

IV. LABORATORY ANALYSIS REPORT

Air-O-Cell cassettes are run for 10 minutes to collect a total volume of 150 L of air. These samples are collected in all areas of concern and compared against the normal outdoor air conditions on that day (aka the baseline sample). A full list of commonly encountered fungi is provided in table form and results are reported if the airborne spore count meets or exceeds 7 spores/m³. Blank spaces indicate that no spores were detected in the sample at or above 7 spores/m³ for the corresponding mold type. Elevations of airborne mold are color-coded either orange or red to highlight the severity of the elevation in comparison with the baseline sample. Values reported but not color-coded do not represent an elevation and/or are not of concern unless otherwise noted in the body of this report. Mold spores are common allergens and it is expected to find some detectable levels in ambient air.



#23039950

Analysis Report prepared for

Enviromed Services, Inc.

470 Murdock Avenue
Box 13
Meriden, CT 06450

Phone: (203) 238-4846

IH-23-1377
Russell And Dawson, Inc
Enfield High School

Collected: **September 18, 2023**
Received: **September 20, 2023**
Reported: **September 20, 2023**



EPA Laboratory ID: VA01419

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 10 samples by FedEx in good condition for this project on September 20th, 2023.

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. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

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. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

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



Lab ID: #188863



DPH License: #PH-0198

Sample Number* Sample Name*	A1		A2		A3		A4								
	Raw Count	Count / m³	% of Total	Raw Count	Count / m³	% of Total	Raw Count	Count / m³	% of Total						
1 Outdoor Baseline	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	3	ND	150 L	7 spores/m³	
2 Lower Level - Automotive Classroom (E Wing)	150 L	7 spores/m³	4	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	
3 Lower Level - A Wing Lobby Near Exit 23	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	
4 1st Floor - E Wing Common Area	150 L	7 spores/m³	3	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/m³	2	ND	150 L	7 spores/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	Raw Count	Count / m³	% of Total
Alternaria	406	2700	30.5%	2	13	1.8%	2	13	66.7%	2	13	100.0%	2	13	100.0%
Ascospores	924	6200	69.5%	108	720	98.2%	1	7	33.3%	1	7	33.3%	1	7	33.3%
Aspergillus Penicillium															
Basidiospores															
Bipolaris Drechslera															
Chaetomium															
Cladosporium															
Curvularia															
Epicoccum															
Fusarium															
Memnoniella															
Myxomycetes															
Pithomyces															
Rusts/Smuts															
Stachybotrys															
Stemphylium															
Torula															
Ulocladium															
Total	1330	8900	100%	110	733	100%	3	20	100%	2	13	100%	2	13	100%

Water Damage Indicator	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
Collected: Sep 18, 2023	Received: Sep 20, 2023	Reported: Sep 20, 2023	Revision: 3
Project Analyst: Joseph Lape.	Reviewed By: Steve Hayes, BSMT	Reviewed By: <i>Stephen A. Hayes</i>	Date: 12 - 06 - 2023
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112	(804) 562-3435	contact@hayesmicrobial.com	Page: 2 of 7



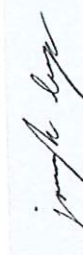
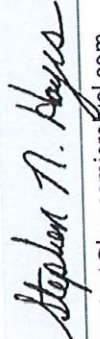
* indicates data provided by the customer

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 Meriden, CT 06450
 (203) 238-4846

IH-23-1377
 Russell And Dawson, Inc
 Enfield High School

Spore Trap
 SOP - HMC#101

Organism	5		A5		6		A6		7		8		A8	
	Raw Count	Count / m ³	% of Total	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Alternaria														
Ascospores														
Aspergillus Penicillium														
Basidio spores														
Bipolaris Drechslera														
Chaetomium	1	7	6.7%											
Cladosporium	1	7	6.7%						3	20	42.9%			
Curvularia														
Epicoccum	2	13	13.3%			1	7	14.3%						
Fusarium														
Memnoniella														
Myxomycetes	4	27	26.7%			2	13	28.6%	1	7	14.3%	3	20	100.0%
Pithomyces	7	47	46.7%			4	27	57.1%	2	13	28.6%			
Rusts/Smuts														
Stachybotrys														
Stemphylium														
Torula														
Ulocladium														
Total	15	101	100%			7	47	100%	7	47	100%	3	20	100%

