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# **INDOOR AIR QUALITY CLEARANCE SAMPLING**

**PERFORMED AT:** 

PS 15 175 Westchester Avenue Yonkers, New York 10707 Adelaide Project#YONK:18392.01-PM

**PREPARED FOR:** 

Yonkers Public Schools One Larkin Center Yonkers, New York 10701

**PREPARED BY:** Jason Fullum October 9, 2018

**REVIEWED BY:** 

Stephanie A. Soter President



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## **1.0 Introduction**

### 1.1 Scope of Work / Project Personnel

Adelaide Environmental Health Associates, Inc. **(Adelaide)** performed an Indoor Air Quality Clearance Sampling, in conformance with ALL Federal, State and Local regulations, on October 1, 2018 for Yonkers Public Schools throughout all rooms located at PS 15 in Yonkers, New York. The clearance sampling included 1) a visual inspection/assessment throughout accessible interior and/or exterior spaces of the building/structure identified to be affected; and, 2) collecting of various air, tape, swab and/or bulk sample(s) at the discretion of the mold assessor; Certified **Adelaide** personnel (Appendix C), Jason Fullum (NYS Mold Assessor/Cert. #MA00056), performed the visual assessment throughout affected area(s) identified.

### **1.2 Executive Summary**

Following the scope of work that was provided to us, **Adelaide** performed an indoor air quality clearance sampling of all the rooms on all floors for post abatement clearance. **Adelaide** collected one hundred and thirty five (135) air samples from the above-mentioned area(s). For testing locations, refer to the sample location maps (Appendix A).

### 1.2.1 Conclusions and Recommendations

The following conclusions and recommendations are prepared by **Adelaide** as per the provided scope of work. Should the scope of work change, it is recommended that the findings be revisited to determine if additional sampling will be required to satisfy ALL Federal, State and Local regulations.

### **1.2.2 Indoor Air Quality**

Air samples were collected in each space throughout the basement, first, second and third floors of the building after mold abatement was completed. The abatement included removals of the visible mold, removal of water stained areas and fogging of the duct work to kill any mold that may be remaining.

The air samples all showed acceptable levels and the area can be reoccupied. Even though Stachybotrys was found in the air samples in rooms 106, storage room 112A, 1<sup>st</sup> floor hallway south and room 209 it was a minimal amount of one or two spores at the highest.

### 1.3 Observations

The following observations were made during the assessment:

• No visible mold was observed during the final clearance.

## 2.0 Sampling Methodology

### Yeasts and Molds:

Adelaide uses 14.4mm, .37 micron Air-O-Cell cassettes at 15.0L/min to sample airborne mold. Samples of unused filters, handled in the same manner as the sample cassettes, are analyzed as blanks to ensure no contamination was from the process of taking the sample.

The filters from the samples are then diluted and redeposited on malt extract agar (for fungi and mold) and tryptic soy agar (for bacteria). The agar is then incubated from four to seven days. The growth is both counted and identified. This is very important. "Counts", alone, are only half the story. The other half is whether the mold present is an opportunistic pathogen or just an allergen. Yeast and mold concentrations vary outdoors based on rainfall, temperature, vegetation, soil disturbance, wind and other factors. There are no "regulatory standard" methods at this time. The method used was provided by Dr. Chin Yang, Consulting Mycologist, formerly with the U.S. Public Health Service, Division of Federal Occupational Health.

Bulk samples collected are sent to the laboratory in a 4 mil poly bag. The sample(s) received by the laboratory are matched with the information provided on the Chain of Custody (COC). A laboratory Identification Number is assigned and the project and sample information is logged. Analysis begins with an inspection of the bulk material and any areas of discoloration or potential fungal presence are noted. Clear tape is used to take representative samples from the material and the tape(s) are reviewed microscopically and any detected fungi are identified and estimated amounts are noted in our reporting system.

In evaluating **microbiological** test data (air samples, wipes, swipes, vacuum swipes, swabs, etc.), there are several assumptions and guidelines we follow, and we list them below:

**1.** Our reference guide for interpreting microbiological analytical results is the *Proceedings of the International Conference of Fungi and Bacteria in Indoor Air Environments*, Edited by Drs. Eckardt Johanning and Chin S. Yang. Additional references include:

- a. *Aerobiology*, edited by Muilenberg and Burge, CRC Press (1996)
- b. *Field Guide for the Determination of Biological Contaminants in Environmental Samples*, Dillon, Heinsohn, Miller, AIHA Publications (1996)
- c. *Biosafety Reference Manual*, Heinsohn, Jacobs, Concoby, AIHA Publications (1995)
- d. Indoor Air and Human Health, Gammage, Kaye, Lewis Publishers, (1985)
- e. Indoor Air and Human Health Second Edition, Gammage, Berven, CRC Press (1996)

**2.** The values we use to interpret <u>air sample data</u> was provided by Dr. Chin Yang. He is a consulting Mycologist, and presently performs consulting work for the U.S. Public Health Service concerning Bioaerosols and Indoor Air Quality.

Low:	0 to 100 CFU/m3 (limited or no effect level)
Moderate:	100 to 250 CFU/M3 (minor effect level; persons with hypersensitivity, allergies or
	immunosuppressed may experience an "effect".)
High:	250 to 1000 CFU/m3 (effect level for the average or normal healthy adult; the effects
-	vary from minor discomfort to lost job time)

Very High: 1000 CFU/m3 and above (noticeable odor, growth, illness etc.; a decontamination strategy is normally required.)

The levels are guideline levels. There is NO law or legal requirement to do anything based on the above levels. They are OPINIONS.

**3.** Why perform microbiological testing if it is so inaccurate, the data is subject to "opinion", and there is no legal requirement? Again, all we can offer is another opinion. When it comes to a person's health and well-being, we like having as much data as possible to determine if a person is "at risk" from the conditions in the workplace. Microbiological testing provides enough data to determine if there is a potential risk from exposure to bioaerosols. When the numbers are above "low", you then take into account the individuals affected, i.e., their medical history, and make a judgment.

Although bodies such as the ACGIH do not give numerical guidelines, a Canadian guide on office buildings based on five years of investigation of 50 air-conditioned federal government buildings (Nathanson, 1993) includes some guidance on numbers. The following are the main points:

- a. The "normal" air flora should be quantitatively lower than, but qualitatively similar to, that of outdoor air.
- b. The presence of one or more fungal species at significant levels in indoor but not outdoor samples is evidence of an indoor amplifier.
- c. Pathogenic fungi such as Aspergillus fumigatus, Histoplasma and Cryptococcus should not be present in significant numbers.
- d. The persistence of toxigenic molds such as Stachybotrys atra and Aspergillus versicolor in significant numbers requires investigation /action.
- e. More than 50 CFU/m<sup>3</sup> (10,000 CFU/g) may be of concern if there is only a single species present (other than certain common outdoor phylloplane fungi); up to 150 CFU/m<sup>3</sup> (30,000 CFU/g) is acceptable if the species present reflect the flora outdoors; up to 500 CFU/m<sup>3</sup> (50,000) is acceptable in summer if outdoor leaf-inhabiting fungi are the main components.

## **3.0 Disclaimers**

**Adelaide** certifies that the information contained within this report is based solely upon site observations and the results of laboratory analysis for samples collected during this survey/assessment. These observations and results are time dependent, subject to changing site conditions and revisions to Federal, State and Local regulations. **Adelaide** warrants that these findings have been promulgated after being prepared in general accordance with generally accepted practices in the abatement industries. **Adelaide** also recognizes that inspection laboratory data is not usually sufficient to make all abatement and management decisions. No other warranties are expressed or implied. **APPENDIX A** 

SAMPLE LOCATION MAP(S)









**APPENDIX B** 

ANALYTICAL RESULTS



contact@hayesmicrobial.com http://hayesmicrobial.com/

Analysis Report prepared for

# Adelaide Environmental Health Associates, Inc.

1511 Route 22 Suite #C24 Brewster, NY. 10509 Phone: (845) 278-7710 Fax: (845) 278-7750

> Job Number: 18392.01-PM Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707 Date Sampled: 10-01-2018 Date Analyzed: 10-02-2018 Report Date: 10-02-2018

EPA Laboratory ID# VA01419







Mold License: LAB1021



License: #PH-0198



Adelaide Environmental Health Associates, Inc. 1511 Route 22 Suite #C24 Brewster, NY 10509

October 2, 2018

Client Job Number:	18392.01-PM
Client Job Name:	PS 15
	175 Westchester Avenue
	Yonkers, New York 10707

Dear Adelaide Environmental Health Associates, Inc.,

We would like to thank you for trusting Hayes Microbial for your analytical needs. On October 2, 2018 we received 52 samples by FedEx for the job referenced above. 52 samples were received in good condition.

The results in this analysis pertain only to this job, collected on the stated date and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial Consulting. In no event, shall Hayes Microbial Consulting or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of your use of the test results.

Stephen N. Hoyces

Steve Hayes, BSMT(ASCP) Laboratory Director Hayes Microbial Consulting, LLC



## HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaidel	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018					
HMC ID Number		18034617 - 1			18034617 - 2			18034617 - 3		18034617 - 4		
Sample ID#		1			2			3		4		
Sample Name	Bsmt ·	- Boiler Room by D	loor	Bsmt -	Bsmt - Boiler Room Chiller #1			t - Lobby by Elevat	or	Bsmt - Elevator Machine Room		
Sample Volume		75 liters		75 liters			75 liters		75 liters			
Reporting Limit	13 spores/M3				13 spores/M3			13 spores/M3		13 spores/M3		
Background		2			2			3			2	
Fragments		ND			ND			ND			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	4	53	20.9%	2	27	11.9%	2	27	14.4%	3	40	15.8%
Aspergillus Penicillium							6	80	42.8%	1	13	5.1%
Basidiospores	15	200	79.1%	14	187	82.4%	5	67	35.8%	10	133	52.6%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium				1	13	5.7%	1	13	7.0%	5	67	26.5%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes												
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												ļ
Torula												ļ
Ulocladium												ļ
Total	19	253		17	227		14	187		19	253	<u> </u>
Water Damage Indicator Common Allergen		Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	Ratio Abnormality				

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



### HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number		18034617 - 5			18034617 - 6			18034617 - 7	•	18034617 - 8			
Sample ID#		5			6			7			8		
Sample Name	1	st FI - Gym South		1	1st FI - Gym North			1st FI - Room 106			1st FI - Girls Bathroom		
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit	13 spores/M3				13 spores/M3			13 spores/M3		13 spores/M3			
Background	2				2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	5	67	16.8%	3	40	21.5%	2	27	16.9%	1	13	19.7%	
Aspergillus Penicillium													
Basidiospores	24	320	80.0%	10	133	71.5%	8	107	66.9%	4	53	80.3%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium				1	13	7.0%							
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes							1	13	8.1%				
Nigrospora													
Pithomyces	1	13	3.3%										
Stachybotrys							1	13	8.1%				
Stemphylium													
Torula													
Ulocladium													
Total	30 400			14	14 186			12 160			5 66		
Water Damage Indicator Common Allergen		Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	Ratio Abnormality					

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



### HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM er abresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number		18034617 - 9			18034617 - 10		· ·	8034617 - 11		18034617 - 12			
Sample ID#		9			10			11			12		
Sample Name	1st Fl - 0	Computer Room H	allway		1st FI - Storage			1st FI - Boys Bathroom			1st FI - Computer Room		
Sample Volume	75 liters				75 liters			75 liters			75 liters		
Reporting Limit	13 spores/M3				13 spores/M3			13 spores/M3		13 spores/M3			
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	1	13	14.0%	1	13	12.3%	3	40	25.0%	4	53	20.9%	
Aspergillus Penicillium													
Basidiospores	4	53	57.0%	7	93	87.7%	1	13	8.1%	14	187	73.9%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	2	27	29.0%				8	107	66.9%	1	13	5.1%	
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora													
Pithomyces													
Stachybotrys													
Stemphylium													
Torula													
Ulocladium	L												
Total	7	93		8	106		12	160		19	253		
Water Damage Indicat	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality		

