



November 15, 2023

Ms. Erin Obey  
Superintendent of Schools  
Pembroke Public Schools  
72 Pilgrim Road  
Pembroke, MA 02339

RE: Final Microbial (Mold) Sampling Report #3 for  
**Hobomock Elementary School**  
81 Learning Lanes, Pembroke, MA  
PMEC Project #23-184

Dear Ms. Obey:

Paul Matuszko Environmental Consulting (**PMEC**) is pleased to submit this report for the microbial sampling conducted at the Hobomock Elementary School, 81 Learning Lanes, Pembroke, Massachusetts. PMEC was retained by the Pembroke Public Schools to conduct spore trap microbial air sampling within one designated wing of the school building. The microbial sampling was conducted on November 13, 2023 by PMEC Project Manager, Paul Matuszko, CIH. The spore trap air sampling was conducted to determine existing spore levels in response to previous sampling and on-going cleaning response actions. A summary of the sampling locations and methods, analysis methods, and sample results are provided as follows:

## 1.0 Background

- A. PMEC conducted sampling within the following designated classrooms:
  - Spore trap air samples collected in Classrooms 225, 230, 235, 240, 245, 250, and hallway.
- B. HEPA filtered air scrubber fans have been used in each of the classrooms for an extended period (~3 weeks). The HEPA fans have been rotated between classrooms and operated over night and on weekends to assist in cleaning and filtering airborne spores and particulates. Classrooms have been cleaned and disinfected on an on-going basis.
- C. During the site visit, PMEC did not identify any visible mold growth in the areas accessed. Ceiling supply diffusers (vents) are clean with no visible dust buildup. No water stained ceiling tiles or current water infiltration were identified.

## 2.0 Air Quality Measurements

- A. A direct reading, thermohygrometer (Fluke Model 971) was used to collect representative temperature and relative humidity (ratio of water vapor in air) measurements. Recommended season levels are:

• Temperature (Temp.):	Recommended Winter Range:	63-72 °F
	Recommended Summer:	68-78 °F
• Relative Humidity (RH%)	Recommended Range:	between 30%-60%
- B. The measurement results on the assessment date are provided in Table 1 below:

<b>Table 1 Baseline Air Quality Measurements</b>		
<b>Location</b>	<b>Temperature</b>	<b>Relative Humidity %</b>
Classroom #225	68.2 °F	40.9%
Classroom #235	67.7 °F	35.9%
Classroom #245	67.5 °F	35.6%
Hallway at #275	67.7 °F	35.1%

- The indoor measurements indicate typical conditions for a late fall, clear day. Indoor relative humidity levels are noticeably lower than previous sampling dates.

### 3.0 Mold Sampling and Analysis Methods

- A. As part of the assessment, P MEC collected nine (8) “spore trap” air samples for mold spore analysis using air-o-cell® brand sampling cassettes. Eight interior samples and one outdoor ambient sample were collected for analysis. A calibrated, battery operated Zefon IAQ 15 sampling pump was used to draw air onto the sample cassette’s adhesive slide. P MEC collected the samples at 15 liters of air per minute (LPM) for a five (5) minute sample duration for a total sample collection volume of 75 liters of air. The airborne aerosols (mold, particulates, pollen, etc.) are trapped on the filter media slide for direct microscopic examination.
- B. The samples were collected on November 13, 2023 at approximately 3:30 pm – 4:45 pm. The results and discussion described herein are only representative of the conditions on the date and time of sample collection.
- C. The samples were sent via chain of custody by Fed Ex to Hayes Microbial Laboratory (Hayes), located in Midlothian, Virginia. Hayes Laboratory is accredited by the American Industrial Hygiene Association (AIHA) for mold and bacteria identification and analysis (AIHA EMPAT Laboratory Accreditation ID # 188863).
- D. Results are reported as Total Fungi Counts in spores per cubic meter of air (**C/m<sup>3</sup>**). The samples were analyzed for both non-viable and viable fungi (mold) by direct analysis optical microscopy.
- E. A summary of analysis criteria of spore trap and direct identification analysis is provided in the lab analysis sheets. The sample results are provided under separate attachment to this report.