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
Collected: Sep 18, 2023	Received: Sep 20, 2023	Reported: Sep 20, 2023	Revision: 3	Date: 12-06-2023
Project Analyst: Joseph Lape,		Reviewed By: Steve Hayes, BSMT		Date: 12-06-2023
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Sample Number*	Sample Name*	Sample Volume*	Reporting Limit	Background	Fragments	Organism	A9		A10	
							Count / m ³	% of Total	Count / m ³	% of Total
9	3rd Floor - Class E - 347	150 L	7 spores/m ³	2	ND					
10	3rd Floor - A Wing Hallway New Stairwell	150 L	7 spores/m ³	3	ND					
						Raw Count	Count / m ³	% of Total		
	Alternaria					1	7	3.7%		
	Ascospores									
	Aspergillus Penicillium									
	Basidiospores									
	Bipolaris Drechslera									
	Chaetomium									
	Cladosporium					4	27	14.8%		
	Curvularia									
	Epicoccum									
	Fusarium									
	Memnoniella									
	Myxomycetes					15	100	55.6%		
	Pithomyces									
	Rusts/Smuts					4	27	14.8%		
	Stachybotrys					3	20	11.1%		
	Stemphylium									
	Torula									
	Ulocladium									
	Total					27	181	100%		

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
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Spore Trap Information

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.

Results have not been corrected for field or laboratory blanks.

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 5 and each level is determined as follows:

NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)

1 : <5% of field occluded.
 2 : 5-25% of field occluded.
 3 : 25-75% of field occluded.
 4 : 75-90% of field occluded.
 5 : >90% of field occluded. Suggested recollection of sample.

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.

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.

Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.
Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.
Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.
Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.
Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline 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.

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.

Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.

Reporting Limit

Blanks

Background

Fragments

Control Comparisons



Color Coding

Significant Figures



Organism Descriptions

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.

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.

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.

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.

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.

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 disseminated 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.

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

Cherie Moran
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Habitat: Found on decaying plant material and as a plant pathogen.
Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Ascomycetes

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.
Effects: Allergenic properties are poorly studied. No cases of infection in humans.

Ascomycetes

Habitat: Found on decaying plant material and as a plant pathogen.
Effects: Some allergenic properties reported.

Rusts/Smuts





#23040176

Analysis Report prepared for

Enviromed Services, Inc.

470 Murdock Avenue
Box 13
Meriden, CT 06450
Phone: (203) 238-4846

IH-23-1377
Russell And Dawson, Inc
Enfield High School

Collected: September 19, 2023
Received: September 21, 2023
Reported: September 21, 2023



EPA Laboratory ID: VA01419

Hayes Microbial Consulting, LLC.

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

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Page: 1 of 7

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Laboratory Director
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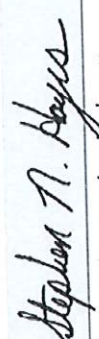
Lab ID: #188863



DPH License: #PH-0198


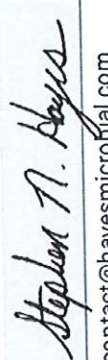
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Sample Number* Sample Name*	A11		A12		A13		A14		
	Raw Count	Count / m³	% of Total	Raw Count	Count / m³	% of Total	Raw Count	Count / m³	% of Total
1 Outdoor Baseline	2	13	1.6%	5	33	29.4%	3	20	42.9%
Sample Volume*	62	410	50.4%	3	20	17.6%	4	27	57.1%
Reporting Limit	12	80	9.8%	6	40	35.3%			
Background	28	190	22.8%						
Fragments									
Organism									
Alternaria									
Ascospores									
Aspergillus/Penicillium									
Basidiospores									
Bipolaris/Drechslera									
Chaetomium									
Cladosporium	15	100	12.2%	2	13	11.8%			
Curvularia	3	20	2.4%						
Epicoccum	1	7	<1%						
Fusarium									
Memnoniella									
Myxomycetes									
Pithomyces									
Stachybotrys									
Stemphylium									
Torula									
Ulocladium									
Total	123	820	100%	17	113	100%	7	47	100%