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyce



## HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number	1	18034617 - 13			18034617 - 14		· ·	8034617 - 15		18034617 - 16			
Sample ID#		13			14			15			16		
Sample Name	1:	st FI - Room 1046		1st F	1st FI - Storage 125 West			1st FI - Storage 125 East			1st FI - Storage 112A		
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit		13 spores/M3			13 spores/M3		13 spores/M3			13 spores/M3			
Background		2			2			2			3		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	3	40	16.7%	3	40	4.5%	8	107	6.3%	1	13	5.1%	
Aspergillus Penicillium							20	267	15.8%				
Basidiospores	12	160	66.7%	64	853	95.5%	96	1280	75.6%	5	67	26.5%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	3	40	16.7%				3	40	2.4%	12	160	63.2%	
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora													
Pithomyces													
Stachybotrys										1	13	5.1%	
Stemphylium													
Torula													
Ulocladium													
Total	18 240			67	893		127	1694		19	253		
Water Demoge Indian	tor	Common	Allorgon	Cli	abtly Higher then	Outoido Air	Signific	ntly Higher then	Outoido Air	D	atia Abnormality		

Signature:

10/02/2018 Reviewed by:

Stephen N. Hoyce



## HMC #18034617

Job Number:18392.01Collected by:John SorEmail:adelaide	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707						Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018					
HMC ID Number	1	18034617 - 17			18034617 - 18		· ·	8034617 - 19		18034617 - 20			
Sample ID#		17			18			19		20			
Sample Name	1st F	I - Comm Room 1	18	1st I	1st FI - Elec Room 111A			FI - Boys Bathroon	۱	1st FI - Custodial Closet			
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3		13 spores/M3			
Background		2		3			2			2			
Fragments		ND			27/M3			ND			13/M3		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria				2	27	6.1%							
Ascospores	2	27	7.8%	3	40	9.1%	1	13	10.9%	3	40	17.7%	
Aspergillus   Penicillium	6	80	23.1%	5	67	15.2%							
Basidiospores	10	133	38.3%	8	107	24.3%	7	93	78.2%	11	147	65.0%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	8	107	30.8%	12	160	36.3%	1	13	10.9%	1	13	5.8%	
Curvularia				1	13	2.9%							
Epicoccum													
Memnoniella													
Myxomycetes				2	27	6.1%				1	13	5.8%	
Nigrospora													
Pithomyces										1	13	5.8%	
Stachybotrys													
Stemphylium							ļ						
Iorula													
Ulocladium													
Total	26	347		33	441		9	119		17	226		
Water Damage Indicator Common Allergen		Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	Ratio Abnormality					

Signature:

10/02/2018 Reviewed by:

Stephen N. Hoyce



## HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaidel	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018						
HMC ID Number		18034617 - 21			18034617 - 22		·	8034617 - 23		18034617 - 24			
Sample ID#		21			22			23			24		
Sample Name	1st	FI - Girls Bathroon	n	1	1st FI - Room 101			1st FI - Room 103			1st FI - Room 105		
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit	13 spores/M3				13 spores/M3			13 spores/M3		13 spores/M3			
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	1	13	14.0%	3	40	20.0%	2	27	11.9%	1	13	8.1%	
Aspergillus Penicillium													
Basidiospores	5	67	72.0%	10	133	66.5%	15	200	88.1%	8	107	66.9%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	1	13	14.0%	2	27	13.5%				3	40	25.0%	
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora	-												
Pithomyces													
Stachybotrys													
Stemphylium													
Total	7	93		15	200		17	227		12	160		
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality		

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



### HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaidel	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018						
HMC ID Number	1	18034617 - 25			18034617 - 26		· ·	8034617 - 27		18034617 - 28			
Sample ID#		25			26			27			28		
Sample Name	1	st FI - Room 107		1	1st FI - Room 109			1st FI - Hallway S			1st FI - Hallway C		
Sample Volume	75 liters				75 liters			75 liters			75 liters		
Reporting Limit	13 spores/M3				13 spores/M3			13 spores/M3		13 spores/M3			
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	1	13	7.5%	5	67	9.5%	5	67	21.9%	10	133	11.2%	
Aspergillus Penicillium										2	27	2.3%	
Basidiospores	12	160	92.5%	48	640	90.5%	16	213	69.6%	64	853	71.9%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium							1	13	4.2%	13	173	14.6%	
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora													
Pithomyces													
Stachybotrys				-			1	13	4.2%				
Stemphylium													
Iorula			ļ										
Ulocladium													
Total	13	173		53	707		23	306		89	1186		
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality		

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoycs



## HMC #18034617

Job Number:18392.01Collected by:John SorEmail:adelaide	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number	1	18034617 - 29			18034617 - 30		· ·	8034617 - 31		18034617 - 32			
Sample ID#		29			30			31			32		
Sample Name	1	Ist FI - Hallway N		1st	1st FI - Electric Room			1st FI - Mech Room			1st FI - Grands Room		
Sample Volume	75 liters				75 liters			75 liters			75 liters		
Reporting Limit		13 spores/M3			13 spores/M3		13 spores/M3			13 spores/M3			
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria				1	13	1.5%							
Ascospores	7	93	5.1%	12	160	19.0%	7	93	8.0%	5	67	17.3%	
Aspergillus Penicillium													
Basidiospores	128	1707	93.4%	48	640	76.2%	80	1067	92.0%	24	320	82.7%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	2	27	1.5%	2	27	3.2%							
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora													
Pithomyces													
Stachybotrys													
Stemphylium													
Torula													
Ulocladium													
Total	137 1827			63	840		87	87 1160			29 387		
		Allenerer	CI	مرام بالجاري والتعاري	Outside Air	Cincifie	مرجعا فيعام والعراب		Potio Abnormality				

Signature:

10/02/2018 Reviewed by:

Stephen N. Hayes



### HMC #18034617

Job Number:18392.01Collected by:John SorEmail:adelaide	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonke	estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number		18034617 - 33		1	18034617 - 34		18034617 - 35			18034617 - 36		
Sample ID#		33			34		35			36		
Sample Name	15	st FI - Maint. Office		1	Ist FI - Toilet 108		1st FI - Toilet 109			1st FI - Hallway 105		
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		13/M3			ND			13/M3			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	6	80	3.8%	2	27	16.9%	4	53	24.9%	7	93	15.2%
Aspergillus   Penicillium										9	120	19.6%
Basidiospores	144	1920	90.0%	10	133	83.1%	12	160	75.1%	30	400	65.3%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	9	120	5.6%									
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes	1	13	< 1%									
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium										L		
Torula												
Ulocladium										L		
Total	160	2133		12	160		16	213		46	613	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Reviewed by:

Stephen N. Hoyce



## HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonke	estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	8034617 - 37		1	18034617 - 38		· ·	8034617 - 39		1	8034617 - 40	
Sample ID#		37			38		39			40		
Sample Name	1st F	I - Room 102E Sta	aff	1st	FI - Cafeteria Eas	t	1st	FI - Cafeteria Wes	t		1st FI - Kitchen	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	12	160	6.7%	11	147	5.9%	30	400	18.3%	3	40	15.8%
Aspergillus Penicillium												
Basidiospores	160	2133	89.4%	176	2347	93.6%	128	1707	78.1%	16	213	84.2%
Bipolaris Drechslera												
Cercospora	1	13	< 1%				1	13	< 1%			
Chaetomium												
Cladosporium	6	80	3.4%				3	40	1.8%			
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes							2	27	1.2%			
Nigrospora												
Pithomyces				1	13	< 1%						
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	179	2386		188	2507		164	2187		19	253	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoycs



## HMC #18034617

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ume: PS 15 175 We Yonke	estchester rs, New Yc	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8	
HMC ID Number	1	18034617 - 41		· ·	18034617 - 42		· ·	18034617 - 43			18034617 - 44		
Sample ID#		41			42		43			44			
Sample Name	1s	t FI - 101J Storage	)	1st	FI - Women's Lock	er	1st FI - Toilet			1st FI - Office			
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3		
Background		2			2			2			2		
Fragments		ND			ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	16	213	12.2%	8	107	16.7%	1	13	32.5%	2	27	28.7%	
Aspergillus Penicillium													
Basidiospores	112	1493	85.5%	40	533	83.3%	2	27	67.5%	5	67	71.3%	
Bipolaris Drechslera													
Cercospora													
Chaetomium													
Cladosporium	3	40	2.3%										
Curvularia													
Epicoccum													
Memnoniella													
Myxomycetes													
Nigrospora													
Pithomyces													
Stachybotrys													
Stemphylium													
I orula													
Ulociadium													
Total	131	1746		48	640		3	40		7	94		
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality		

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



## HMC #18034617

Job Number:18392.01Collected by:John SorEmail:adelaide	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonker	estchester s, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034617 - 45		· ·	8034617 - 46		· ·	8034617 - 47		1	8034617 - 48	
Sample ID#		45			46		47			48		
Sample Name	1s	t FI - Men's Locker			Ist FI - Receiving		1s	t FI - Food Storage			Exterior - North	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			40/M3	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria										1	13	< 1%
Ascospores	5	67	7.2%	3	40	17.6%	5	67	21.8%	144	1920	17.4%
Aspergillus   Penicillium										18	240	2.2%
Basidiospores	64	853	91.4%	14	187	82.4%	18	240	78.2%	640	8533	77.5%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium										16	213	1.9%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes										6	80	< 1%
Nigrospora										1	13	< 1%
Pithomyces												
Stachybotrys												
Stemphylium												
Torula	1	13	1.4%									
Ulocladium												
Total	70	933		17	227		23	307		826	11012	
Mater Demogra Indiaa	tor	Common	Allergen	01	abth ( Liabor than	Outoido Air	Cignifie	nthe Linhar than	Outoido Air		atia Abaarmality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hayes



### HMC #18034617

Job Number:18392.01Collected by:John SoEmail:adelaide	-PM ter labresults@a	adelaidellc.cor	n	Job Na	me: PS 15 175 We Yonker	estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034617 - 49		1	8034617 - 50		· ·	8034617 - 51		18034617 - 52		
Sample ID#		49			50		51			52		
Sample Name		Exterior - East			Exterior - South		Exterior - West			Field Blank		
Sample Volume		75 liters			75 liters			75 liters			0 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			0 spores/M3	
Background		2			2			2			ND	
Fragments		13/M3			27/M3			13/M3			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria				1	13	< 1%						
Ascospores	160	2133	19.4%	192	2560	18.7%	112	1493	18.3%			
Aspergillus Penicillium	6	80	< 1%	4	53	< 1%	5	67	< 1%			
Basidiospores	640	8533	77.8%	800	10667	77.9%	480	6400	78.6%			
Bipolaris Drechslera												
Cercospora	2	27	< 1%	2	27	< 1%	1	13	< 1%			
Chaetomium												
Cladosporium	10	133	1.2%	12	160	1.2%	8	107	1.3%			
Curvularia	1	13	< 1%									
Epicoccum				2	27	< 1%						
Memnoniella												
Myxomycetes	4	53	< 1%	7	93	< 1%	5	67	< 1%			
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula				7	93	< 1%						
Ulocladium												
Total	823	10972		1027	13693		611	8147		ND	ND	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



Reporting Limit	he Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the lide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.						
Blanks	Results have not been corrected for field or laboratory blanks.						
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 4 and each level is determined as follows:						
	<ul> <li>ND : No background detected. (Pump or cassette malfunction.) Recollect sample.</li> <li>1 : &lt;5% of field occluded. No spores will be uncountable.</li> <li>2 : 5-25% of field occluded.</li> <li>3 : 25-75% of field occluded.</li> <li>4 : 75-90% of field occluded.</li> <li>5 : &gt;90% of field occluded. Suggest recollection of sample.</li> </ul>						
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.						
Indoor/Outdoor Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.						
Water Damage Indicate	These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.						
Common Allergens	Although all molds are potential allergens, these are the most common allergens that may be found indoors.						
Slightly Higher than Outsid	de Air The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.						
Significantly Higher than Out	side Air The spore count is significantly higher than the outdoor count and probably indicates a source of contamination.						
Ratio Abnormality	The types of spores found indoors should be similar to the ones that were identified in the outdoor sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.						
Color Note	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.						



#### Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Health Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

#### Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Health Effects: Health affects are poorly studied, but many are likely to be allergenic.

#### Aspergillus | Penicillium

- Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
- Health Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

#### **Basidiospores**

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Health Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

#### Cercospora

Habitat: Found on wood and decaying plant matter.

Health Effects: Health effects are poorly studied.

#### Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Health Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

#### Curvularia

**Habitat:** They exist in soil and plant debris, and are plant pathogens.

Health Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.



#### Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Health Effects: It is a common allergen. No cases of infection have been reported in humans.