### 4.0 Laboratory Analysis Results

- A. The results of the mold spore air sampling are presented in Table 2 below.

<b>Table 2 Mold Sample Analysis Results November 13, 2023 (4<sup>th</sup> round)</b>			
<b>Sample #</b>	<b>Sample Location</b>	<b>Total Fungi (C/m<sup>3</sup>)</b>	<b>Specific Species &amp; levels of note</b>
3705 3136 (01)	<b>Classroom 230 - At back right side</b>	40 C/m <sup>3</sup>	Ascospores – 27 C/m <sup>3</sup> Basidiospores – 13 C/m
3705 3138 (02)	<b>Classroom 225 - back right side</b>	253 C/m <sup>3</sup>	Ascospores – 53 C/m <sup>3</sup> Aspergillus/Penicillium – 200 C/m <sup>3</sup>
3705 3138 (03)	<b>Classroom 225 – Front left side at desk</b>	79 C/m <sup>3</sup>	Ascospores – 13 C/m <sup>3</sup> Aspergillus/Penicillium – 53 C/m <sup>3</sup> Cladosporium – 13 C/m <sup>3</sup>

<b>Table 2 - continued Mold Sample Analysis Results November 13, 2023 (4<sup>th</sup> round)</b>			
<b>Sample #</b>	<b>Sample Location</b>	<b>Total Fungi (C/m<sup>3</sup>)</b>	<b>Specific Species &amp; levels of note</b>
3705 3132 (04)	<b>Classroom 235 –</b> at back desk	40 C/m <sup>3</sup>	Ascospores – 27 C/m <sup>3</sup> Myxomycetes – 13 C/m <sup>3</sup>
3705 3107 (05)	<b>Classroom 240 –</b> at back middle	67 C/m <sup>3</sup>	Ascospores – 40 C/m <sup>3</sup> Cladosporium – 27 C/m <sup>3</sup>
3705 3146 (06)	<b>Classroom 245 –</b> at back desk	26 C/m <sup>3</sup>	Ascospores – 13 C/m <sup>3</sup> Cladosporium – 13 C/m <sup>3</sup>
3705 3143 (07)	<b>Classroom 250 –</b> at back middle	40 C/m <sup>3</sup>	Ascospores – 40 C/m <sup>3</sup>
3705 3129 (08)	<b>Hallway at room 275</b> (comparison sample)	66 C/m <sup>3</sup>	Ascospores – 13 C/m <sup>3</sup> Aspergillus/Penicillium – 53 C/m <sup>3</sup>
3705 31040 (08)	<b>Outside ambient air</b> Outside exit door 3 (comparison sample)	257 C/m <sup>3</sup>	Ascospores – 110 C/m <sup>3</sup> Basidiospores – 80 C/m <sup>3</sup> Cladosporium – 27 C/m <sup>3</sup> Myxomycetes – 40 C/m <sup>3</sup>

Notes: Additional information on species types are provided in the Laboratory Analysis results.

## 5.0 Discussion of Mold Results

### A. Spore trap sample results:

1. Classroom 225 – Current spore levels have been reduced in comparison to previous sample analysis results. The total spore levels are similar to outdoor ambient levels. Additionally, aspergillus/penicillium (Asp/Pen) spore levels are considered acceptable at this time. The levels of Asp/Pen spores are within generally recommended levels for individual species (below ~300-400 C/m<sup>3</sup>). Therefore, existing spore levels for Classroom 225 should be acceptable for general public access.
2. Other Classrooms: The analysis results in classrooms 235, 240, 245, 250 and hallway indicate normal and low levels of airborne mold spores. The indoor airborne mold spore levels in the locations sampled on the assessment date are considered very low and acceptable.
3. The overall spore levels are similar in nature and are lower than outdoor ambient levels. The current airborne spore levels on the sampling date are not representative of an amplified airborne spore condition. The analysis results did not identify any significant mold spore levels that would be a cause for concern at this time.