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
Collected: Sep 19, 2023	Received: Sep 21, 2023	Reported: Sep 21, 2023		
Project Analyst: Ronzo Lee, 	Reviewed By: Steve Hayes, BSMT	Reviewed By: 		Date: 09 - 21 - 2023
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112		contact@hayesmicrobial.com		Page: 2 of 7



Sample Number*	Sample Name*	A15		A16		A17		A18	
		Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total
5	1st Floor - Main Office	150 L		150 L		150 L		150 L	
	Reporting Limit	7 spores/m ³		7 spores/m ³		7 spores/m ³		7 spores/m ³	
	Background	2		2		2		2	
	Fragments	ND		ND		ND		ND	
	Organism	Raw Count	Count / m ³	Raw Count	Count / m ³	Raw Count	Count / m ³	Raw Count	Count / m ³
	Alternaria								
	Ascospores	4	27	2	13	2	13	2	13
	Aspergillus Penicillium	2	13	3	20	1	7	2	13
	Basidiospores	2	13						
	Bipolaris Drechslera								
	Chaetomium								
	Cladosporium								
	Curvularia								
	Epicoccum								
	Fusarium								
	Memnoniella								
	Myxomycetes			3	20				
	Pithomyces								
	Stachybotrys								
	Stemphylium								
	Torula								
	Ulocladium								
	Total	8	53	8	53	3	20	4	26
			100%		100%		100%		100%

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
Collected: Sep 19, 2023	Received: Sep 21, 2023	Reported: Sep 21, 2023	Date: 09 - 21 - 2023	
Project Analyst: Ronzo Lee, 	Reviewed By: Steve Hayes, BSMT	Reviewed By: 		Date: 09 - 21 - 2023
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112		(804) 562-3435		contact@hayesmicrobial.com



Spore Trap Information

Reporting Limit

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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 5 and each level is determined as follows:

NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)

- 1 : <5% of field occluded. No spores will be uncountable.
- 2 : 5-25% of field occluded.
- 3 : 25-75% of field occluded.
- 4 : 75-90% of field occluded.
- 5 : >90% of field occluded. Suggested recollection of sample.

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.

Control 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.



- Blue:** These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.
- Green:** Although all molds are potential allergens, these are the most common allergens that may be found indoors.
- Orange:** The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.
- Red:** The spore count is significantly higher than the baseline count and probably indicates a source of contamination.
- Violet:** The types of spores found indoors should be similar to the ones that were identified in the baseline 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 Coding

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.

Significant Figures

Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.

Organism Descriptions

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

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.

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.

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.

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.

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.

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 disseminated infection, primarily in the immunocompromised.

IH-23-1377

Russell And Dawson, Inc
Enfield High School

Organism Descriptions

Maellie Moran
EnviroMed Services, Inc.
70 Murdock Avenue Box 13
Meriden, CT 06450
(860) 238-4846

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.

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.

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.

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





#23040153

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DPH License: #PH-0198

Sample Number* Sample Name*	Sample Volume* Reporting Limit Background Fragments	A25		A26		A27		A28	
		Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total
Lower Level Weight Room	150 L 7 spores/m ³ 2 ND	2	100.0%	3	75.0%	1	20.0%	3	100.0%
1st Floor - Class D - 107	150 L 7 spores/m ³ 2 ND	3	75.0%	1	25.0%				
2nd Floor - Stair C - ST1	150 L 7 spores/m ³ 3 ND								
2nd Floor - Office E - 201	150 L 7 spores/m ³ 2 ND								
Total		2	100%	13	100%	2	40.0%	3	100%

Water Damage Indicator	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer			
Collected: Sep 20, 2023	Received: Sep 21, 2023	Reported: Sep 21, 2023	Date: 09 - 21 - 2023
Project Analyst: Jeremiah Moore,	Reviewed By: Steve Hayes, BSMT	Reviewed By: <i>Stephen A. Hayes</i>	
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112	(804) 562-3435	contact@hayesmicrobial.com	Page: 3 of 6



