJH-02				BJH-03			
Sample Number	Room 114				Office				Room 107			
Location:	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Alternaria					1	13	13	5%				
Ascospores									2	13	26	11%
Aspergillus/Penicillium-like	2	13	26	7%	5	13	65	24%				
Basidiospores	22	13	286	81%	4	13	52	19%	11	13	143	58%
Bipolaris/Drechslera												
Cercospora												
Chaetomium												
Cladosporium	2	13	26	7%	6	13	78	29%	4	13	52	21%
Curvularia					1	13	13	5%				
Epicoccum					1	13	13	5%	1	13	13	5%
Helicomyces												
Nigrospora												
Oidium												
Pithomyces/Ulocladium	1	13	13	4%	2	13	26	10%	1	13	13	5%
Polythrincium					1	13	13	5%				
Rusts												
Smuts/ Myxomycetes												
Stachybotrys												
Torula												
Trichoderma												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m³ of air)	27		351		21		273		19		247	
Pollen	0	13	< 13		0	13	< 13		0	13	< 13	
Hyphal Fragments												
Insect Fragments												
Plant Fragments												
Skin Cell Fragments			1				1				1	
Debris			2				2				2	
Analyst Initials			LS				LS				LS	
Date Analyzed			08/25/20				08/25/20				08/25/20	
Cassette Serial # / Exp Date:			3220317 10/2020				3220379 10/2020				3220314 10/2020	

Entire trace analyzed. Results relate only to the samples tested. Results are reported as calculated. For biological data, the first and/or second digit should be considered significant. Total percentage may not equal 100% due to rounding. Percentages reported as 0% are greater than 0 and less than 0.5%. The *Aspergillus/Penicillium*-like category cannot be differentiated by non-viable sampling methods.
 AS=Analytical Sensitivity (spores/m³); Blank Lines = None Detected

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 Sharon Danko, AS, MLT (ASCP)



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Airborne Spore Trap Analysis - AllergencoD
Analytical Method: MIC 01

Total Volume (L)	75				75				75			
	BJH-04				BJH-05				BJH-06			
Sample Number	Room 101				Room 143				Room 246			
	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Particle ID												
Alternaria	1	13	13	3%					2	13	26	7%
Ascospores	1	13	13	3%	1	13	13	25%	5	13	65	17%
Aspergillus/Penicillium-like	2	13	26	6%					5	13	65	17%
Basidiospores	10	13	130	32%	2	13	26	50%	15	13	195	52%
Bipolaris/Drechslera												
Cercospora												
Chaetomium												
Cladosporium	12	13	156	39%	1	13	13	25%	2	13	26	7%
Curvularia												
Epicoccum	1	13	13	3%								
Helicomyces												
Nigrospora												
Oidium												
Pithomyces/Ulocladium	2	13	26	6%								
Polythrincium												
Rusts												
Smuts/ Myxomycetes	2	13	26	6%								
Stachybotrys												
Torula												
Trichoderma												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m³ of air)	31		403		4		52		29		377	
Pollen	0	13	< 13		0	13	< 13		0	13	< 13	
Hyphal Fragments												
Insect Fragments												
Plant Fragments												
Skin Cell Fragments			1				1				1	
Debris			2				2				2	
Analyst Initials			LS				LS				LS	
Date Analyzed			08/25/20				08/25/20				08/25/20	
Cassette Serial # / Exp Date:			3220309 10/2020				3220330 10/2020				3220312 10/2020	

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Project Name/Number: Butler Junior High School

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Airborne Spore Trap Analysis - AllergencoD
 Analytical Method: MIC 01