## 6.0 Analysis Results Summary

- A. Table 3 below provides a summary of the sampling conducted to date from September to November, 2023. Current results indicate lower airborne spore levels:

<b>Table 3 Hobomock Elementary School Mold Laboratory Analysis Results Summary For four Sampling Rounds</b>					
<b>Room #</b>	<i>September 19, 2023 Round #1</i>	<i>September 25, 2023 Round #2</i>	<i>October 16, 2023 Round #3</i>	<i>November 13, 2023 Round #4</i>	<b>Comments for Round #4</b>
Classroom # 225 (front)	NA	<b>750 C/m<sup>3</sup>- Asp/Pen</b>	<b>1,100 C/m<sup>3</sup>- Asp/Pen</b>	200 C/m <sup>3</sup> - Asp/Pen	Asp/Pen and total spore counts sufficiently reduced to acceptable levels
	NA	750 C/m <sup>3</sup> - Total	1,393 C/m <sup>3</sup> - Total	253 C/m <sup>3</sup> - Total	
Classroom # 225 (back)	<b>3,900 C/m<sup>3</sup>- Asp/Pen 1,300 C/m<sup>3</sup> cladosporium</b>	<b>750 C/m<sup>3</sup>- Asp/Pen</b>	<b>3,400 C/m<sup>3</sup>- Asp/Pen</b>	53 C/m <sup>3</sup> - Asp/Pen	Asp/Pen and total spore counts sufficiently reduced to acceptable levels
	<b>5,610 C/m<sup>3</sup>- Total</b>	<b>5,610 C/m<sup>3</sup>- Total</b>	<b>5,013 C/m<sup>3</sup>- Total</b>	79 C/m <sup>3</sup> - Total	
Classroom 230	NA	210 C/m <sup>3</sup> - Asp/Pen	110 C/m <sup>3</sup> - Asp/Pen	No Asp/Pen present	Asp/Pen and total spore counts sufficiently reduced to acceptable levels
		210 C/m <sup>3</sup> - Total	243 C/m <sup>3</sup> - Total	40 C/m <sup>3</sup> - Total	
Classroom 235	NA	0 C/m <sup>3</sup> - Asp/Pen	<b>560 C/m<sup>3</sup>- Asp/Pen</b>	No Asp/Pen present	Asp/Pen and total spore counts sufficiently reduced to acceptable levels
		53 C/m <sup>3</sup> - Total	560 C/m <sup>3</sup> - Total	40 C/m <sup>3</sup> - Total	
Classroom 240	NA	NA	<b>1,800 C/m<sup>3</sup>- Asp/Pen</b>	No Asp/Pen present	Asp/Pen and total spore counts sufficiently reduced to acceptable levels
			<b>1,920 C/m<sup>3</sup>- Total</b>	67 C/m <sup>3</sup> - Total	
Classroom 245	130 C/m <sup>3</sup> Asp/Pen	0 C/m <sup>3</sup> - Asp/Pen	150 C/m <sup>3</sup> - Asp/Pen	No Asp/Pen present	Asp/Pen and total spore counts at acceptable levels
	237 C/m <sup>3</sup> - Total	26 C/m <sup>3</sup> - Total	163 C/m <sup>3</sup> - Total	26 C/m <sup>3</sup> - Total	
Classroom 250	NA	0 C/m <sup>3</sup> - Asp/Pen	0 C/m <sup>3</sup> - Asp/Pen	No Asp/Pen present	Asp/Pen and total spore counts at acceptable levels
		26 C/m <sup>3</sup> - Total	13 C/m <sup>3</sup> - Total	40 C/m <sup>3</sup> - Total	
Hallway at room 275				53 C/m <sup>3</sup> - Asp/Pen	Asp/Pen and total spore counts at acceptable levels
				66 C/m <sup>3</sup> - Total	
Outside ambient air	0 C/m <sup>3</sup> Asp/Pen	0 C/m <sup>3</sup> Asp/Pen	0 C/m <sup>3</sup> - Asp/Pen	No Asp/Pen present	No Asp/Pen present. Typical outdoor levels
	3,350 C/m <sup>3</sup> - Total	2,057 C/m <sup>3</sup> - Total	3,827 C/m <sup>3</sup> - Total	257 C/m <sup>3</sup> - Total	