Sample Number*	A29		A30	
	3rd Floor - Class E - 337		3rd Floor - Class A - 301	
Sample Name*	150 L	150 L	7 spores/m ³	7 spores/m ³
Reporting Limit	2	2	2	2
Background	7/m ³	ND	ND	ND
Fragments				
Organism	Raw Count	Count / m ³	Count / m ³	% of Total
Alternaria			1	7
Ascospores				20.0%
Aspergillus Penicillium			3	20
Basidiospores				60.0%
Bipolaris Drechslera				
Chaetomium			1	7
Cladosporium				20.0%
Curvularia				
Epicoccum				
Fusarium				
Memnoniella				
Myxomycetes	1	7		50.0%
Pithomyces	1	7		50.0%
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Total	2	14	5	34
				100%

Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality

* indicates data provided by the customer

Collected: Sep 20, 2023 Received: Sep 21, 2023 Reported: Sep 21, 2023

Project Analyst: Jeremiah Moore, *Jeremiah Moore* Reviewed By: Steve Hayes, BSMT Date: 09 - 21 - 2023

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 contact@hayesmicrobial.com Date: 09 - 21 - 2023

HAYES MICROBIAL CONSULTING Page: 4 of 6

Spore Trap Information

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.

Results have not been corrected for field or laboratory blanks.

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 5 and each level is determined as follows:

- NBD:** No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)
- 1 :** <5% of field occluded. No spores will be uncountable.
- 2 :** 5-25% of field occluded.
- 3 :** 25-75% of field occluded.
- 4 :** 75-90% of field occluded.
- 5 :** >90% of field occluded. Suggested recollection of sample.

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.

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.

Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.

Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.

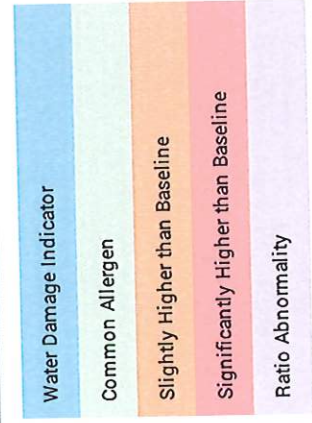
Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.

Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.

Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline 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.

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.

Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.



Color Coding

Significant Figures



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

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

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

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

Habitat: Found on decaying plant material and as a plant pathogen.
Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.
Effects: Allergenic properties are poorly studied. No cases of infection in humans.





#23040464

Analysis Report prepared for

Enviromed Services, Inc.

470 Murdock Avenue
Box 13
Meriden, CT 06450
Phone: (203) 238-4846

1H-23-1377
Enfield High School

Collected: September 21, 2023
Received: September 22, 2023
Reported: September 22, 2023



EPA Laboratory ID: VA01419

We would like to thank you for trusting Hayes Microbial for your analytical needs! We received 10 samples by FedEx in good condition for this project on September 22nd, 2023.

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. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

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


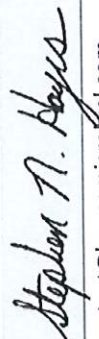


Lab ID: #188863



DPH License: #PH-0198



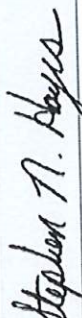
Sample Number*	Sample Name*	A31		A32		A33		A34	
		Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total
1	Classroom A106	150 L		150 L		150 L		150 L	
	Reporting Limit	7 spores/m ³		7 spores/m ³		7 spores/m ³		7 spores/m ³	
	Background	2		3		2		2	
	Fragments	ND		7/m ³		ND		ND	
	Organism	Raw Count	% of Total	Raw Count	% of Total	Raw Count	% of Total	Raw Count	% of Total
	Alternaria								
	Ascospores	3	75.0%	3	17.6%	6	42.9%	3	37.5%
	Aspergillus Penicillium			3	17.6%	3	21.4%	3	37.5%
	Basidiospores			2	11.8%	5	35.7%	2	25.0%
	Bipolaris Drechslera								
	Chaetomium								
	Cladosporium								
	Curvularia	1	5.9%	7	5.9%				
	Epicoccum	1	5.9%	7	5.9%				
	Fusarium								
	Memnoniella								
	Myxomycetes	1	25.0%	7	29.4%				
	Nigrospora								
	Pithomyces								
	Polythrincium	2	11.8%	13	11.8%				
	Stachybotrys								
	Stemphylium								
	Torula								
	Ulocladium								
	Total	4	100%	27	100%	17	100%	8	100%