#### **Myxomycetes**

Habitat: Found on decaying plant material and as a plant pathogen.

Health Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

#### Nigrospora

Habitat: Found on wood, soil and decaying plant matter.

Health Effects: Health effects are poorly studied.

#### Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Health Effects: Allergenic properties are poorly studied. No cases of infection in humans.

#### Stachybotrys

- Habitat: Commonly found in soil and on decaying plant material. It is cellulolytic, and can be found indoors on wet materials containing cellulose, such as wallboard, ceiling tile, and other paper-based materials. It is found outdoors on decaying plant material although it is rarely detected on outdoor air samples.
- Health Effects: Allergenic properties are poorly studied and no cases of infection have been reported in humans. They are capable of producing potent tricothecene mycotoxins. The toxins produced by this fungus can suppress the immune system affecting the lymphoid tissue and the bone marrow. The mycotoxin is also reported to be a liver and kidney carcinogen.

#### Torula

Habitat: Found in soil and on wood and grasses. Occasionally found growing indoors on cellulose containing materials.

Health Effects: A known allergen. No known cases of human infection.



#### 1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

**Chain of Custody** 

Form v.2101208.1 HMC # 034617

Job Number: 183	92.01-PM Job Name: PS 15	Collector: John S	Soter	Ema	all: adelaidelabresults@adelaidello
Date Collected:	29/18 175 Westchester Avenue	Notes:			
Mobile:	Yonkers, New York 10707	Angelerie Turne	Volume	TAT	Notes
Sample #	Sample Name	Analysis Type	75.1	DUCH	
1	BEAT - Bale, Kon - Py Your	S	75 L	RUSH	
2	- Chilly #2	S	75 L	RUSH	
2	The flatter	S	75 L	RUSH	
3	- Lobby - by Lleval a	S	75 L	RUSH	
4	2 Elevet Manne Noon	9	751	RUSH	
5	PFI Cym- South	c	751	RUSH	
6	1 - North	0	751	RUSH	
7	1 - Dan 106	3	751	DUCH	
8	I - Girly Datham	S	75 L	RUSH	
9	- Compter Riger Hallyding	S	75 L	RUSH	
10	- 5- 5-	S	75 L	RUSH	
10	- 1 of ase	S	75 L	RUSH	
//	Doys pathrow	S	751	RUSH	
12	V - Compter Noom	TAT	102	Accep	table Sample Types
Analysis Type	a Description	24 Hour	Spore Trap casse	ettes, Impact slid	es
Spore Trap S	Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap casse	ettes, Impact slid	es
S+	I & E of Fungal Spores + total dander, fiber and pollen could	24 Hour	Tape, Bio-tape, s	wab, bulk, agar p	plate for ID only
Direct ID D	ID and Semi-quantative enumeration of spores and mycellum	24 Hour	Tape, Bio-tape, s	wab, bulk, agar p	plate for ID only
D+	ID and Enumeration with spores count	7 Day	Anderson Air Pla	te, Swab, Bulk	
Culture C1	Identification & Enumeration of Mold Only	4 Day	Anderson Air Pla	te, Swab, Bulk	
C2	Identification & Enumeration of Bacteria	7 Day	Anderson Air Pla	te, Swab, Bulk	
C3	Identification & Enumeration of Mold and Bacteria	2 Day	Anderson Air Pla	te, Swab, Bulk	
C5	Coliform Screen for Sewage Bacteria	24 Hour	Bulk Dust		
Dust Mite A1	Semi-quantative analysis of dust fille allergen	24 Hour	Spore Trap cass	ettes, Impact slid	les, Bio-Tape
Particle P	Date: 6///// Rcvd By		N	Date:	12/18 Time:
Relinquished by:	1/2 Date 1/ C//	ion VA 23112 USA	www. havesmicrobia	.com :: info@ha	vesmiorobial.com

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#### Chain of Custody

1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

Form v.2101208.1 HMC # 0346/7

Job Number: 18	3392.01-PM	Job Name: PS 15	Collector: John	Soter	Email:	adelaidelabresults@adelaidello
Date Collected:	9/29/18	175 Westchester Avenue	Notes:		1.155	
Mobile:	10/1/18	Yonkers, New York 10707				
Sample #		Sample Name	Analysis Type	Volume	TAT	Notes
13	STHON	~ - (100m 1046	S	75 L	RUSH	
14		- Sturge 125- 128+	S	75 L	RUSH	
15		Fist	S	75 L	RUSH	
17.		- Startie 112A	S	75 L	RUSH	
12		- ( )	S	75 L	RUSH	
1.6		> The first IIIA	S	751	RUSH	
18		- Due Aulta	S	751	RUSH	
20		- CHILL	S	751	RUSH	
21		- Colorado La Toto	S	751	RUSH	
25		- Rea JAL	S	751	RUSH	
22		- 100m 101	S	751	RUSH	
24		- 110m 105	S	75 L	RUSH	-
Analysis Typ		Description	TAT		Acceptable	Sample Types
Spore Trap S	Identification	& Enumeration of Fungal Spores	24 Hour	Spore Trap cass	ettes, Impact slides	campio ()pec
S+	I & E of Fung	al Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	ettes, Impact slides	
Direct ID D	ID and Semi-	quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape,	swab, bulk, agar plate for	or ID only
D+	ID and Enum	eration with spores count	24 Hour	Tape, Bio-tape,	swab, bulk, agar plate fo	or ID only
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Pla	ate, Swab, Bulk	
C2	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Pla	ate, Swab, Bulk	
C3	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air Pla	ate, Swab, Bulk	
C5	Coliform Scre	een for Sewage Bacteria	2 Day	Anderson Air Pla	ate, Swab, Bulk	
Dust Mite A1	Semi-quanta	tive analysis of dust mite allergen	24 Hour	Bulk Dust		
Particle P	A Total Particul	ate Analysis	24 Hour	Spore Trap cass	ettes, Impact slides, Bio	-Таре
Relinquished by:	1 Fr	Date: 0/1/// F	Rovd By:	TP	Date: 10/2/	18 Time:

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@hayesmicrobial.com



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#### Chain of Custody

Form v.2101208.1 HMC #

034617

lob Number: 183	92.01-PM	Job Name: PS 15	Collector: John Soter Email: adelaidelabresults@adelaide						
Date Collected: 9	1 <del>29/1</del> 8 2/1/18	175 Westchester Avenue         Yonkers, New York 10707	Notes:						
Sample #	101	Sample Name	Analysis Type	Volume	TAT	Notes			
25	1ª Floor	- 11 um 107	S	75 L	RUSH				
26	1	- Rom 109	S	75 L	RUSH				
77		- H.T 5	9	75.1	DIICU				
20		VISILWAY 2	0	13 L	RUSH				
28	Ý	1 - C	S	75 L	RUSH				
29	L		S	75 L	RUSH				
30		- Electric llam	S	75 L	RUSH				
31		- Mech. Room	S	75 L	RUSH				
32		- Grands Boom	S	75 L	RUSH				
33		- Maint. Office	S	75 L	RUSH				
24		- Toilet 108	S	75 L	RUSH				
35	V	- Tojet 109	S	75 L	RUSH				
36		- Hellway DJ	S	75 L	RUSH				
Analysis Type		Description	TAT		Acce	ptable Sample Types			
ore Trap S	Identification	& Enumeration of Fungal Spores	24 Hour	Spore Trap cass	settes, Impact sli	des			
S+	1 & E of Fung	al Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	settes, Impact sli	des			
Direct ID D	ID and Semi-	quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape,	swab, bulk, agar	r plate for ID only			
D+	ID and Enum	eration with spores count	24 Hour	Tape, Bio-tape,	swab, bulk, agar	plate for ID only			
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Pla	ate, Swab, Bulk				
C2	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Pla	ate, Swab, Bulk				
C3	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air Pla	ate, Swab, Bulk				
C5	Coliform Scre	en for Sewage Bacteria	2 Day	Anderson Air Pla	ate, Swab, Bulk				
ust Mite A1	Semi-quantat	ive analysis of dust mite allergen	24 Hour	Bulk Dust					
Panicle P	a Total Particula	ate Analysis	24 Hour	Spore Trap cass	ettes, Impact sli	des, Bio-Tape			

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Fax: (845) 278-7750

#### **Chain of Custody**

Form v.2101208.1 HMC # 034617

Job Number: 1839	2.01-PM Job Name: PS 15	Collector: John S	Soter	Email:	adelaidelabresults@adelaidellq
Date Collected: 9/2	9/18 175 Westchester Avenue	Notes:			
Mobile:	Yonkers, New York 10707	]			
Sample #	Sample Name	Analysis Type	Volume	TAT	Notes
37	\$ 755 - Run 1821 - Stilt	S	75 L	RUSH	
	- Citating - Sit	S	75 L	RUSH	
76	- Wait	S	75 L	RUSH	
	- 1/ the	S	75 L	RUSH	
40	- INIT - Staring	S	75 L	RUSH	
71		S	75 L	RUSH	
72	Til-L	S	75 L	RUSH	
43		S	75 L	RUSH	
44	- Mala Larker	S	75 L	RUSH	=
4)	The Lotty	S	75	RUSH	
46	- Friday	S	75 L	RUSH	
7/	Auch Nich	S	75 L	RUSH	
78 Analysis Type	Description	TAT		Acceptab	le Sample Types
Analysis Type	Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap cas	settes, Impact slides	
Spore riap S	L& E of Fundal Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cas	settes, Impact slides	
Direct ID D	ID and Semi-guantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape,	swab, bulk, agar plate	e for ID only
Direct iD D+	ID and Enumeration with spores count	24 Hour	Tape, Bio-tape,	swab, bulk, agar plate	e for ID only
Culture C1	Identification & Enumeration of Mold only	7 Day	Anderson Air P	late, Swab, Bulk	
C2	Identification & Enumeration of Bacteria only	4 Day	Anderson Air P	late, Swab, Bulk	
C3	Identification & Enumeration of Mold and Bacteria	7 Day	Anderson Air P	late, Swab, Bulk	
C5	Coliform Screen for Sewage Bacteria	2 Day	Anderson Air P	late, Swab, Bulk	
Dust Mite A1	Semi-quantative analysis of dust mite allergen	24 Hour	Bulk Dust	eattes Impact alides	Pic Topo
Particle P	/Total Particulate Analysis	24 Hour	Spore Trap cas	settes, impact sildes,	Dio-Taba
Relinquished by:	Date:   b / 1 / Rovd	By:	Th	Date; 0/2/	Time:

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@hayesmicrobial.com



1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750 **Chain of Custody** 

Form v.2101208.1 HMC # 034617

8 175 Westchester Avenue Yonkers, New York 10707 Sample Name 5 xterior - 5 s.M - 5 s.M - 5 s.M - 5 s.M	Notes: Analysis Type	Volume	TAT	Natas
Sample Name Exterior - Esst - South - South	Analysis Type	Volume	TAT	Notas
Exterior - Esst - South -	3	751		Notes
- South - Last			RUSH	
	5	75 L	RUSH	
	3	751	RUSH	
		751	RUSH	
Feld DILL	5	75 L	DUOLI	
	5	75 L	RUSH	
	5	75 L	RUSH	
	S	75 L	RUSH	
	S	75 L	RUSH	
	S	75 L	RUSH	
	S	75 L	RUSH	
	S	75 L	RUSH	
	S	75 L	RUSH	
Description	TAT		Accepta	ble Sample Types
Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap cass	ettes, Impact slides	8
L& E of Fundal Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	ettes, Impact slides	· · · · · · · · · · · · · · · · · · ·
ID and Semi-quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape, s	swab, bulk, agar pla	ate for ID only
ID and Enumeration with spores count	24 Hour	Tape, Bio-tape, s	wab, bulk, agar pla	ate for ID only
Identification & Enumeration of Mold only	7 Day	Anderson Air Pla	te, Swab, Bulk	
Identification & Enumeration of Bacteria only	4 Day	Anderson Air Pla	te, Swab, Bulk	
Identification & Enumeration of Mold and Bacteria	7 Day	Anderson Air Pla	te, Swab, Bulk	
Coliform Screen for Sewage Bacteria	2 Day	Anderson Air Pla	ite, Swab, Bulk	
Semi-quantative analysis of dust mite allergen	24 Hour	Bulk Dust		
Total Particulate Analysis	24 Hour	Spore Trap cass	ettes, Impact slides	BIO- Labe
	Description         entification & Enumeration of Fungal Spores         a E of Fungal Spores + total dander, fiber and pollen count         and Semi-quantative enumeration of spores and mycelium         and Enumeration with spores count         entification & Enumeration of Mold only         entification & Enumeration of Bacteria only         entification & Enumeration of Mold and Bacteria         oliform Screen for Sewage Bacteria         emi-quantative analysis of dust mite allergen         otal Particulate Analysis	S         S <td< td=""><td>S       75 L         S       75 L         Sore Trap cassi       24 Hour</td><td>S       75 L       RUSH         S       75 L       RUSH         Description       TAT       Accepta         entification &amp; Enumeration of Fungal Spores       24 Hour       Spore Trap cassettes, Impact slides         and Semi-quantative enumeration of spores and mycelium       24 Hour       Tape, Bio-tape, swab, bulk, agar pla         and Enumeration with spores count       24 Hour       Tape, Bio-tape, swab, bulk, agar pla         entification &amp; Enumeration of Mold only       7 Day       Anderson Air Plate, Swab, Bulk         entification &amp; Enumeration of Mold and Bacteria       7 Day       Anderson Air Plate, Swab, Bulk         entification &amp; Enumeration of Mold and Bacteria       7 Day       Anderson Air Plate, Swab, Bulk         entification &amp; Enumeration of Mold and Bacteria       2 Day       Anderson Air Plate, Swab, Bulk         entification &amp; Enumeration of Mold and Bacteria       2 Day       Anderson Air Plate, Swab, Bulk         emi-quantative analysis of dust mite allergen<!--</td--></td></td<>	S       75 L         Sore Trap cassi       24 Hour	S       75 L       RUSH         Description       TAT       Accepta         entification & Enumeration of Fungal Spores       24 Hour       Spore Trap cassettes, Impact slides         and Semi-quantative enumeration of spores and mycelium       24 Hour       Tape, Bio-tape, swab, bulk, agar pla         and Enumeration with spores count       24 Hour       Tape, Bio-tape, swab, bulk, agar pla         entification & Enumeration of Mold only       7 Day       Anderson Air Plate, Swab, Bulk         entification & Enumeration of Mold and Bacteria       7 Day       Anderson Air Plate, Swab, Bulk         entification & Enumeration of Mold and Bacteria       7 Day       Anderson Air Plate, Swab, Bulk         entification & Enumeration of Mold and Bacteria       2 Day       Anderson Air Plate, Swab, Bulk         entification & Enumeration of Mold and Bacteria       2 Day       Anderson Air Plate, Swab, Bulk         emi-quantative analysis of dust mite allergen </td

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@bayesmicrobial.com



contact@hayesmicrobial.com http://hayesmicrobial.com/

Analysis Report prepared for

# Adelaide Environmental Health Associates, Inc.

1511 Route 22 Suite #C24 Brewster, NY. 10509 Phone: (845) 278-7710 Fax: (845) 278-7750

> Job Number: 18392.01-PM Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707 Date Sampled: 10-01-2018 Date Analyzed: 10-02-2018 Report Date: 10-02-2018

EPA Laboratory ID# VA01419







Mold License: LAB1021



License: #PH-0198



Adelaide Environmental Health Associates, Inc. 1511 Route 22 Suite #C24 Brewster, NY 10509

October 2, 2018

Client Job Number:	18392.01-PM
Client Job Name:	PS 15
	175 Westchester Avenue
	Yonkers, New York 10707

Dear Adelaide Environmental Health Associates, Inc.,

We would like to thank you for trusting Hayes Microbial for your analytical needs. On October 2, 2018 we received 48 samples by FedEx for the job referenced above. 48 samples were received in good condition.

The results in this analysis pertain only to this job, collected on the stated date and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial Consulting. In no event, shall Hayes Microbial Consulting or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of your use of the test results.

Stephen N. Hoyces

Steve Hayes, BSMT(ASCP) Laboratory Director Hayes Microbial Consulting, LLC


# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonkei	estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number		18034658 - 1			18034658 - 2			18034658 - 3			18034658 - 4	
Sample ID#		53			54			55			56	
Sample Name	2	nd FI - Room 210		2n	d FI - Storage 218		2r	d FI - Storage 216		2	nd FI - Room 208	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		13/M3			ND			ND			ND	
Organism	Raw Count	Count / M3 % of Raw Total Count			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	1	13	3.5%	2	27	8.8%				1	13	10.8%
Aspergillus Penicillium												
Basidiospores	3	40	10.7%	3	40	13.0%	1	13	8.9%	3	40	33.3%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	24	320	85.8%	14	187	60.9%	7	93	63.7%	5	67	55.8%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes				3	40	13.0%	3	40	27.4%			
Nigrospora												
Pithomyces				1	13	4.2%						
Stachybotrys												
Stemphylium												
Torula								ļ				
Ulocladium												
Total	28	373		23	307		11	146		9	120	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyce



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaided	nber: 18392.01-PM d by: John Soter adelaidelabresults@adelaidellc.com Number 18034658 - 5					estchester rs, New Yo	Avenue rk 10707		D D D	ate Collected: ate Received: ate Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number		18034658 - 5			18034658 - 6			18034658 - 7			18034658 - 8	
Sample ID#		57			58			59			60	
Sample Name	2	nd FI - Room 206		2n	nd FI - Storage 211		2nd	FI - Comm Rm 21	4	2	nd FI - Elec Room	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			13/M3			ND			ND	
Organism	Raw Count	Count / M3 % of Raw Total Count			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	1	13	2.5%				1	13	7.0%	1	13	10.8%
Aspergillus   Penicillium	28	373	71.9%									
Basidiospores	3	40	7.7%	2	27	12.6%	7	93	50.0%	2	27	22.5%
Bipolaris Drechslera	1	13	2.5%									
Cercospora												
Chaetomium												
Cladosporium	5	67	12.9%	11	147	68.7%	5	67	36.0%	5	67	55.8%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes	1	13	2.5%	3	40	18.7%	1	13	7.0%	1	13	10.8%
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium										_		
Torula										_		
Ulocladium										_		
Total	39	519		16	214		14	186		9	120	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Ai	r R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Loyes



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaide	b Number:       18392.01-PM         ollected by:       John Soter         mail:       adelaidelabresults@adelaidellc.com         MC ID Number       18034658 - 9					estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number		18034658 - 9			8034658 - 10		· ·	8034658 - 11		1	8034658 - 12	
Sample ID#		61			62			63			64	
Sample Name	2	2nd FI - Staff Only		2	nd FI - Room 204		2nc	FI - Staff Only 209	)	2	nd FI - Room 201	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
Organism	Raw Count	W Count / M3 % of Raw nt Count / M3 Total Cour			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores				2	27	13.5%	4	53	26.5%	1	13	10.8%
Aspergillus Penicillium												
Basidiospores	6	80	60.2%	13	173	86.5%	7	93	46.5%	8	107	89.2%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	4	53	39.8%				2	27	13.5%			
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes												
Nigrospora												
Pithomyces									10 50/			
Stachybotrys							2	27	13.5%			
Stemphylium												
i orula												
Ulociadium												
Total	10	133		15	200		15	200		9	120	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

2/2018 Reviewed by:

Stephen N. Hoycs



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaidel	b Number: 18392.01-PM billected by: John Soter nail: adelaidelabresults@adelaidellc.com 1C ID Number 18034658 - 13					estchester rs, New Yc	Avenue ork 10707		ם כ נ	Date Collected: Date Received: Date Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 13		· ·	8034658 - 14		· ·	8034658 - 15		· · ·	18034658 - 16	
Sample ID#		65			66			67			68	
Sample Name	2nd F	I - Staff Bathroom	230	2nd F	I - Staff Bathroom	229	2	nd FI - Room 203		2	nd FI - Room 205	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
Organism	Raw Count	Count / M3 % of Total Count / M3 6 5%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	1	13	6.5%	1	13	6.5%	3	40	21.5%	ώ 3	40	17.6%
Aspergillus Penicillium				3	40	20.1%						
Basidiospores	12	160	80.4%	6	80	40.2%	10	133	71.5%	б <u>14</u>	187	82.4%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	1	13	6.5%	4	53	26.6%						
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes	1	13	6.5%	1	13	6.5%	1	13	7.0%	, D		
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												L
Ulocladium												ļ
Total	15	199		15	199		14	186		17	227	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside A	ir R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Loyes



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaided	b Number:     18392.01-PM       ollected by:     John Soter       nail:     adelaidelabresults@adelaidellc.com       VIC ID Number     18034658 - 17					estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 17		· ·	8034658 - 18		·	18034658 - 19		1	8034658 - 20	
Sample ID#		69			70			71			72	
Sample Name	2	nd FI - Girls Toilet		2	nd FI - Boys Toilet		2	nd FI - Room 207		2n	d FI - Storage 223	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			13/M3			ND	
Organism	Raw Count	Count / M3 % of Raw Total Count			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	5	67	27.9%	1	13	12.3%	1	13	8.2%	1	13	9.8%
Aspergillus Penicillium												
Basidiospores	12	160	66.7%	5	67	63.2%	7	93	58.5%	3	40	30.1%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	1	13	5.4%	1	13	12.3%	4	53	33.3%	6	80	60.2%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes				1	13	12.3%						
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	18	240		8	106		12	159		10	133	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyce



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaide	bb Number:       18392.01-PM         ollected by:       John Soter         mail:       adelaidelabresults@adelaidellc.com         VIC ID Number       18034658 - 21					estchester s, New Yo	Avenue rk 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number		18034658 - 21		1	8034658 - 22		1	8034658 - 23		1	8034658 - 24	
Sample ID#		73			74			75			76	
Sample Name	2n	d FI - Storage 222		2	nd FI - Room 209		2nd	FI - Guidance Suit	e	2nd Fl ·	- Guidance Confere	ence
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			3			3	
Fragments		ND			ND			ND			13/M3	
		Raw Count / M3 % of I Count Count / M3 Total C										
Organism	Raw Count	Count / M3% of TotalRaw Court22714.4%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	2	27	14.4%	2	27	8.1%	2	27	11.2%	1	13	8.9%
Aspergillus Penicillium												
Basidiospores	9	120	64.2%	16	213	64.0%	5	67	27.8%	3	40	27.4%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	3	40	21.4%	7	93	27.9%	8	107	44.4%	7	93	63.7%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes							2	27	11.2%			
Nigrospora												
Pithomyces							1	13	5.4%			
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	14	14 187			333		18	241		11	146	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

10/02/2018 Reviewed by:

Stephen N. Loyes



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaide	b Number: 18392.01-PM ollected by: John Soter nail: adelaidelabresults@adelaidellc.com MC ID Number 18034658 - 25					estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 25		· · · · · ·	18034658 - 26		·	8034658 - 27		1	8034658 - 28	
Sample ID#		77			78			79			80	
Sample Name		2nd FI - Psych		2nd	FI - Guidance Offic	ce	2	nd FI - SW Office		2n	d FI - Admin Suite	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			3			2	
Fragments		ND			ND			ND			13/M3	
Organism	Raw Count	Raw         Count / M3         % of         F           Count         3         40         11.1%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	3	40	11.1%	1	13	5.8%	1	13	6.1%	64	853	28.1%
Aspergillus Penicillium				2	27	11.9%						
Basidiospores	15	200	55.6%	4	53	23.5%	3	40	18.8%	160	2133	70.2%
Bipolaris Drechslera							1	13	6.1%			
Cercospora												
Chaetomium												
Cladosporium	9	120	33.3%	10	133	58.8%	11	147	69.0%	3	40	1.3%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes										1	13	< 1%
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
I oruia												
Ulociadium												
Total	27	360		17	226		16	213		228	3039	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoycs



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaidel	bb Number:       18392.01-PM         ollected by:       John Soter         mail:       adelaidelabresults@adelaidellc.com         MC ID Number       18034658 - 29					estchester rs, New Yo	Avenue ork 10707			ate Collected: ate Received: ate Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 29		1	8034658 - 30		·	8034658 - 31		· · ·	18034658 - 32	
Sample ID#		81			82			83			84	
Sample Name	2nd	FI - Assist Principa	al	:	2nd FI - Principal		2n	d FI - Nurses Office	•	2r	d FI - Exam Room	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			13/M3	
Organism	Raw Count	Count / M3         % of Total         Ra Count           1         13         < 1%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria	1	13	< 1%									
Ascospores	48	640	10.9%	30	400	7.7%	16	213	10.5%	10	133	8.0%
Aspergillus   Penicillium	3	40	640         10.9%           40         < 1%									
Basidiospores	224	2987	51.0%	224	2987	57.4%	128	1707	84.3%	112	1493	90.3%
Bipolaris Drechslera												
Cercospora				2	27	< 1%	1	13	< 1%			
Chaetomium												
Cladosporium	160	2133	36.4%	128	1707	32.8%	3	40	2.0%	2	27	1.6%
Curvularia				1	13	< 1%						
Epicoccum												
Memnoniella												
Myxomycetes	3	40	< 1%	5	67	1.3%	4	53	2.6%			
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium										_		<b> </b>
Iorula										_		<b> </b>
Ulocladium										_		<b> </b>
Total	439	5853		390	5201		152	2026		124	1653	<u> </u>
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Ai	r R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoycs



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ume: PS 15 175 We Yonke	estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 33			18034658 - 34		· ·	8034658 - 35		1	8034658 - 36	
Sample ID#		85			86			87			88	
Sample Name	2nd F	I - Nurses Room 20	04B	2nd I	FI - Nurses Bathroo	om	2nc	d FI - Parent Cente		2nd I	-I - Auditorium Lob	by
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			13/M3	
Organism	Raw Count	Count / M3     % of Total     Rav Count       8     107     5.2%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	8	107	107 5.2%		187	9.8%	3	40	9.4%	3	40	14.3%
Aspergillus   Penicillium			107 5.2%									
Basidiospores	144	1920	93.5%	128	1707	89.5%	24	320	74.9%	16	213	76.1%
Bipolaris Drechslera												
Cercospora				1	13	< 1%						
Chaetomium												
Cladosporium	1	13	< 1%				5	67	15.7%	2	27	9.6%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes	1	13	< 1%									
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	154	2053		143	1907		32	427		21	280	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyces



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaide	b Number:     18392.01-PM       billected by:     John Soter       mail:     adelaidelabresults@adelaidellc.com       VIC ID Number     18034658 - 37					estchester rs, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 37		· ·	18034658 - 38		1	8034658 - 39		1	8034658 - 40	
Sample ID#		89			90			91			92	
Sample Name	2nd F	I - Room 203A Co	ats	2nd	FI - Auditorium Bad	ck	2nd	FI - Auditorium Fro	nt		2nd FI - Stage	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
									-			-
Organism	Raw Count	Count / M3     % of Total     Raw Count       5     67     23.9%			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	5	67	23.9%	1	13	14.0%	6	80	27.3%	1	13	6.1%
Aspergillus   Penicillium	1	13	4.6%									
Basidiospores	12	160	57.1%	2	27	29.0%	10	133	45.4%	12	160	75.1%
Bipolaris Drechslera												
Cercospora												
Chaetomium												
Cladosporium	3	40	14.3%	4	53	57.0%	5	67	22.9%	3	40	18.8%
Curvularia												
Epicoccum												
Memnoniella												
Myxomycetes							1	13	4.4%			
Nigrospora												
Pithomyces												
Stachybotrys												
Stemphylium												
Iorula												
Ulocladium												
Total	21	280		7	93		22	293		16	213	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoycs



# HMC #18034658

Job Number:18392.01Collected by:John SotEmail:adelaided	nber: 18392.01-PM d by: John Soter adelaidelabresults@adelaidellc.com Number 18034658 - 41					estchester rs, New Yo	Avenue rk 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8
HMC ID Number	1	18034658 - 41		1	8034658 - 42		1	8034658 - 43			18034658 - 44	
Sample ID#		93			94			95			96	
Sample Name	2nc	d FI - Hallway North	ı	2nd	FI - Hallway Cente	er	2nc	l FI - Hallway South	ı		Exterior North	
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			13/M3	
											1	
Organism	Raw Count	v Count / M3 % of Ra nt Count / M3 Total Cou			Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria										1	13	< 1%
Ascospores	8	107	20.1%	3	40	15.0%	5	67	13.6%	160	2133	18.0%
Aspergillus Penicillium			107 20.1%							4	53	< 1%
Basidiospores	30	400	75.0%	16	213	80.1%	30	400	81.0%	480	6400	54.1%
Bipolaris Drechslera										1	13	< 1%
Cercospora										3	40	< 1%
Chaetomium												
Cladosporium	1	13	2.4%				2	27	5.5%	224	2987	25.3%
Curvularia										1	13	< 1%
Epicoccum				1	13	4.9%						
Memnoniella												
Myxomycetes	1	13	2.4%							12	160	1.4%
Nigrospora												
Pithomyces										1	13	< 1%
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	40	533		20	266		37	494		887	11825	
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality	

Signature:

Date: 10/02/2018 Reviewed by:

Stephen N. Hoyce



# HMC #18034658

Job Number:18392.01Collected by:John SoEmail:adelaide	I-PM ter labresults@a	n	Job Na	me: PS 15 175 We Yonker	estchester s, New Yo	Avenue ork 10707		Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8	
HMC ID Number	] 1	8034658 - 45		1	8034658 - 46		1	8034658 - 47		1	18034658 - 48	
Sample ID#		97			98			99			100	
Sample Name		Exterior - East			Exterior South			Exterior West			Field Blank	
Sample Volume		75 liters			75 liters			75 liters			0 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			0 spores/M3	
Background		2			2			2			ND	
Fragments		13/M3			40/M3			53/M3			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria				1	13	< 1%						
Ascospores	192	2560	18.4%	320	4267	28.9%	144	1920	15.1%			
Aspergillus Penicillium	7	93	< 1%	4	53	< 1%	2	27	< 1%			
Basidiospores	576	7680	55.3%	640	8533	57.9%	704	9387	73.9%			
Bipolaris Drechslera												
Cercospora	1	13	< 1%				1	13	< 1%			
Chaetomium												
Cladosporium	256	3413	24.6%	128	1707	11.6%	96	1280	10.1%			
Curvularia	1	13	< 1%									
Epicoccum												
Memnoniella												
Myxomycetes	7	93	< 1%	10	133	< 1%	5	67	< 1%			
Nigrospora	1	13	< 1%	1	13	< 1%						
Pithomyces	1	13	< 1%	1	13	< 1%	1	13	< 1%			
Stachybotrys												
Stemphylium										L		
Torula					13	< 1%				L		
Ulocladium										L		
Total	1042	13891		1106	14745		953	12707		ND	ND	
Motor Domogo India	tor	Common	Allergen	CI:	مراجع والمراجع والمراجع	Outside Air	Cignific	and a link and a set				

Signature:

Date:

10/02/2018 Reviewed by:

Stephen N. Hoyce



# HMC #18034658

Reporting Limit	e Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the de that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 pres will be estimated.										
Blanks	Results have not been corrected for field or laboratory blanks.										
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 4 and each level is determined as follows:										
	<ul> <li>ND : No background detected. (Pump or cassette malfunction.) Recollect sample.</li> <li>1 : &lt;5% of field occluded. No spores will be uncountable.</li> <li>2 : 5-25% of field occluded.</li> <li>3 : 25-75% of field occluded.</li> <li>4 : 75-90% of field occluded.</li> <li>5 : &gt;90% of field occluded. Suggest recollection of sample.</li> </ul>										
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.										
Indoor/Outdoor Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.										
Water Damage Indicate	These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.										
Common Allergens	Although all molds are potential allergens, these are the most common allergens that may be found indoors.										
Slightly Higher than Outsid	de Air The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.										
Significantly Higher than Out	tside Air The spore count is significantly higher than the outdoor count and probably indicates a source of contamination.										
Ratio Abnormality	The types of spores found indoors should be similar to the ones that were identified in the outdoor sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.										
Color Note	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.										



HMC #18034658

#### Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Health Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

#### Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Health Effects: Health affects are poorly studied, but many are likely to be allergenic.

#### Aspergillus | Penicillium

- Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
- Health Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

#### **Basidiospores**

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Health Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

#### **Bipolaris**|Drechslera

Habitat: They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.

Health Effects: They may be allergenic and are very commonly involved in allergic fungal sinusitis. They are opportunistic pathogens but occasionally infect healthy individuals, causing keratitis, sinusitis and osteomyelitis.

#### Cercospora

Habitat: Found on wood and decaying plant matter.

Health Effects: Health effects are poorly studied.

#### Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Health Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.



HMC #18034658

#### Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Health Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.

#### Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Health Effects: It is a common allergen. No cases of infection have been reported in humans.

#### Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Health Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

#### Nigrospora

Habitat: Found on wood, soil and decaying plant matter.

Health Effects: Health effects are poorly studied.

#### Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Health Effects: Allergenic properties are poorly studied. No cases of infection in humans.

#### Stachybotrys

- Habitat: Commonly found in soil and on decaying plant material. It is cellulolytic, and can be found indoors on wet materials containing cellulose, such as wallboard, ceiling tile, and other paper-based materials. It is found outdoors on decaying plant material although it is rarely detected on outdoor air samples.
- Health Effects: Allergenic properties are poorly studied and no cases of infection have been reported in humans. They are capable of producing potent tricothecene mycotoxins. The toxins produced by this fungus can suppress the immune system affecting the lymphoid tissue and the bone marrow. The mycotoxin is also reported to be a liver and kidney carcinogen.

#### Torula

Habitat: Found in soil and on wood and grasses. Occasionally found growing indoors on cellulose containing materials.

Health Effects: A known allergen. No known cases of human infection.



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1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750 Chain of Custody

Form v.2101208.1

HMC # 034658

Job Numbe	er: 1839	2.01-PM	Job Name: PS	5 15	C	Collector: John Soter Email: adelaidelabresults@adela						
Date Collec	cted: 9/2	9/18	175 Westch	ester Avenue	N	otes:						
Mobile:	10	11/1	Yonkers, Ne	ew York 10707								
Sample	#		Sam	ole Name		Analysis Type	Volume	TAT	Notes			
53		219		Rum 210	S		75 L	RUSH				
54		1	1000	Arres 218	S		75 L	RUSH				
F	-			1. 211	S		75 L	RUSH				
27			-	2 208	S		751	RUSH				
56		Y	-	100m 200	0		751					
57				Koon Lou	3		75 L	RUSH				
58			-	Storge LI	S		75 L RUS					
59			- (	ann. Bn 214	S		75 L	RUSH				
60		- Eler Com					75 L	RUSH				
41		V	-	Staff Only	S		75 L	RUSH				
(,)		Ĭ	-	Noon 204	S		75 L	RUSH				
1.3			-	Stat Caly 209	S		75 L	RUSH				
64		l	-	Run 201	S		75 L	RUSH				
Analys	sis Type			Description		TAT		Acce	ptable Sample Types			
Spore Trap	S	Identification	& Enumeration of Fu	ingal Spores		24 Hour	Spore Trap cas	ssettes, Impact slie	des			
	S+	I & E of Fung	al Spores + total dar	der, fiber and pollen count		24 Hour	Spore Trap cas	ssettes, Impact slie	des			
Direct ID	D	ID and Semi-	-quantative enumera	tion of spores and mycelium		24 Hour	Tape, Bio-tape	, swab, bulk, agar	plate for ID only			
	D+	ID and Enum	neration with spores of	count		24 Hour	Tape, Bio-tape	, swab, bulk, agar	plate for ID only			
Culture	C1	Identification	& Enumeration of M	old only		7 Day	Anderson Air P	late, Swab, Bulk				
	C2	Identification	& Enumeration of Ba	acteria only		4 Day	Anderson Air P	late, Swab, Bulk				
	C3	Identification	& Enumeration of M	old and Bacteria		7 Day	Anderson Air P	late, Swab, Bulk				
	C5	Coliform Scr	een for Sewage Bact	eria		2 Day	Anderson Air P	late, Swab, Bulk				
Dust Mite	A1	Semi-quanta	tive analysis of dust	mite allergen		24 Hour	Bulk Dust					
Particle	P	Total Particu	late Analysis	1 1		24 Hour	Spore Trap cas	ssettes, Impact slid	des, Bio-Tape			
Relinquishe	d by:	Int	1_	Date: 2/1/18	Rovd By:		T	Date:	11/18 Time:			