Notes: NA = not applicable/not collected; Bold = level and/or species of concern  
C/m<sup>3</sup> = Spore counts per cubic meter of air  
Asp/Pen = abbreviation for Aspergillus/Penicillium microbial species analysis detection  
Total = total airborne spore level analysis for sample

## 7.0 Background Mold Information

- A. Currently, there are no standards or regulations to indicate acceptable numerical levels of airborne fungal spores derived from indoor environments. Results are also assessed for specific target species that may induce allergic reactions. Specific species are reviewed for their known potential to cause allergic reactions or as an indicator of potential water damage and moisture issues. In general, indoor mold levels should be equivalent to or lower than outdoor levels or non-complaint

areas with similar types and percentages of mold species. Please note that airborne mold spores are present in most indoor environments at low levels.

- B. There are no regulations for acceptable levels of mold in the indoor environment; therefore, exact numerical limits are not supported at this time. Specific fungal species of concern are recommended to have much lower levels in the indoor environment. Existing conditions and symptoms are unique to each season, building and occupant. Airborne mold spore levels may vary greatly by location, time of day and weather conditions. However, health impacts cannot be predicted based on this information; individuals experience varying levels of allergic and non-allergic response to mold. Controlling moisture is critical to the prevention of indoor mold growth issues.

## 8.0 Conclusions

- A. The laboratory analysis results indicate that the airborne mold spore levels in the locations sampled were lower than previous sampling dates. The results suggest that the spore levels are sufficiently low and acceptable on the sampling date. Additionally, Aspergillus/Penicillium levels have been greatly decreased. The overall conditions suggest the classrooms are at a Condition 1 – normal indoor ecology environment per the IICRC guidelines.
- B. The on-going cleaning and HEPA air filtering in the designated classrooms has assisted in lowering airborne spore and general particulate levels.

## 9.0 Limitations

- A. The assessment provided herein is based on the professional judgment of PMEC using approved industry standards and guidelines. Assessment findings are based on the investigator's careful consideration of field observations and interpretation of analysis results in accordance with industry standards, including, but not limited to, IICRC S520 guidelines for Condition 1 – normal fungal ecology, 2008 AIHA (Green Book) publication "Recognition, Evaluation, and Control of Indoor Mold", and the ACGIH 1999 book "Bioaerosols – Assessment and Control".
- B. The analysis results are only representative of the conditions of the date and time of sample collection and are considered a "snapshot in time". PMEC's results listed herein represent the conditions present at the time of inspection and sampling.

Should you have any additional questions regarding this assessment report or the results, please do not hesitate to contact me at 617-893-4476 or email at [pmatuszko@pmecsolutions.com](mailto:pmatuszko@pmecsolutions.com). PMEC appreciates the opportunity to provide our services to the Pembroke Public Schools for this project.