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality	
Collected: Sep 21, 2023		Received: Sep 22, 2023		Reported: Sep 22, 2023	
Project Analyst: Ronzo Lee		Reviewed By: Steve Hayes, BSMT		Date: 09 - 22 - 2023	
				Date: 09 - 22 - 2023	
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112		(804) 562-3435		contact@hayesmicrobial.com	


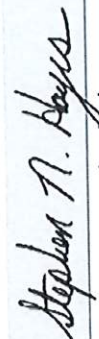
* indicates data provided by the customer



Sample Number* Sample Name*	Sample Volume* Reporting Limit	Background Fragments	5		6		7		8		
			A35	A36	A37	A38					
Organism	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Pre - School Classroom A005	150 L 7 spores/m ³	ND	Classroom E212		Classroom A234		Vice Principals Office (Floor 3)		Vice Principals Office (Floor 3)		
Alternaria	2		4	27	33.3%	3	20	50.0%	2	13	100.0%
Ascospores	2	42.9%	3	20	25.0%	2	13	33.3%			
Aspergillus Penicillium	2	28.6%	3	20	25.0%						
Basidiospores	2	28.6%									
Bipolaris Drechslera											
Chaetomium											
Cladosporium											
Curvularia											
Epicoccum											
Fusarium											
Memnoniella			1	7	8.3%						
Myxomycetes											
Nigrospora			1	7	8.3%						
Pithomyces											
Polythrincium						1	7	16.7%			
Stachybotrys											
Stemphylium											
Torula											
Ulocladium											
Total			7	46	100%	12	81	100%	6	40	100%

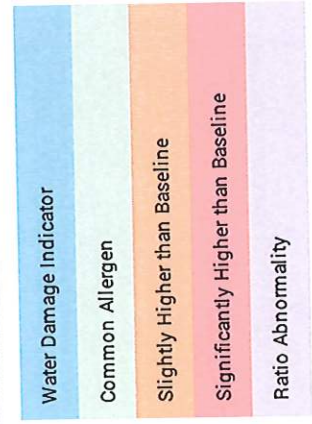
Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
 HAYES MICROBIAL CONSULTING		Collected: Sep 21, 2023 Project Analyst: Ronzo Lee, 	Received: Sep 22, 2023 Reviewed By: Steve Hayes, BSMT 	Reported: Sep 22, 2023 Date: 09 - 22 - 2023
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com		Date: 09 - 22 - 2023		

Sample Number*	Sample Name*	9		A39		10		A40	
		Classroom A33A		Classroom A33A		Baseline		Baseline	
Sample Volume*	150 L	150 L		150 L		150 L		150 L	
Reporting Limit	7 spores/m ³	7 spores/m ³		7 spores/m ³		7 spores/m ³		7 spores/m ³	
Background	2	2		2		2		2	
Fragments	ND	ND		ND		ND		ND	
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Alternaria							1	7	<1%
Ascospores	2	13	50.0%	57	380	53.8%			
Aspergillus Penicillium				12	80	11.3%			
Basidiospores	2	13	50.0%	9	60	8.5%			
Bipolaris Drechslera									
Chaetomium									
Cladosporium				18	120	17.0%			
Curvularia				2	13	1.9%			
Epicoccum									
Fusarium									
Memnoniella									
Myxomycetes				5	33	4.7%			
Nigrospora				2	13	1.9%			
Pithomyces									
Polythrincium									
Stachybotrys									
Stemphylium									
Torula									
Ulocladium									
Total	4	26	100%	106	706	100%			

Water Damage Indicator	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer			
Collected: Sep 21, 2023	Received: Sep 22, 2023	Reported: Sep 22, 2023	Date: 09 - 22 - 2023
Project Analyst: Ronzo Lee, 	Reviewed By: Steve Hayes, BSMT	Reviewed By:  Stephen A. Hayes	
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112		contact@hayesmicrobial.com	
(804) 562-3435		Page: 4 of 7	



Spore Trap Information

<p>Reporting Limit</p> <p>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.</p> <p>Blanks</p> <p>Results have not been corrected for field or laboratory blanks.</p>	
<p>Background</p> <p>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 5 and each level is determined as follows:</p> <p>NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)</p> <p>1 : <5% of field occluded. No spores will be uncountable. 2 : 5-25% of field occluded. 3 : 25-75% of field occluded. 4 : 75-90% of field occluded. 5 : >90% of field occluded. Suggested recollection of sample.</p>	
<p>Fragments</p> <p>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.</p>	
<p>Control Comparisons</p> <p>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.</p>	
 <p>Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.</p> <p>Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.</p> <p>Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.</p> <p>Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.</p> <p>Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline 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.</p>	
<p>Color Coding</p> <p>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.</p>	
<p>Significant Figures</p> <p>Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.</p>	



Organism Descriptions

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

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.

