EHC
ASSOCIATES
ENVIRONMENTAL CONSULTANTS & ABATEMENT CONTRACTORS

March 24, 2021 *PA HIC # 195*

Schuylkill Valley School District
929 Lake Shore Drive
Leesport, PA 19533

Attn: Mr. Casey Blankenbiller

Re: Spore Trap Air & Swab Sampling Services
929 Lake Shore Drive, Leesport, PA
Computer Lab Room D-31
EHC Project No.: 210141-001

Dear Mr. Blankenbiller:

Please find the attached laboratory analysis report for your review. Samples were collected at the above-referenced property on March 22, 2021.

Spore trap air samples were collected from the following locations:

Sample 01 - (3146 9309) – Room D-31 – Center of Room;
Sample 02 - (3146 9315) – Outside – Baseline, Outside Visitor's Entrance;

Swab samples were collected from the following locations inside Room D-31:

Sample 03 - Stainless Sink Countertop
Sample 04 - Wooden Shelf @ Rear of Room
Sample 05 - Desktop Near Tack Board

At the current time, there are no established "safe" levels of mold spores in regard to indoor mold spore levels. However, the general consensus among experts in the industry is that interior spore levels should be generally equal to or lower than the levels found outside of a home or building.

As indicated on the enclosed report, at the time of sampling, the airborne spore trap counts are currently within acceptable ranges (indoor compared to outdoor), and the surface swab results were all non-detect for fungi.

No visible mold growth was observed at the time of sampling. In order to prevent microbial growth, the building should be inspected frequently for pipe leaks or for signs of water intrusion and repaired and dried promptly if discovered.

Please contact my office with questions or concerns, or if additional information is needed.

Sincerely,

Rick Dom
Project Manager

Encl's.: Laboratory Analysis Report
Invoice No. 210141-001

2502 HORSESHOE ROAD, LANCASTER, PA 17601 ◊ 717-656-3008 ◊ FAX: 717-656-7134
EMAIL: OFFICE@EHCASSOCIATES.COM ◊ WWW.EHCASSOCIATES.COM

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#21009711

Analysis Report prepared for

EHC Associates, Inc.

2502 Horseshoe Rd
Lancaster, PA 17601

Phone: **(717) 656-3008**

210141-001
Schuylkill Valley School District
929 Lake Shore Dr.
Leesport, PA 19535

Collected: **March 22, 2021**
Received: **March 23, 2021**
Reported: **March 23, 2021**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 5 samples by FedEx in good condition for this project on March 23rd, 2021.

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

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. 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.

EPA Laboratory ID: VA01419

Lab ID: #188863

DPH License: #PH-0198

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Spore Trap +
SOP - #HMC101

Sample Number	1	31469309		2	31469315	
Sample Name	Classroom D-31 Computer Lab			Outside Baseline, Outside Visitor's Entrance		
Sample Volume	75.00 liter			75.00 liter		
Reporting Limit	13 spores/m³			13 spores/m³		
Background	1			2		
Fragments	ND			ND		
	Pollen	Dander	Fiber	Pollen	Dander	Fiber
	ND	173/m³	13/m³	27/m³	67/m³	ND
Organism	Raw Count	Count / m³	% of Total	Raw Count	Count / m³	% of Total
Alternaria						
Ascospores	1	13	100.0%	12	160	66.7%
Aspergillus|Penicillium						
Basidiospores				5	67	27.8%
Bipolaris|Drechslera						
Chaetomium						
Cladosporium				1	13	5.6%
Curvularia						
Epicoccum						
Fusarium						
Memnoniella						
Myxomycetes						
Pithomyces						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Total	1	13	100%	18	240	100%

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

Collected: **Mar 22, 2021** Received: **Mar 23, 2021** Reported: **Mar 23, 2021**

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Project Analyst: Ramesh Poluri, PhD P. Ramesh Date: **03 - 23 - 2021**