Respectively submitted,



Paul Matuszko, CIH, CIEC  
Project Manager/Principal



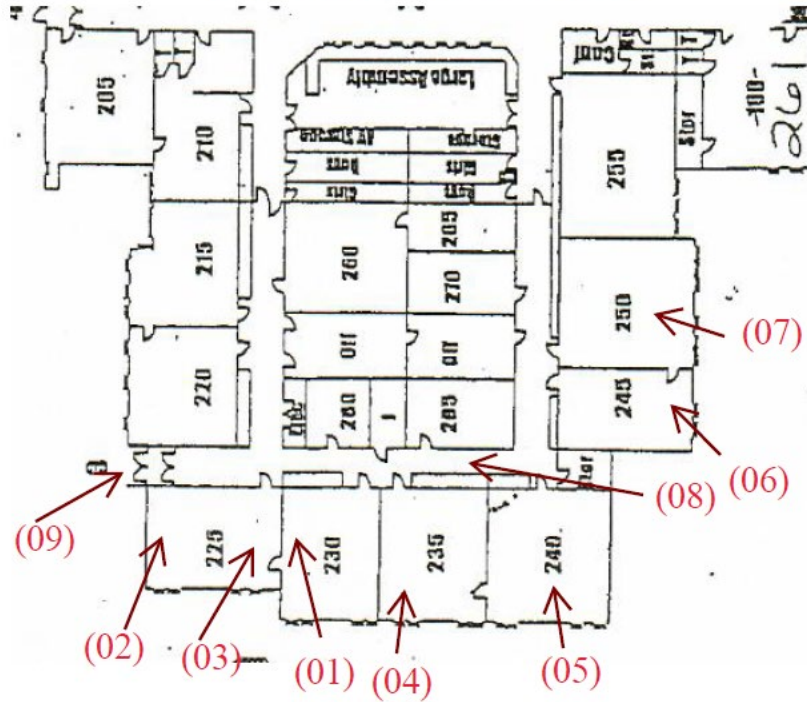
## ATTACHMENTS

- Attachment A – Sampling Floor Plan (page 1)
- Attachment B – Hayes Microbial - Sample Analysis Results (pages 1-6)

Attachment A – Sampling Floor Plan

Hobomock Elementary School  
Microbial Sampling Locations  
November 15, 2023  
Round #4

(#) - sample number location



**Attachment B**

**Laboratory Analysis Results**

**Hayes Microbial –  
pages 1-6**



#23049726

Analysis Report prepared for

# Paul Matuszko Environmental Consulting

79 Cedar Street  
Walpole, MA 02081

Phone: (617) 893-4476

23-184  
Pembroke Public Schools Hobomock  
Elementary School  
81 Learning Lanes  
Pembroke, MA

Collected: **November 13, 2023**  
Received: **November 14, 2023**  
Reported: **November 14, 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 9 samples by FedEx in good condition for this project on November 14th, 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.

A handwritten signature in black ink that reads 'Stephen N. Hayes'.

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



Sample Number*	1	37053136			2	37053147			3	37053138			4	37053132		
Sample Name*	Classroom 230- Back Right			Classroom 225- Back Right			Classroom 225- Front Left			Classroom 235- Back Desk						
Sample Volume*	75 L			75 L			75 L			75 L						
Reporting Limit	13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>						
Background	2			2			2			2						
Fragments	ND			ND			ND			13/m <sup>3</sup>						
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total				
Alternaria																
Ascospores	2	27	66.7%	4	53	21.1%	1	13	16.7%	2	27	66.7%				
Aspergillus Penicillium				15	200	78.9%	4	53	66.7%							
Basidiospores	1	13	33.3%													
Bipolaris Drechslera																
Chaetomium																
Cladosporium							1	13	16.7%							
Curvularia																
Epicoccum																
Fusarium																
Memnoniella																
Myxomycetes										1	13	33.3%				
Pithomyces																
Stachybotrys																
Stemphylium																
Torula																
Ulocladium																
Total	3	40	100%	19	253	100%	6	79	100%	3	40	100%				

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



Collected: **Nov 13, 2023**

Received: **Nov 14, 2023**

Reported: **Nov 14, 2023**

Project Analyst:  
 Ramesh Poluri, PhD *P. Ramesh*

Date:  
**11 - 14 - 2023**

Reviewed By:  
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:  
**11 - 14 - 2023**

Sample Number*	5 37053107			6 37053146			7 37053143			8 37053129		
Sample Name*	Classroom 240- Back Middle			Classroom 245- Back Desk			Classroom 250- Middle			Hallway at 275		
Sample Volume*	75 L			75 L			75 L			75 L		
Reporting Limit	13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>			13 spores/m <sup>3</sup>		
Background	2			2			2			2		
Fragments	ND			ND			ND			ND		
Organism	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total	Raw Count	Count / m <sup>3</sup>	% of Total
Alternaria												
Ascospores	3	40	60.0%	1	13	50.0%	3	40	100.0%	1	13	20.0%
Aspergillus Penicillium										4	53	80.0%
Basidiospores												
Bipolaris Drechslera												
Chaetomium												
Cladosporium	2	27	40.0%	1	13	50.0%						
Curvularia												
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes												
Pithomyces												
Stachybotrys												
Stemphylium												
Torula												
Ulocladium												
Total	5	67	100%	2	26	100%	3	40	100%	5	66	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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Project Analyst:  
 Ramesh Poluri, PhD *P. Ramesh*

Date:  
**11 - 14 - 2023**

Reviewed By:  
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:  
**11 - 14 - 2023**