Alternaria

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.

Ascospores

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.

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.

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.

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.

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 disseminated infection, primarily in the immunocompromised.

Xavier Jackson-Ward
EnviroMed Services, Inc.
470 Murdock Avenue Box 13
Meriden, CT 06450
(203) 238-4846

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.

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

Epicoccum

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

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

Myxomycetes

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

Effects: Health effects are poorly studied.

Nigrospora

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

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

Pithomyces

Habitat: Found in soil and occasionally on plants.

Effects: No known health effects. Allergenic properties are poorly studied.

Polythrincium





#23040694

Analysis Report prepared for

Enviromed Services, Inc.

470 Murdock Avenue
Box 13
Meriden, CT 06450
Phone: (203) 238-4846

1H-23-1377
Enfield High School

Collected: September 22, 2023
Received: September 25, 2023
Reported: September 25, 2023



EPA Laboratory ID: VA01419

Hayes Microbial Consulting, LLC.

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

(804) 562-3435

contact@hayesmicrobial.com

Page: 1 of 6

We would like to thank you for trusting Hayes Microbial for your analytical needs! We received 10 samples by FedEx in good condition for this project on September 25th, 2023.

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. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

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. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

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



Lab ID: #188863



DPH License: #PH-0198

Sample Number*	Sample Name*	A41		A42		A43		A44	
		Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total
1	Lower Level Mens Bathroom Near Exit 10	7	25.0%	7	50.0%	13	66.7%	27	100.0%
2	Cafeteria Kitchen	7	50.0%	7	50.0%	13	66.7%	27	100.0%
3	Classroom Across From C-012	7	50.0%	7	50.0%	13	66.7%	27	100.0%
4	Ticket Booth Office	7	50.0%	7	50.0%	13	66.7%	27	100.0%
Total		27	100%	27	100%	27	100%	27	100%

Water Damage Indicator	Common Allergen	Significantly Higher than Baseline	Slightly Higher than Baseline	Ratio Abnormality
* indicates data provided by the customer				
Collected: Sep 22, 2023	Received: Sep 25, 2023	Reported: Sep 25, 2023	Date: 09 - 25 - 2023	
Project Analyst: P. Ramesh	Reviewed By: Steve Hayes, BSMT	Reviewed By: Stephen A. Hayes		
Ramesh Poluri, PhD	contact@hayesmicrobial.com	Date: 09 - 25 - 2023		
3005 East Boundary Terrace, Suite F, Midlothian, VA. 23112	(804) 562-3435	Page: 2 of 6		



Sample Number*	Sample Name*	A45		A46		A47		A48	
		Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total	Count / m ³	% of Total
5	Stairwell Near Exit 5	150 L		150 L		150 L		150 L	
	Reporting Limit	7 spores/m ³		7 spores/m ³		7 spores/m ³		7 spores/m ³	
	Background	2		2		2		2	
	Fragments	ND		ND		ND		ND	
	Organism	Raw Count	Count / m ³	Raw Count	Count / m ³	Raw Count	Count / m ³	Raw Count	Count / m ³
	Alternaria								
	Ascospores	3	20	1	7	1	7	2	13
	Aspergillus Penicillium		50.0%						100.0%
	Basidio spores	1	7	1	7				
	Bipolaris Drechslera		16.7%						
	Chaetomium								
	Cladosporium								
	Curvularia								
	Epicoccum								
	Fusarium								
	Memnoniella								
	Myxomycetes	2	13						
	Pithomyces		33.3%						
	Stachybotrys								
	Stemphylium								
	Torula								
	Ulocladium								
	Total	6	40	2	14	1	7	2	13
			100%		100%		100%		100%