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@bayesmicrobial.com



# 1511 Route 22Suite #C24 Brewster, NY 10509

(845) 278-7710 Fax: (845) 278-7750

### Chain of Custody

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Form v.2101208.1 HMC #

Job Number:	18392	01-PM	Job Name: PS	15		Collector: John Soter Email: adelaidelabresults@adelaid							
Date Collecte Mobile:	ed: <del>9/29</del>	1 <del>8</del>	175 Westch Yonkers, Ne	ester Avenue w York 10707		Notes:							
Sample #		1	Samp	le Name		Analysis Type	Volume	TAT	Notes				
65	2	nd Flan	5t2A	Betham 230		S	75 L	RUSH					
66	0	1 100.	2 [21]	225		S	75 L	75 L RUSH					
17			-Rima	203		S	75 L	RUSH					
68		1/	· Ron	205		S	75 L	RUSH					
69		1	- Girle	Toilet	[	S	75 L	RUSH					
70			- Boys	Toilet		S 75 L RUSH							
71			- Run	207		S	75 L	RUSH					
72		- Starge 223					75 L	RUSH					
73			- Star	de 222	[	S	75 L	RUSH					
74		[]	- Rom	209		S	75 L	RUSH					
75			- Gui	chric Suite		S	75 L	RUSH					
76		L	- Gui	dance Carfere	nce E	S	75 L	RUSH					
Analysis	Туре		0	escription		TAT		Accepta	able Sample Types				
Spore Trap S		Identification &	& Enumeration of Fur	gal Spores		24 Hour	Spore Trap cass	ettes, Impact slides	3				
S	+	1 & E of Funga	al Spores + total dance	ler, fiber and pollen count		24 Hour	Spore Trap cass	ettes, Impact slides	3				
Direct ID D		ID and Semi-o	quantative enumeration	on of spores and mycelium		24 Hour	Tape, Bio-tape, s	swab, bulk, agar pla	ate for ID only				
D	+	ID and Enume	eration with spores co	ount		24 Hour	Tape, Bio-tape, s	swab, bulk, agar pla	ate for ID only				
Culture C	1	Identification &	& Enumeration of Mo	d only		7 Day	Anderson Air Pla	ite, Swab, Bulk					
C	2	Identification &	& Enumeration of Bac	teria only		4 Day	Anderson Air Pla	ite, Swab, Bulk					
C	3	Identification &	& Enumeration of Mo	d and Bacteria		7 Day	Anderson Air Pla	te, Swab, Bulk					
C	5	Coliform Scree	en for Sewage Bacte	ria		2 Day	Anderson Air Pla	te, Swab, Bulk					
Dust Mite A	1	Semi-quantati	ve analysis of dust m	ite allergen		24 Hour	Bulk Dust						
Particle P	Particle P Total Particulate Analysis						Spore Trap cass	ettes, Impact slides	s, Bio-Tape				
Relinquished b	iy: 1/	4	21	Date: 16/1/18	Rovd By:		TP	Date: 18/1	/18 . Time:				

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@hayesmicrobial.com



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### Chain of Custody

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Form v.2101208.1 HMC #

34658

Job Number: 18	8392.01-PM	Job Name: PS 15	Collector: John	Soter	E	Email: adelaidelabresults@adelaidellg			
Date Collected: Mobile: 1	<del>9/29/1</del> 8 10 [ 1   18	175 Westchester Avenue Yonkers, New York 10707	Notes:						
Sample #		Sample Name	Analysis Type	Volume	TAT	Notes			
22	2nt FI	our - Reach	S	75 L	RUSH				
78	1	- Cuil care 6/5-	S	75 L	RUSH				
79		- SIL Alling	S	751	RUSH				
80			S	751	RUSH				
41	Ý	- Acial Quinte	S	751	RUSH				
01		1) si longito	9	751					
02	Ý		0	751	RU3H				
87		- NURSEN OFFICE	3	75 L	RUSH				
94		- Exem Kom	S	75 L	RUSH				
85		- Nune Num 2048	S	75 L	RUSH				
86	1	- Nurses Bathroom	S	75 L	RUSH				
87		- Comt Center	S	75 L	RUSH				
38	J	- Auditarium Laleby	S	75 L	RUSH				
Analysis Typ	pe	Description	TAT		Acce	eptable Sample Types			
Spore Trap S	Identification	& Enumeration of Fungal Spores	24 Hour	Spore Trap cass	ettes, Impact sl	ides			
S+	I & E of Fung	al Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	ettes, Impact sl	ides			
Direct ID D	ID and Semi-	quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape, s	swab, bulk, aga	r plate for ID only			
D+	ID and Enum	eration with spores count	24 Hour	Tape, Bio-tape, s	swab, bulk, aga	r plate for ID only			
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Pla	ate, Swab, Bulk				
C2	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Pla	ate, Swab, Bulk				
C3	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air Pla	ate, Swab, Bulk				
C5	Coliform Scre	een for Sewage Bacteria	2 Day	Anderson Air Plate, Swab, Bulk					
Dust Mite A1	Semi-quanta	tive analysis of dust mite allergen	24 Hour	Bulk Dust					
Particle P	Total Particul	ate Analysis	24 Hour	Spore Trap cass	ettes, Impact sl	ides, Bio-Tape			
Relinquished by:	11-In	Date: / 0/ 1/18 Rove	i By:	TP	Date: 20	Time:			

Hayes Microbial Consulting :: 3005 East Boundary Terrace, Suite F :: Midlothian, VA 23112 :: USA :: www.hayesmicrobial.com :: info@bayesmicrobial.com



1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

### Chain of Custody

U

Pg

Form v.2101208.1 HMC #

Job Number: 18	3392.01-PM	Job Name: PS 15	Collector: John Soter Email: adelaidelabresults@adelaid								
Date Collected: Mobile:	<del>9/29/18</del> 10/1/18	175 Westchester Avenue         Yonkers, New York 10707	Notes:								
Sample #		Sample Name	Analysis Type	Volume	TA	T Notes					
89	224 FTO	or - Rom 203A - Costa	S	75 L	RUSH						
90		Autority - Bulk	S	75 L	RUSH						
GI		- Avortant Dain	0	75 1	DIICH						
7/		Trat	3	75 L	RUSH						
72	2	- Stare	S	75 L	RUSH						
93		- Hell way - North	S	75 L	RUSH						
94		- Center	S	75 L	RUSH						
95		- Sail	S	75 L	RUSH						
96	5xtes	ar - North	S	75 L	RUSH						
97	1	- Fist	S	75 L	RUSH						
98		- Sauth	S	75 L	RUSH						
59		- West	S	75 L	RUSH						
100	Field	Slat	S	75 L	RUSH						
Analysis Typ	e	Description	TAT		Acc	eptable Sample Types					
Spore Trap S	Identification	& Enumeration of Fungal Spores	24 Hour	Spore Trap cass	settes, Impact s	lides					
S+	1 & E of Fun	gal Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	settes, Impact s	lides					
Direct ID D	ID and Semi	-quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape,	swab, bulk, aga	ar plate for ID only					
D+	ID and Enun	neration with spores count	24 Hour	Tape, Bio-tape,	swab, bulk, aga	ar plate for ID only					
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Pla	ate, Swab, Bulk	(					
C2	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Plate, Swab, Bulk							
C3	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air Plate, Swab, Bulk							
C5	Coliform Scr	een for Sewage Bacteria	2 Day	Anderson Air Pla	ate, Swab, Bulk						
Dust Mite A1	Semi-quanta	tive analysis of dust mite allergen	24 Hour	Bulk Dust							
Particle P	Total Particu	late Analysis	24 Hour	Spore Trap cass	settes, Impact s	lides, Bio-Tape					

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HMC #18034657



contact@hayesmicrobial.com http://hayesmicrobial.com/

Analysis Report prepared for

# Adelaide Environmental Health Associates, Inc.

1511 Route 22 Suite #C24 Brewster, NY. 10509 Phone: (845) 278-7710 Fax: (845) 278-7750

> Job Number: 18392.01-PM Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707 Date Sampled: 10-01-2018 Date Analyzed: 10-02-2018 Report Date: 10-02-2018

EPA Laboratory ID# VA01419







Mold License: LAB1021



License: #PH-0198



HMC #18034657

Adelaide Environmental Health Associates, Inc. 1511 Route 22 Suite #C24 Brewster, NY 10509

October 2, 2018

Client Job Number:	18392.01-PM
Client Job Name:	PS 15
	175 Westchester Avenue
	Yonkers, New York 10707

Dear Adelaide Environmental Health Associates, Inc.,

We would like to thank you for trusting Hayes Microbial for your analytical needs. On October 2, 2018 we received 35 samples by FedEx for the job referenced above. 35 samples were received in good condition.

The results in this analysis pertain only to this job, collected on the stated date and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial Consulting. In no event, shall Hayes Microbial Consulting or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of your use of the test results.

Stephen N. Hoyces

Steve Hayes, BSMT(ASCP) Laboratory Director Hayes Microbial Consulting, LLC



# HMC #18034657

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM ter labresults@a	adelaidellc.cor	n	Job Na	me: PS 15 175 We Yonker	estchester rs, New Yo	Avenue rk 10707	Da Da Da	Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018				
HMC ID Number		18034657 - 1			18034657 - 2			18034657 - 3		18034657 - 4			
Sample ID#		101			102			103		104			
Sample Name	3r	d FI - Room 301A			3rd Fl - Rom 301			rd FI - Room 303		3rd FI - Staff Restroom			
Sample Volume		75 liters		75 liters			75 liters		75 liters				
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3		
Background	2				2			2			2		
Fragments	ND				ND			13/M3			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	15	200	59.9%	13	173	72.4%	9	120	56.1%	4	53	57.0%	
Aspergillus   Penicillium	2	27	8.1%	1	13	5.4%	2	27	12.6%	3	40	43.0%	
Basidiospores	6	80	24.0%	4	53	22.2%							
Bipolaris Drechslera													
Chaetomium													
Cladosporium	2	27	8.1%				5	67	31.3%				
Curvularia													
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes													
Pithomyces													
Stachybotrys													
Stemphyllum													
Ulociadium													
Unspecified Spore													
Total	25	334		18	239		16	214		7 93			
Water Damage Indica	tor	Common	Allergen	Sli	abtly Higher than	Outside Air	Significa	ntly Higher than	Outeido Air	r Ratio Abnormality			

Signature:

Stephen N. Hoycs

Date: 10/02/2018 Revi

8 Reviewed by:

Ramexh



# HMC #18034657

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number		18034657 - 5			18034657 - 6			18034657 - 7			18034657 - 8		
Sample ID#		105			106			107		108			
Sample Name	3rd	FI - Staff Restroor	n	3rd	FI - Custodial Close	et	3	rd FI - Room 305		3rd FI - Girls Bathroom			
Sample Volume		75 liters			75 liters			75 liters		75 liters			
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3		13 spores/M3			
Background		2			2			2			2		
Fragments	ND				13/M3			27/M3			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	7	93	69.9%	14	187	45.2%	58	773	47.2%	6	80	60.2%	
Aspergillus Penicillium	2	27	20.3%	3	40	9.7%	9	120	7.3%	1	13	9.8%	
Basidiospores				6	80	19.3%	31	413	25.2%	3	40	30.1%	
Bipolaris Drechslera													
Chaetomium													
Cladosporium	1	13	9.8%	8	107	25.8%	22	293	17.9%				
Curvularia													
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes							3	40	2.4%				
Pithomyces													
Stachybotrys													
Stemphyllum													
i orula													
Unspecified Spore													
Total	10	133		31	414		123	1639		10	133		
Water Damage Indica	Water Damage Indicator Common Allergen				Slightly Higher than Outside Air			antly Higher than	Outside Air	ir Ratio Abnormality			

Signature:

Stephen N. Hayes

Date: 10/02/2018

2/2018 Reviewed by:



# HMC #18034657

Job Number:18392.01Collected by:John SotEmail:adelaidel	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number		18034657 - 9		· · ·	18034657 - 10		· ·	8034657 - 11		1	8034657 - 12		
Sample ID#		109			110			111		112			
Sample Name	3rd	FI - Boys Bathroor	n	3	Brd FI - Room 307		3	rd FI - Room 309		3rd FI - Room 310			
Sample Volume		75 liters			75 liters			75 liters		75 liters			
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3		13 spores/M3			
Background		2			2			2			2		
Fragments	13/M3				ND			ND			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	9	120	64.2%	11	147	61.3%	23	307	54.8%	12	160	70.8%	
Aspergillus Penicillium	1	13	7.0%	3	40	16.7%	4	53	9.5%	1	13	5.8%	
Basidiospores	2	27	14.4%	1	13	5.4%	10	133	23.8%	3	40	17.7%	
Bipolaris Drechslera													
Chaetomium													
Cladosporium	2	27	14.4%	2	27	11.3%	2	27	4.8%	1	13	5.8%	
Curvularia							1	13	2.3%				
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes				1	13	5.4%	2	27	4.8%				
Pithomyces	-												
Stachybotrys													
Stemphyllum													
I orula													
Unspecified Spore													
Total	14	187		18	240		42	560		17	226		
Water Damage Indica	Water Damage Indicator Common Allergen				Slightly Higher than Outside Air			antly Higher than	Outside Air	ir Ratio Abnormality			