Sample Number*	9	37053140				
Sample Name*	<b>Outside Ambient Air</b>					
Sample Volume*	75 L					
Reporting Limit	13 spores/m <sup>3</sup>					
Background	2					
Fragments	ND					
<b>Organism</b>	<b>Raw Count</b>	<b>Count / m<sup>3</sup></b>	<b>% of Total</b>			
Alternaria						
Ascospores	8	110	42.1%			
Aspergillus Penicillium						
Basidiospores	6	80	31.6%			
Bipolaris Drechslera						
Chaetomium						
Cladosporium	2	27	10.5%			
Curvularia						
Epicoccum						
Fusarium						
Memnoniella						
Myxomycetes	3	40	15.8%			
Pithomyces						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
<b>Total</b>	<b>19</b>	<b>257</b>	<b>100%</b>			

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



Collected: **Nov 13, 2023**

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Project Analyst:  
 Ramesh Poluri, PhD *P. Ramesh*

Date:  
**11 - 14 - 2023**

Reviewed By:  
 Steve Hayes, BSMT *Stephen N. Hayes*

Date:  
**11 - 14 - 2023**

**Spore Trap Information**

<b>Reporting Limit</b>	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.										
<b>Blanks</b>	Results have not been corrected for field or laboratory blanks.										
<b>Background</b>	<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><b>NBD:</b> No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD)</p> <p><b>1 :</b> &lt;5% of field occluded. No spores will be uncountable.</p> <p><b>2 :</b> 5-25% of field occluded.</p> <p><b>3 :</b> 25-75% of field occluded.</p> <p><b>4 :</b> 75-90% of field occluded.</p> <p><b>5 :</b> &gt;90% of field occluded. Suggested recollection of sample.</p>										
<b>Fragments</b>	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.										
<b>Control Comparisons</b>	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.										
<table border="1"> <tr> <td style="background-color: #ADD8E6;">Water Damage Indicator</td> <td><b>Blue:</b> These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.</td> </tr> <tr> <td style="background-color: #90EE90;">Common Allergen</td> <td><b>Green:</b> Although all molds are potential allergens, these are the most common allergens that may be found indoors.</td> </tr> <tr> <td style="background-color: #FFDAB9;">Slightly Higher than Baseline</td> <td><b>Orange:</b> The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.</td> </tr> <tr> <td style="background-color: #FFB6C1;">Significantly Higher than Baseline</td> <td><b>Red:</b> The spore count is significantly higher than the baseline count and probably indicates a source of contamination.</td> </tr> <tr> <td style="background-color: #DDA0DD;">Ratio Abnormality</td> <td><b>Violet:</b> 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.</td> </tr> </table>	Water Damage Indicator	<b>Blue:</b> These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.	Common Allergen	<b>Green:</b> Although all molds are potential allergens, these are the most common allergens that may be found indoors.	Slightly Higher than Baseline	<b>Orange:</b> The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.	Significantly Higher than Baseline	<b>Red:</b> The spore count is significantly higher than the baseline count and probably indicates a source of contamination.	Ratio Abnormality	<b>Violet:</b> 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.	
Water Damage Indicator	<b>Blue:</b> These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem.										
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Slightly Higher than Baseline	<b>Orange:</b> The spore count is slightly higher than the outside count and may or may not indicate a source of contamination.										
Significantly Higher than Baseline	<b>Red:</b> The spore count is significantly higher than the baseline count and probably indicates a source of contamination.										
Ratio Abnormality	<b>Violet:</b> 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.										
<b>Color Coding</b>	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.										
<b>Significant Figures</b>	Raw counts and column totals may reflect more than 2 significant figures, but results should only be considered significant to 2 figures.										

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<b>Ascospores</b>	<b>Habitat:</b> 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.
	<b>Effects:</b> Health affects are poorly studied, but many are likely to be allergenic.

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<b>Aspergillus Penicillium</b>	<b>Habitat:</b> 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.
	<b>Effects:</b> 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.

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<b>Basidiospores</b>	<b>Habitat:</b> 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.
	<b>Effects:</b> Common allergens and are also associated with hypersensitivity pneumonitis.

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<b>Cladosporium</b>	<b>Habitat:</b> 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.
	<b>Effects:</b> A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

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

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