Water Damage Indicator	Common Allergen	Slightly Higher than Baseline	Significantly Higher than Baseline	Ratio Abnormality

* indicates data provided by the customer

Collected: Sep 22, 2023 Received: Sep 25, 2023 Reported: Sep 25, 2023

Project Analyst: **P. Ramesh** Reviewed By: **Stephen N. Hayes** Date: **09 - 25 - 2023**
 Ramesh Poluri, PhD Steve Hayes, BSMT contact@hayesmicrobial.com

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 Page: 3 of 6



Sample Number*	Sample Name*	9	A49	10	A50	
	Elevator No. 049-0124	Baseline				
Sample Volume*	150 L	150 L				
Reporting Limit	7 spores/m ³	7 spores/m ³				
Background	2	2				
Fragments	ND	ND				
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Alternaria						
Ascospores	2	13	40.0%	192	1300	45.7%
Aspergillus Penicillium				160	1100	38.1%
Basidiospores						
Bipolaris Drechslera						
Chaetomium				64	430	15.2%
Cladosporium						
Curvularia						
Epicoccum						
Fusarium						
Memnoniella						
Myxomycetes	2	13	40.0%	4	27	<1%
Pithomyces	1	7	20.0%			
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Total	5	33	100%	420	2857	100%

Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality

* indicates data provided by the customer

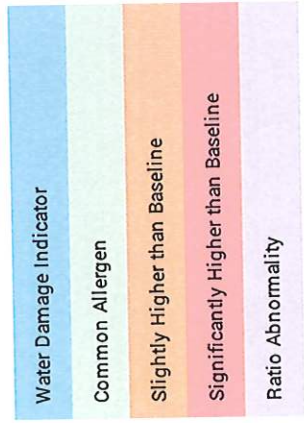
Collected: **Sep 22, 2023** Received: **Sep 25, 2023** Reported: **Sep 25, 2023**

Project Analyst: **P. Ramesh** Reviewed By: **Stephen A. Hayes** Date: **09 - 25 - 2023**

Ramesh Poluri, PhD Steve Hayes, BSMT Date: **09 - 25 - 2023**

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com Page: 4 of 6



<p>Reporting Limit</p> <p>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.</p>
<p>Blanks</p> <p>Results have not been corrected for field or laboratory blanks.</p>
<p>Background</p> <p>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 5 and each level is determined as follows:</p> <p>NBD: No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)</p> <p>1 : <5% of field occluded. No spores will be uncountable. 2 : 5-25% of field occluded. 3 : 25-75% of field occluded. 4 : 75-90% of field occluded. 5 : >90% of field occluded. Suggested recollection of sample.</p>
<p>Fragments</p> <p>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.</p>
<p>Control Comparisons</p> <p>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.</p>
 <p>Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.</p> <p>Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.</p> <p>Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.</p> <p>Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.</p> <p>Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline 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.</p>
<p>Color Coding</p> <p>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.</p>
<p>Significant Figures</p> <p>Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.</p>



Organism Descriptions

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

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.

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.

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

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.

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

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.

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

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

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

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

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



V. LABORATORY ANALYSIS CLEARANCE REPORT (RE-TEST NOVEMBER 7, 2023)

Air-O-Cell cassettes are run for 10 minutes to collect a total volume of 150 L of air. These samples are collected in all areas of concern and compared against the normal outdoor air conditions on that day (aka the baseline sample). A full list of commonly encountered fungi is provided in table form and results are reported if the airborne spore count meets or exceeds 7 spores/m³. Blank spaces indicate that no spores were detected in the sample at or above 7 spores/m³ for the corresponding mold type. Elevations of airborne mold are color-coded either orange or red to highlight the severity of the elevation in comparison with the baseline sample. Values reported but not color-coded do not represent an elevation and/or are not of concern unless otherwise noted in the body of this report. Mold spores are common allergens and it is expected to find some detectable levels in ambient air.



#23048943

Analysis Report prepared for

Enviromed Services, Inc.

470 Murdock Avenue
Box 13
Meriden, CT 06450
Phone: (203) 238-4846

IH-23-1710
Enfield Public Schools
IH-23-1710

Collected: November 7, 2023
Received: November 9, 2023
Reported: November 9, 2023



EPA Laboratory ID: VA01419



Lab ID: #188863



DPH License: #PH-0198

We would like to thank you for trusting Hayes Microbial for your analytical needs! We received 2 samples by FedEx in good condition for this project on November 9th, 2023.