Total Volume (L)	75				75				75			
Sample Number	BJH-07				BJH-08				BJH-09			
Location:	Room 213				Room 208				Room 204			
Particle ID	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Alternaria	1	13	13	4%								
Ascospores					2	13	26	9%	1	13	13	6%
Aspergillus/Penicillium-like	3	13	39	13%	1	13	13	5%	2	13	26	13%
Basidiospores	8	13	104	33%	13	13	169	59%	7	13	91	44%
Bipolaris/Drechslera												
Cercospora												
Chaetomium												
Cladosporium	12	13	156	50%	6	13	78	27%	3	13	39	19%
Curvularia												
Epicoccum												
Helicomyces												
Nigrospora												
Oidium												
Pithomyces/Ulocladium									1	13	13	6%
Polythrincium												
Rusts									1	13	13	6%
Smuts/ Myxomycetes									1	13	13	6%
Stachybotrys												
Torula												
Trichoderma												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m³ of air)	24		312		22		286		16		208	
Pollen	1	13	13		0	13	< 13		0	13	< 13	
Hyphal Fragments												
Insect Fragments												
Plant Fragments									1	13	13	
Skin Cell Fragments			1				1				1	
Debris			2				2				2	
Analyst Initials	LS				LS				LS			
Date Analyzed	08/25/20				08/25/20				08/25/20			
Cassette Serial # / Exp Date:	3220324 10/2020				3220318 10/2020				3220323 10/2020			

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Airborne Spore Trap Analysis - AllergencoD
 Analytical Method: MIC 01

Total Volume (L)	75				75				75			
Sample Number	BJH-10				BJH-11				BJH-12			
Location:	Room 217				Room 318				Room 313			
Particle ID	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Alternaria												
Ascospores	1	13	13	13%	1	13	13	4%	1	13	13	5%
Aspergillus/Penicillium-like									7	13	91	35%
Basidiospores	3	13	39	38%	17	13	221	61%	8	13	104	40%
Bipolaris/Drechslera												
Cercospora												
Chaetomium												
Cladosporium	3	13	39	38%	6	13	78	21%	4	13	52	20%
Curvularia												
Epicoccum												
Helicomyces												
Nigrospora												
Oidium												
Pithomyces/Ulocladium												
Polythrincium												
Rusts					1	13	13	4%				
Smuts/ Myxomycetes	1	13	13	13%	3	13	39	11%				
Stachybotrys												
Torula												
Trichoderma												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m ³ of air)	8		104		28		364		20		260	
Pollen	0	13	< 13		0	13	< 13		0	13	< 13	
Hyphal Fragments					1	13	13					
Insect Fragments												
Plant Fragments												
Skin Cell Fragments			1				1				1	
Debris			2				2				2	
Analyst Initials			LS				LS				LS	
Date Analyzed			08/25/20				08/25/20				08/25/20	
Cassette Serial # / Exp Date:			3220313 10/2020				3220325 10/2020				3220307 10/2020	

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Analytical Method: MIC 01

Total Volume (L)	75				75				75			
	Sample Number BJH-13				Sample Number BJH-14				Sample Number BJH-15			
Location:	Room 306				Room 302				Outside			
	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%	Raw ct.	AS	Spores/m ³	%
Alternaria									4	13	52	3%
Ascospores	1	13	13	7%	1	13	13	5%	14	13	182	9%
Aspergillus/Penicillium-like	1	13	13	7%								
Basidiospores	9	13	117	60%	12	13	156	55%	87	13	1,131	55%
Bipolaris/Drechslera												
Cercospora												
Chaetomium												
Cladosporium	4	13	52	27%	5	13	65	23%	48	13	624	31%
Curvularia												
Epicoccum					1	13	13	5%				
Helicomyces												
Nigrospora												
Oidium									1	13	13	1%
Pithomyces/Ulocladium									1	13	13	1%
Polythrincium					1	13	13	5%				
Rusts												
Smuts/ Myxomycetes					2	13	26	9%	2	13	26	1%
Stachybotrys												
Torula												
Trichoderma												
Unidentified dematiaceous conidia												
Unidentified hyaline conidia												
Total Mold (Spores/m³ of air)	15		195		22		286		157		2,041	
Pollen	0	13	< 13		0	13	< 13		0	13	< 13	
Hyphal Fragments												
Insect Fragments												
Plant Fragments												
Skin Cell Fragments			1				1				1	
Debris			2				2				1	
Analyst Initials			LS				LS				LS	
Date Analyzed			08/25/20				08/25/20				08/25/20	
Cassette Serial # / Exp Date:			3220308 10/2020				3220328 10/2020				3220335 10/2020	

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SPORE TRAP INTERPRETATION TIPS

Contains opinions and interpretations

Currently there are no numeric standards for indoor airborne or surface microbial contamination. Suggested guidelines are constantly being reviewed and updated as more information is collected.