Reviewed By: Steve Hayes, BSMT Stephen N. Hayes Date: **03 - 23 - 2021**

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

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Direct Analysis +
SOP - HMC#102

#3	Swab (1.00 cm2)	Organism	Spore Estimate	Mycelial Estimate	Raw Count	% Total
Swab - Stainless Sink Counter Top		No Fungi Detected				

Reporting Limit: 1 spore/cm2

#4	Swab (1.00 cm2)	Organism	Spore Estimate	Mycelial Estimate	Raw Count	% Total
Swab - Wooden Shelf at Rear of Room		No Fungi Detected				

Reporting Limit: 1 spore/cm2

#5	Swab (1.00 cm2)	Organism	Spore Estimate	Mycelial Estimate	Raw Count	% Total
Swab - Desk Top Near Tack Board		No Fungi Detected				

Reporting Limit: 1 spore/cm2

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Spore Trap Information

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.
Blanks	Results have not been corrected for field or laboratory blanks.
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 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.
Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality	**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.

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Direct Analysis Information

Spore Estimate		Percentages
ND	None Detected	0%
Rare	Less than 10 spores	< 1%
Light	10 - 99 spores	1-10%
Moderate	100 - 999 spores	11-25%
Heavy	1000 - 9999 spores	26-50%
Very Heavy	10000 or greater spores	51-100%

Mycelial Estimate	
ND	None Detected No active growth at site.
Trace	Very small amount of Mycelium Probably no active growth at site.
Few	Some Mycelium Possible active growth at site.
Many	Large amount of Mycelium Probable active growth at site.

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Organism Descriptions

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.

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MICROBIAL CONSULTING

Company: EHC Associates, Inc.
Address: 2502 Horseshoe Rd.
Lancaster, PA 17601

P
SHIP: FEDEX - PAK SO
DATE: 03-23-2021
8162 2508 4985

MOLD
21009711

Job Number: 21041-001	Job Name: Schuylkill Valley School District 929 Lake Shore Dr Leesport, PA 19533
Collector: Rick Dom	
Date Collected: 03	

Mobile: | Email:
Note:

Analysis Type		Analysis Description	Turnaround	Accepted Media Types
Spore Trap	S	Identification & Enumeration of Fungal Spores	24 Hour	Air Cassettes, Impact Slides
	S+	Spore Trap Analysis with Dander, Fiber, and Pollen counts	24 Hour	Air Cassettes, Impact Slides
Direct ID	D	ID & Semi-Quantative Enumeration of spores and mycelium	24 Hour	Bio-Tape, Tape, Swab, Bulk, Agar Plate
	D+	Direct Analysis with Fully Quantitative spore count	24 Hour	Bio-Tape, Tape, Swab, Bulk, Agar Plate
Culture	C1	Identification & Enumeration of Mold only	7 Day	Air Plate, Agar Plate, Swab, Bulk
	C2	Identification & Enumeration of Bacteria only	4 Day	Air Plate, Agar Plate, Swab, Bulk
	C3	Identification & Enumeration of Mold and Bacteria	7 Day	Air Plate, Agar Plate, Swab, Bulk
	C5	Coliform Screen for Sewage Bacteria	2 Day	Agar Plate, Swab, Bulk
Particle	TPA	Total Particulate Analysis, ID & Count (Does Not Include Mold)	24 Hour	Air Cassettes, Impact Slides, Bio-Tape

#	Number	Sample	Analysis	Volume	Notes
1	3146 9309	Classroom D-31 Computer Lab	S+	75 l	
2	3146 9315	Outside - Base line, outside Visitor's Entrance	S+	75 l	
3	—	Stainless sink counter top	D+	—	
4	—	Wooden Shelf @ rear of room	D+	—	
5	—	Desk Top Near Tack Board	D+	—	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Released by: | Date: 03/22/2021 | Received By: | Date: 3/23/21