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. Information supplied by the customer can affect the validity of results. These results apply only to the samples as received. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC.

All information provided to Hayes Microbial is confidential information relating to our customers and their clients. We will not disclose, copy, or distribute any information verbally or written, except to those designated by the customer(s). We take confidentiality very seriously. No changes to the distribution list will be made without the express consent of the customer.

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. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

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

Sample Number*	A1	A2				
Sample Name*	Enfield High School / Baseline	Lower Level - Automotive Classroom (E Wing)				
Sample Volume*	150 L	150 L				
Reporting Limit	7 spores/m ³	7 spores/m ³				
Background	2	3				
Fragments	80/m ³	ND				
Organism	Raw Count	Count / m ³	% of Total	Raw Count	Count / m ³	% of Total
Alternaria	3	20	<1%			
Ascospores	98	650	28.0%			
Aspergillus Penicillium	134	890	38.3%			
Basidiospores						
Bipolaris Drechslera						
Chaetomium						
Cladosporium	112	750	32.0%	13	87	81.3%
Curvularia						
Epicoccum	2	13	<1%			
Fusarium						
Memnoniella						
Myxomycetes	1	7	<1%	3	20	18.8%
Pithomyces						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Total	350	2330	100%	16	107	100%

Water Damage Indicator: Common Allergen

Significantly Higher than Baseline

Slightly Higher than Baseline

Ratio Abnormality

* indicates data provided by the customer


Collected: Nov 7, 2023
Received: Nov 9, 2023
Reported: Nov 9, 2023
Revision: 2

Project Analyst: Joseph Lape
Reviewed By: Steve Hayes, BSMT
Date: 11 - 09 - 2023
Date: 12 - 06 - 2023

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Spore Trap Information

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 <p>Blue: Water Damage Indicator</p> <p>Green: Common Allergen</p> <p>Orange: Slightly Higher than Baseline</p> <p>Red: Significantly Higher than Baseline</p> <p>Purple: Ratio Abnormality</p> <p>Blue: These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.</p> <p>Green: Although all molds are potential allergens, these are the most common allergens that may be found indoors.</p> <p>Orange: The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.</p> <p>Red: The spore count is significantly higher than the baseline count and probably indicates a source of contamination.</p> <p>Violet: The types of spores found indoors should be similar to the ones that were identified in the baseline 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.</p>
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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.

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

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.

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.

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

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.

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.

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



Figure 13. Automotive Classroom and location of clearance sample A1. Figure from re-test taken on November 7, 2023.

VI. LABORATORY CERTIFICATION



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Hayes Microbial Consulting

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

Laboratory ID: LAP-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 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

- INDUSTRIAL HYGIENE Accreditation Expires:
- ENVIRONMENTAL LEAD Accreditation Expires:
- ENVIRONMENTAL MICROBIOLOGY Accreditation Expires: February 01, 2025
- FOOD Accreditation Expires:
- UNIQUE SCOPES 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 17025:2017 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.

Cheryl O. Morton

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

Date Issued: 05/09/2023

Revision20: 06/07/2022



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

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

Laboratory ID: LAP-188863

Issue Date: 05/01/2023

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)

Initial Accreditation Date: 08/01/2010

EMLAP Scope Category	Field of Testing (FOT)	Component, parameter or characteristic tested	Method	Method Description <i>(for internal methods only)</i>
Fungal	Air - Culturable	Air	HMC-#103	In House: Viable Air Culture
Fungal	Air - Direct Examination	Spore Trap	HMC-#101	In House: Spore Trap Analysis
Fungal	Bulk - Culturable	Bulk Material	HMC-#104	In House: Bulk Culture Analysis
Fungal	Bulk - Direct Examination	Bulk Material	HMC-#102	In House: Direct Identification Analysis
Fungal	Surface - Culturable	Swab	HMC-#105	In House: Swab Culture Analysis
Fungal	Surface - Direct Examination	Bio-Tape, Swab	HMC-#102	In House: Direct Identification Analysis

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