Some common denominators should be considered when interpreting results:

1. Comparison of indoor/outdoor concentration ratios.
2. Complaint vs. non-complaint areas or affected vs. non-affected areas.
3. Consider air exchange rates and activity levels in a building structure, weather, and season of the year.
4. Rank order assessment and concentration (e.g. Spores/m³ of air) of the fungi.
5. Predominant fungal genera: Are there water indicator microorganisms present, such as but not limited to: *Chaetomium*, *Stachybotrys*, *Rhodotorula*, *Trichoderma*, and *Scopulariopsis*.
6. Generally fungal counts indoors should be lower than outdoor counts and the types of fungi found indoors should be similar to outdoors.
7. There is always a potential bias from infiltration of outdoor air, poor housekeeping, excessive indoor relative humidity, or potential contamination sources (e.g. water intrusion through a basement wall) that may negatively influence post remedial verification (PRV) or clearance levels.
8. The investigator should look for various patterns among the indoor types of molds detected:
 - a. Increased levels of primary (1st) colonizers in damp or moisture intrusion areas of homes or commercial buildings: ***Aspergillus/Penicillium*** or ***Cladosporium*** are usually noted.
 - b. ***Chaetomium*** or ***Stachybotrys*** are tertiary (3rd) colonizers of indoor materials and are usually associated with chronic long-standing water/moisture issues in a building.
 - c. The presence of **hyphal fragments** or **fruiting structures** noted on spore trap samples usually indicates amplification (growth) of fungi on building substrates.
 - d. **Ascospores** and **basidiospores** noted on indoor spore trap samples most often represent the entrance of inadequately filtered outdoor air. During inclement weather, remember to note time, temperature, and season. Most indoor materials will not support the growth of these fungi.
9. When unidentified **hyaline** (clear) or **dematiaceous** (dark-pigmented) conidia are noted on a spore trap sample, it indicates that no particular fungus can be identified. These fungal conidia may represent such yeast-like fungi as *Aureobasidium*, *Sporidiobolus*, unidentifiable *Acremonium* species, Basidiomycetes (basidiospores), and Ascomycetes (ascospores).
10. Keep in mind when interpreting spore trap sample reports, that indoor levels may be higher than corresponding outdoor levels (winter time in the northern U.S.) with a predominance of *Aspergillus/Penicillium* or *Cladosporium* conidia with no significant amplification of any molds.

SPORE TRAP GUIDELINES FOR INDOOR MICROBIAL CONTAMINATION

DEBRIS RATING for SPORE TRAP ANALYSIS (using 600X magnification) (Air-O-Cell, Micro 5, Allergenco D, Cyclex d, VersaTrap, etc.)		
DEBRIS RATING	CONDITIONS FOR REPORTING DEBRIS RATING	SIGNIFICANCE
0	A visible trace, including particulates and debris, is not observed.	Indicates the sample is a blank, the area is exceptionally clean, or improper sampling occurred.
1	Debris is present and <10% of the average viewing field is obscured.	Minimal amount of debris is observed.
2	Debris is present and 10% to <40% of the average viewing field is obscured.	Low amount of debris is observed, counts may be affected.
3*	Debris is present and 40% to 75% of the average viewing field is obscured.	Moderate amount of debris is observed, counts of conidia/hyphal fragments may be underestimated.
4*	Debris is present and >75% of the average viewing field is obscured.	High amount of debris is observed, counts are estimated.
5* <small>See Relative Abundance chart below</small>	Excessive debris is present.	Periphery of trace analyzed. Relative amounts of conidia/hyphal fragments noted. Suggest recollection.
6	Slide completely obscured by excessive debris.	Unable to analyze. Recollect sample.

*A rating of 3 or greater indicates that the accuracy of the analysis is likely affected.

RELATIVE ABUNDANCE of OBSERVED CONIDIA & HYPHAL FRAGMENTS	
RATING	Relative Amounts of Observed Fungal Structures per high power field (600 X)
Rare	0-1
Few	2 to 5
Moderate	6 to 10
Many	11 to 100
Numerous	>100

SKIN CELL ANALYSIS	
SKIN CELL RATING	Relative Amounts of Observed Skin Cells per high power field (600 X)
0	No skin cells present
1	0-1
2	2 to 5
3	6 to 10
4	11 to 15
5	≥16

End of Report