Signature:

Stephen N. Hoycs

Date: 10

10/02/2018 Reviewed by:

10/02/2018

Date:



# HMC #18034657

Job Number:18392.01Collected by:John SoEmail:adelaide	l-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonkei	estchester rs, New Yo	Avenue ork 10707	Da Da Da	te Collected: te Received: te Reported:	10/01/201 10/02/201 10/02/201	8 8 8	
HMC ID Number		18034657 - 13		1	18034657 - 14		· ·	18034657 - 15		1	8034657 - 16	
Sample ID#		113			114			115		116		
Sample Name	3rd	FI - Stray Room 31	13	3	Brd FI - Room 308		3	rd FI - Room 306		3rd FI - Mech Room		
Sample Volume		75 liters			75 liters			75 liters		75 liters		
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3		13 spores/M3		
Background		2			2			2			2	
Fragments	ND				13/M3			13/M3			13/M3	
		1	0/ -6			0/ -6	Davis		0/ -f	Daw		0/ - f
Organism	Count	Count / M3	% of Total	Count	Count / M3	% of Total	Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	8	107	72.8%	19	253	54.3%	43	573	63.2%	21	280	55.3%
Aspergillus Penicillium				3	40	8.6%	4	53	5.8%	1	13	2.6%
Basidiospores	2	27	18.4%	4	53	11.4%	16	213	23.5%	12	160	31.6%
Bipolaris Drechslera												
Chaetomium												
Cladosporium							2	27	3.0%	3	40	7.9%
Curvularia				9	120	25.8%						
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes	1	13	8.8%				3	40	4.4%	1	13	2.6%
Pithomyces												
Stachybotrys												
Stemphylium												
I orula												
Unspecified Spore												
Total	11	147		35	466		68 906			38 506		
Water Damage Indica	Water Damage Indicator Common Allergen				Slightly Higher than Outside Air			antly Higher than	Outside Air	ir Ratio Abnormality		

Signature:

Stephen N. Hoycs

Date: 10/02

10/02/2018 Reviewed by:



# HMC #18034657

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number	1	18034657 - 17			18034657 - 18		· ·	18034657 - 19			8034657 - 20		
Sample ID#		117			118			119		120			
Sample Name	3rc	d FI - Comm Room	1	3	3rd FI - Elec Room			d FI - Storage 306		3rd Fl - Room 304			
Sample Volume		75 liters			75 liters			75 liters		75 liters			
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3		
Background		2			2			2			1		
Fragments	ND				27/M3			13/M3			ND		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria													
Ascospores	27	360	67.5%	58	773	55.2%	18	240	47.4%	16	213	69.6%	
Aspergillus   Penicillium	3	40	7.5%	5	67	4.8%	2	27	5.3%	1	13	4.2%	
Basidiospores	9	120	22.5%	29	387	27.6%	4	53	10.5%	6	80	26.1%	
Bipolaris Drechslera													
Chaetomium													
Cladosporium	1	13	2.4%	7	93	6.6%	13	173	34.2%				
Curvularia				1	13	< 1%							
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes				5	67	4.8%	1	13	2.6%				
Pithomyces	-												
Stachybotrys	-												
Stemphylium				-									
Torula													
Ulocladium													
Unspecified Spore								ļ					
Total	40	533		105	1400		38	506		23	306		
Water Damage Indica	Water Damage Indicator Common Allergen				Slightly Higher than Outside Air			antly Higher than	Outside Air	ir Ratio Abnormality			

Signature:

Stephen N. Hoycs

Date: 10/02/2018 F

2018 Reviewed by:



# HMC #18034657

Job Number:18392.01Collected by:John SotEmail:adelaided	-PM ter labresults@a	adelaidellc.cor	n	Job Na	ime: PS 15 175 We Yonkei	estchester rs, New Yo	Avenue rk 10707	Da Da Da	Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number	1	18034657 - 21		1	8034657 - 22		·	18034657 - 23	-	18034657 - 24		
Sample ID#		121			122			123		124		
Sample Name	3	rd FI - Room 302			3rd FI - ICT 4			3rd FI - ICT 3		3rd FI - Library		
Sample Volume		75 liters			75 liters			75 liters		75 liters		
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3		13 spores/M3		
Background	2				2			1			2	
Fragments	ND				13/M3			ND			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	25	333	51.0%	14	187	46.8%	7	93	69.9%	13	173	59.0%
Aspergillus Penicillium	4	53	8.1%	1	13	3.3%				2	27	9.2%
Basidiospores	12	160	24.5%	3	40	10.0%	2	27	20.3%	4	53	18.1%
Bipolaris Drechslera												
Chaetomium												
Cladosporium	8	107	16.4%	11	147	36.8%	1	13	9.8%	1	13	4.4%
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes				1	13	3.3%				2	27	9.2%
Pithomyces												
Stachybotrys												
Stemphylium												
I orula												
Unspecified Spore												
Total	49	653		30	400		10	133		22	293	
Water Damage Indica	Water Damage Indicator Common Allergen				Slightly Higher than Outside Air			antly Higher than	Outside Air	Ratio Abnormality		

Signature:

Stephen N. Hoycs

Date: 10/02/2018

2018 Reviewed by:



# HMC #18034657

Job Number:       18392.01-PM         Collected by:       John Soter         Email:       adelaidelabresults@adelaidellc.com					Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018		
HMC ID Number	18034657 - 25			· ·	18034657 - 26		· ·	18034657 - 27		· · · · · · · · · · · · · · · · · · ·	8034657 - 28	
Sample ID#		125			126			127			128	
Sample Name	3r	d FI - Work Room		3rd F	I - Reading Resour	rce	3r	d FI - Staff Lounge		3rc	I FI - Hallway North	1
Sample Volume		75 liters			75 liters			75 liters			75 liters	
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3	
Background		2			2			2			2	
Fragments		ND			ND			ND			ND	
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total
Alternaria												
Ascospores	10	133	83.1%	7	93	63.7%	11	147	73.5%	19	253	67.8%
Aspergillus Penicillium				1	13	8.9%	1	13	6.5%	1	13	3.5%
Basidiospores	2	27	16.9%	1	13	8.9%	2	27	13.5%	6	80	21.4%
Bipolaris Drechslera												
Chaetomium												
Cladosporium				2	27	18.5%	1	13	6.5%	2	27	7.2%
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Unspecified Spore												
Total	12	160		11	146		15	200		28	373	
Water Damage Indica	tor	Common	Allorgon	Cli	abtly Highor than	Outcido Air	Signific	onthy Higher than	Outcido Air	D	atio Abnormality	

Signature:

Stephen N. Hoyes

Date: 10/02/2018

Reviewed by:

Ramexh



# HMC #18034657

Job Number:       18392.01-PM         Collected by:       John Soter         Email:       adelaidelabresults@adelaidellc.com					Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					Date Collected:         10/01/2018           Date Received:         10/02/2018           Date Reported:         10/02/2018			
HMC ID Number	18034657 - 29			· ·	18034657 - 30			18034657 - 31			18034657 - 32		
Sample ID#		129			130			131			132		
Sample Name	3rd	FI - Hallway Cente	r	3rc	I FI - Hallway South	ı		Exterior North			Exterior East		
Sample Volume		75 liters			75 liters			75 liters			75 liters		
Reporting Limit		13 spores/M3			13 spores/M3			13 spores/M3			13 spores/M3		
Background		2			1			2			2		
Fragments		13/M3			ND			40/M3			27/M3		
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria	1	13	1.0%				2	27	< 1%	3	40	< 1%	
Ascospores	49	653	51.6%	6	80	66.7%	308	4107	49.8%	242	3227	47.7%	
Aspergillus Penicillium	6	80	6.3%				29	387	4.7%	18	240	3.6%	
Basidiospores	28	373	29.5%	2	27	22.5%	176	2347	28.4%	126	1680	24.9%	
Bipolaris Drechslera													
Chaetomium													
Cladosporium	7	93	7.4%				54	720	8.7%	94	1253	18.5%	
Curvularia							3	40	< 1%				
Epicoccum													
Fusarium													
Memnoniella													
Myxomycetes	4	53	4.2%	1	13	10.8%	46	613	7.4%	21	280	4.1%	
Pithomyces							1	13	< 1%	3	40	< 1%	
Stachybotrys													
Stemphylium													
Torula													
Ulocladium													
Unspecified Spore													
Total	95	1265		9	120		619	8254		507	6760		
Water Damage Indica	tor	Common	Allergen	Sli	ghtly Higher than	Outside Air	Significa	antly Higher than	Outside Air	R	atio Abnormality		

Signature:

Stephen N. Hoyes

Date: 10/02/2018

2/2018 Reviewed by:



# HMC #18034657

Job Number:       18392.01-PM         Collected by:       John Soter         Email:       adelaidelabresults@adelaidellc.com					Job Name: PS 15 175 Westchester Avenue Yonkers, New York 10707					vate Collected:         10/01/2018           vate Received:         10/02/2018           vate Reported:         10/02/2018
HMC ID Number	1	8034657 - 33		1	8034657 - 34		· ·	8034657 - 35		
Sample ID#		133			134			135		
Sample Name		Exterior South			Exterior West			Field Blank		
Sample Volume		75 liters			75 liters			0 liters		
Reporting Limit		13 spores/M3			13 spores/M3			0 spores/M3		
Background		2			2			ND		
Fragments		53/M3			40/M3			ND		
	-									_
Organism	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	Raw Count	Count / M3	% of Total	
Alternaria				1	13	< 1%				
Ascospores	274	3653	48.8%	280	3733	52.4%				
Aspergillus   Penicillium	30	400	5.3%	34	453	6.4%				
Basidiospores	168	2240	30.0%	132	1760	24.7%				
Bipolaris Drechslera										
Chaetomium										
Cladosporium	45	600	8.0%	60	800	11.2%				
Curvularia	3	40	< 1%	1	13	< 1%				
Epicoccum										
Fusarium										
Memnoniella										
Myxomycetes	31	413	5.5%	24	320	4.5%				
Pithomyces	1	13	< 1%	2	27	< 1%				
Stachybotrys										
Stemphylium										
Torula	9	120	1.6%							
Ulocladium										
Unspecified Spore										
Total	561	7479		534	7119		ND	ND		
Water Damage Indig	otor	Common	Allorgon	CI.	abtly Higher than	Outcido Air	Signific	antly Higher than	Outcido Ai	Patio Abnormality

Signature:

Stephen N. Hayes

Date: 10/02/2018 Review

Reviewed by:

Ramexh



# HMC #18034657

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.						
Blanks	Results have not been corrected for field or laboratory blanks.						
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 4 and each level is determined as follows:						
	<ul> <li>ND : No background detected. (Pump or cassette malfunction.) Recollect sample.</li> <li>1 : &lt;5% of field occluded. No spores will be uncountable.</li> <li>2 : 5-25% of field occluded.</li> <li>3 : 25-75% of field occluded.</li> <li>4 : 75-90% of field occluded.</li> <li>5 : &gt;90% of field occluded. Suggest recollection of sample.</li> </ul>						
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.						
Indoor/Outdoor Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.						
Water Damage Indicate	These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.						
Common Allergens	Although all molds are potential allergens, these are the most common allergens that may be found indoors.						
Slightly Higher than Outsid	de Air The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.						
Significantly Higher than Out	side Air The spore count is significantly higher than the outdoor count and probably indicates a source of contamination.						
Ratio Abnormality	The types of spores found indoors should be similar to the ones that were identified in the outdoor sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.						
Color Note	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.						



HMC #18034657

#### Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Health Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

#### Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Health Effects: Health affects are poorly studied, but many are likely to be allergenic.

#### Aspergillus | Penicillium

- Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.
- Health Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

#### **Basidiospores**

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Health Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

#### Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Health Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

#### Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Health Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.



HMC #18034657

#### Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Health Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

### Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Health Effects: Allergenic properties are poorly studied. No cases of infection in humans.

#### Torula

Habitat: Found in soil and on wood and grasses. Occasionally found growing indoors on cellulose containing materials.

Health Effects: A known allergen. No known cases of human infection.



### **Chain of Custody**

Form v.2101208.1 HMC #



1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

Iob Number:         18392.01-PM         Job Name:         PS           Date Collected:         9/29/18         175 Westch		Job Name: PS 15	Collector: John S	Collector: John Soter					
		175 Westchester Avenue	Notes:	Notes:					
Nobile: l	0/1/18	Yonkers, New York 10707							
Sample #		Sample Name	Analysis Type	Volume	TAT	Notes			
Jall	31221	Rom 301A	S	75 L	RUSH				
101	5 100	A ZXI	S	75 L	RUSH				
102		- Hun 2012	S	751	RUSH				
03		- flor 202	0	751	RUSH				
184		- istelf lightram	5	75 L					
105		-	S	75 L	RUSH				
161		- Cutodil ( piet	S	75 L	RUSH				
100		- 1/100 305	S	75 L	RUSH				
10/		Rom Sin	S	75 L	RUSH				
108		- Cirb Sthran	S	75 L	RUSH				
109		Days Da hrom	S	75 L	RUSH				
		- R 205	S	75 L	RUSH				
111		- D	S	75 L	RUSH				
112	$\checkmark$	Com 10	TAT	1	Acceptable	Sample Types			
Analysis Typ	pe	Description	24 Hour	Spore Trap ca	Spore Trap cassettes, Impact slides				
Spore Trap S	Identification	a Enumeration of Fungal Spores	24 Hour	Spore Trap cassettes, Impact slides					
S+		augustative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape, swab, bulk, agar plate for ID only					
Direct ID D	ID and Serie	neration with spores count	24 Hour	Tape, Bio-tape, swab, bulk, agar plate for ID only					
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Plate, Swab, Bulk					
Culture C1	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Plate, Swab, Bulk					
02	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air	Plate, Swab, Bulk				
C5	Coliform Sci	reen for Sewage Bacteria	2 Day	Anderson Air Plate, Swab, Bulk					
Dust Mite A1	Semi-quanta	ative analysis of dust mite allergen	24 Hour	Bulk Dust					
Dust wite At	oon quant		24 Hour	Spore Trap c	assettes, Impact slides, Bio	-lape			

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### 1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

### **Chain of Custody**

p3

Form v.2101208.1 HMC #

ob Number: 18392.	.01-PM Job Name: PS 15	Collector: John Soter Email: adelaidelabresults@adelaidell						
ate Collected: 9/29	#18 175 Westchester Avenue	Notes:						
lobile. /	Yonkers, New York 10707	Analysis Type	Volume	TAT	Notes			
Sample #	Sample Name	Analysis Type	751	RUSH				
113 2	Sig Flow - Strake Kam SIS	5	751	DUCH				
114	1 - (Som 308	S	75 L	RUSH				
117	Row Zola	S	75 L	RUSH				
1/5	- Noom Solo	S	75 L	RUSH				
116	- Mech from	S	75 L	RUSH				
117	- Commi lloum	6	751	RUSH				
118	- Elec. Room	5	751	RUSH				
119	- Strage 306	3		DUCU				
120	- Rum 304	S	75 L	RUSH				
121	- Raina 302	S	75 L	RUSH				
121	- TIT I	S	75 L	RUSH				
1,22	147	S	75 L	RUSH				
123			751	RUSH				
124	V - Library	5		Acce	entable Sample Types			
Analysis Type	Description	IAI	Spore Tran case	settes Impact sli	Acceptable Sample Types			
Spore Trap S	Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap case	settes, Impact sli	ides			
S+	I & E of Fungal Spores + total dander, fiber and pollen count	24 Hour	Tape, Bio-tape,	Tape Bio-tape swab bulk agar plate for ID only				
Direct ID D	ID and Semi-quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape,	swab, bulk, agai	r plate for ID only			
D+	ID and Enumeration with spores count	7 Day	Anderson Air Plate, Swab, Bulk					
Culture C1	Identification & Enumeration of Mold only	4 Day	Anderson Air Pl	ate, Swab, Bulk				
C2	Identification & Enumeration of Bacteria only	7 Day	Anderson Air Pl	ate, Swab, Bulk				
C3	Identification & Enumeration of Mold and Bacteria	2 Dav	Anderson Air Pl	ate, Swab, Bulk				
C5	Coliform Screen for Sewage Bacteria	24 Hour	Bulk Dust					
Dust Mite A1	Semi-quantative analysis of dust mite allergen	24 Hour	Spore Trap cas	settes, Impact sl	ides, Bio-Tape			
Particle P	Total Particulate Analysis	evd By:	TO	Date:	Time:			

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1511 Route 22Suite #C24 Brewster, NY 10509 (845) 278-7710 Fax: (845) 278-7750

### **Chain of Custody**

Pg3

Form v.2101208.1 HMC # 3465

Job Number: 1	8392.01-PM	Job Name: PS 15	Collector: John	Soter	Email:	Email: adelaidelabresults@adelaidellg				
Date Collected: Mobile:	9/29/18 10/1/18	175 Westchester Avenue         Yonkers, New York 10707	Notes:	Notes:						
Sample #		Sample Name	Analysis Type	Volume	TAT	Notes				
125	30 FT	ow - fort (loon	S	75 L	RUSH					
126	1	- Rending Resonce	S	75 L	RUSH					
125		- Stationia	S	75 L	RUSH					
128		- Aller - North	S	75 L	RUSH					
125		T - Ceter	S	75 L	RUSH					
130		Vie - Saith	S	75 L	RUSH					
131	5 Lon	c = North	S	75 L	RUSH					
172	CARGO	- Sist	S	75 L	RUSH					
133		- S.M.	S	75 L	RUSH					
134		- West	S	75 L	RUSH					
135	50	S GY	S	75 L	RUSH					
	1.5	c ving	S	75 L	RUSH					
Analysis Ty	pe	Description	TAT	Acceptable Sample Types						
Spore Trap S	Identification	& Enumeration of Fungal Spores	24 Hour	Spore Trap cassettes, Impact slides						
S+	1 & E of Fung	al Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cass	ettes, Impact slides					
Direct ID D	ID and Semi-	-quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape, s	swab, bulk, agar plate	for ID only				
D+	ID and Enum	neration with spores count	24 Hour	Tape, Bio-tape, swab, bulk, agar plate for ID only						
Culture C1	Identification	& Enumeration of Mold only	7 Day	Anderson Air Plate, Swab, Bulk						
C2	Identification	& Enumeration of Bacteria only	4 Day	Anderson Air Plate, Swab, Bulk						
C3	Identification	& Enumeration of Mold and Bacteria	7 Day	Anderson Air Plate, Swab, Bulk						
C5	Coliform Scr	een for Sewage Bacteria	2 Day	Anderson Air Plate, Swab, Bulk						
Dust Mite A1	Semi-quanta	tive analysis of dust mite allergen	24 Hour	Bulk Dust						
Particle P	Jotal Particu	late Analysis	24 Hour	Spore Trap cass	ettes, Impact slides, B	lio-Tape				
Relinquished by:	1 th	Date: /6/1/18 R	cvd By:	T	Date: 18W	Time:				

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**APPENDIX C** 

PERSONNEL AND LABORATORY CERTIFICATIONS

**NEW YORK STATE - DEPARTMENT OF LABOR DIVISION OF SAFETY AND HEALTH** LICENSE AND CERTIFICATE UNIT STATE CAMPUS BUILDING 12 **Mold Assessor Company License** Adelaide Env Health Assoc ,Inc LICENSE NUMBER 00074 1511 Rte 22 Suite C24 DATE OF ISSUE: 1/22/2018 BREWSTER, NY 10509 EXPIRATION DATE 12/31/2019 This license is valid only for the contractor named above. SI Eileen Franko, Director FOR THE COMMISSIONER OF LABOR



# 

EYES BLU S HAIR BRN HAIR BRN HGT 5' 11"

IF FOUND, RETURN TO: NYSDOL - L&C UNIT ROOM 161A BUILDING 12 STATE OFFICE CAMPUS ALBANY NY 12240



September 28, 2018

Laboratory ID: 188863

Stephen Hayes Hayes Microbial Consulting 3005 E. Boundary Terrace, Suite F Midlothian, VA 23112

Dear Mr. Hayes:

Congratulations! The AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC's Analytical Accreditation Board (AAB) has approved Hayes Microbial Consulting as an accredited Environmental Microbiology laboratory.

Accreditation documentation includes the EMLAP accreditation certificate, scope of accreditation document and a copy of the current AIHA-LAP, LLC license agreement (if your completed agreement is not on file at AIHA-LAP, LLC). The accreditation symbol has been designed for use by all AIHA-LAP, LLC accredited laboratories. If your laboratory chooses to use the symbol in its advertising the laboratory's accreditation, you must complete and return the AIHA-LAP, LLC license agreement to a Laboratory Accreditation Specialist. Once submitted, an electronic copy of the accreditation symbol will be sent to you.

Laboratory accreditation shall be maintained by continued compliance with EMLAP requirements (*see Policy Modules 2D and 6*), which includes proficient participation in AIHA-LAP, LLC approved proficiency testing, demonstration of competency, or round robin program as indicated on the AIHA-LAP "Approved PT and Round Robin" webpage, its associated Scope/PT table, and as required in Policy Module 6, for all Fields of Testing (FoTs) for which the laboratory is accredited. An accredited laboratory that wishes to expand into a new FoT must submit an updated accreditation application to AIHA-LAP, LLC for review by the AAB.

Any changes in ownership, laboratory location, personnel, FoTs/Methods, or significant procedural changes shall be reported to AIHA-LAP, LLC in writing within twenty (20) business days of the change.

The accreditation certificate is the property of AIHA-LAP, LLC and must be returned to us should your laboratory withdraw or be removed from the EMLAP.

Again, congratulations. If you have any questions, please contact Lauren Schnack, Laboratory Accreditation Specialist, at (703) 846-0716.

Sincerely,

Cheryl J. Marton

Cheryl O. Morton Managing Director

AIHA Laboratory Accreditation Programs, LLC 3141 Fairview Park Drive, Suite 777, Falls Church, VA 22042 USA main +1 703-846-0736 fax +1 703-207-8558

**Twitter: @AIHA\_LAP\_LLC** R4 01/24/2018 Page 1 of 1



## AIHA Laboratory Accreditation Programs, LLC

acknowledges that

### **Hayes Microbial Consulting**

3005 E. Boundary Terrace, Suite F, Midlothian, VA 23112

Laboratory ID: 188863

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

#### LABORATORY ACCREDITATION PROGRAMS

□ INDUSTRIAL HYGIENE
□ ENVIRONMENTAL LEAD
✓ ENVIRONMENTAL MICROBIOLOGY
□ FOOD
□ UNIQUE SCOPES

Accreditation Expires: Accreditation Expires: Accreditation Expires: August 01, 2020 Accreditation Expires: Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Bet Bair

Elizabeth Bair Chairperson, Analytical Accreditation Board

Revision 17-09/11/2018

Cheryl J. Marton

Cheryl O. Morton Managing Director, AIHA Laboratory Accreditation Programs, LLC

Date Issued: 09/28/2018



# AIHA Laboratory Accreditation Programs, LLC SCOPE OF ACCREDITATION

### **Hayes Microbial Consulting**

3005 E. Boundary Terrace, Suite F, Midlothian, VA 23112

Laboratory ID: **188863** Issue Date: 09/28/2018

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

### **Environmental Microbiology Laboratory Accreditation Program (EMLAP)**

EMLAP Category	Field of Testing (FoT)	Method	<b>Method Description</b> (for internal methods only)
Fungal	Air - Culturable	HMC-#103	In-house: Analysis of Culturable Air
	Bulk - Culturable	HMC-#104	In-house: Analysis of Culturable Bulk
	Surface - Culturable	HMC-#105	In-house: Analysis of Culturable Swab
	Air - Direct Examination	HMC-#101	In-house: Analysis of Spore Trap
	Bulk - Direct Examination	HMC-#102	In-house: Analysis of Direct Samples
	Surface - Direct Examination	HMC-#102	In-house: Analysis of Direct Samples

### Initial Accreditation Date: 08/01/2010

A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: <u>http://www.aihaaccreditedlabs.org</u>