



March 30, 2022

Mr. David Zeck, CEFM  
Facilities Manager  
**Franklin Township Board of Education**  
3228 Coles Mill Rd.  
Franklinville, NJ 08322

**RE: Indoor Air Quality Inspection Report – March 2022**  
**Reutter Elementary School**  
**Epic Project No. 22-1032**

Dear Mr. Zeck:

**Epic Environmental Services, LLC (Epic)** was retained by the Franklin Township Board of Education (District) to perform indoor air quality inspections for five randomly selected areas at the Reutter Elementary School. The inspections consisted of visual observations and the collection of temperature and relative humidity data. Additionally, samples for airborne mold spores were collected in the inspection areas.

The visual inspections focused on signs of moisture, water intrusion, and visible mold growth.

Temperature and relative humidity data were compared to current New Jersey Indoor Air Quality and industry standards.

Epic Environmental performed the inspections on March 18, 2022.

### **Acceptable Temperature and Relative Humidity Criteria**

<b>Acceptable Indoor Temperature Range:</b>	<b>68° - 79° Fahrenheit</b>
<b>Ideal Relative Humidity Range:</b>	<b>30-60%</b>

The following rooms/areas were inspected:

Library, Room 16, Room 11, Room 15, Art Room

## **Observations, Comments, and Recommendations**

### **Weather Conditions: Sunny, 70° Fahrenheit, 60% Relative Humidity**

#### **Library**

No visible mold was observed.  
No evidence of recent water intrusion was observed.  
Relative humidity was within normal range (53%). Temperature was within the acceptable range.  
Airborne mold spore concentrations were near or below outside (background) concentrations.  
No action required at this time.

#### **Room 16**

No visible mold was observed.  
No evidence of recent water intrusion was observed.  
Relative humidity was within normal range (53%). Temperature was within the acceptable range.  
Airborne mold spore concentrations were near or below outside (background) concentrations.  
No action required at this time.

#### **Room 11**

No visible mold was observed.  
No evidence of recent water intrusion was observed.  
Relative humidity was within normal range (53%). Temperature was within the acceptable range.  
Airborne mold spore concentrations were near or below outside (background) concentrations.  
No action required at this time.

#### **Room 15**

No visible mold was observed.  
No evidence of recent water intrusion was observed.  
Relative humidity was within normal range (53%). Temperature was within the acceptable range.  
Airborne mold spore concentrations were near or below outside (background) concentrations.  
No action required at this time.

#### **Art Room**

No visible mold was observed.  
No evidence of recent water intrusion was observed.  
Relative humidity was within normal range (53%). Temperature was within the acceptable range.  
Airborne mold spore concentrations were near or below outside (background) concentrations.  
No action required at this time.

## **Air Sample Results**

Air samples were collected in each inspection area. Airborne mold spore concentrations were near or below background (outside) concentrations in all areas.

See Sample Data Summary

## **Conclusions and General Recommendations**

- Assure steps are taken to maintain a maximum relative humidity concentration of 60% during the summer months. This will reduce the overall probability of triggering mold activity.

Please do not hesitate to contact me at 856-205-1077 should you have any questions.

An invoice for the completed project is enclosed.

Regards,



James Eberts

President

Epic Environmental Services, LLC

## Sample Data Summary Air Sampling

Air Samples

March 18, 2022

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Library	3180	Ascospores 200
		Basidiospores 2700
		Cladosporium 200
		Curvularia 80
Room 16	7580	Ascospores 80
		Aspergillus/Penicillium 200
		Basidiospores 5200
		Cladosporium 2100
Room 11	2880	Aspergillus/Penicillium 200
		Basidiospores 2600
		Torula 80
Room 15	3960	Ascospores 80
		Aspergillus/Penicillium 80
		Basidiospores 3600
		Cladosporium 200
Art Room	480	Basidiospores 400
		Myxomycetes 80
Outside	23800	Ascospores 600
		Basidiospores 19800
		Cladosporium 3400

- Total mold counts found in **green** indicate a total airborne mold level NEAR or BELOW the outside (background) level.
- Total mold counts found in **red** indicate a total airborne mold level significantly ABOVE the outside (background) level, and may be an indicator of active mold growth.
- Individual molds listed in **green** indicate an individual airborne mold level NEAR or BELOW outside the (background) level.
- Individual molds listed in **purple** were not found in the background sample, but not considered evidence of a water/moisture issue or active mold growth.
- Individual molds listed in **red** indicate an individual airborne mold level significantly ABOVE the outside (background) level, and may be an indicator of active mold growth in the area.

Airborne mold spore concentrations were near or below background (outside) concentrations.



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-0262

<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

EMSL Order: 372204180

Customer ID: EPIC62

Customer PO: 22-1032

Project ID:

**Attention:** James Eberts  
Epic Environmental Services, LLC  
80 Fork Bridge Road  
Pittsgrove, NJ 08318

**Phone:** (856) 205-1077  
**Fax:** (856) 205-0413  
**Collected Date:** 03/18/2022  
**Received Date:** 03/21/2022  
**Analyzed Date:** 03/22/2022

**Project:** Reutter IAQ

### Test Report: Micro-5(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	372204180-0001			372204180-0002			372204180-0003		
Client Sample ID:	R-01			R-02			R-03		
Volume (L):	25			25			25		
Sample Location:	Outside			Library			Rm 16		
Spore Types	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 (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	7	600	2.5	2	200	6.3	1	80	1.1
Aspergillus/Penicillium	-	-	-	-	-	-	2	200	2.6
Basidiospores	248	19800	83.2	34	2700	84.9	65	5200	68.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	42	3400	14.3	3	200	6.3	26	2100	27.7
Curvularia	-	-	-	1	80	2.5	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Torula++	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>297</b>	<b>23800</b>	<b>100</b>	<b>40</b>	<b>3180</b>	<b>100</b>	<b>94</b>	<b>7580</b>	<b>100</b>
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	6	500	-	1	80	-	3	200	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Vincent Iuzzolino, M.S., Laboratory Director  
or other Approved Signatory

No discernable field blank was submitted with this group of samples.

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Accredited #100194

Initial report from: 03/23/2022 01:12 PM

For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com).



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### Test Report: Micro-5(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	372204180-0004			372204180-0005			372204180-0006		
Client Sample ID:	R-04			R-05			R-06		
Volume (L):	25			25			25		
Sample Location:	Rm 11			Rm 15			Art Rm		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	1	80	2	-	-	-
Aspergillus/Penicillium	2	200	6.9	1	80	2	-	-	-
Basidiospores	32	2600	90.3	45	3600	90.9	5	400	83.3
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	3	200	5.1	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	1	80	16.7
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Torula++	1	80	2.8	-	-	-	-	-	-
<b>Total Fungi</b>	<b>35</b>	<b>2880</b>	<b>100</b>	<b>50</b>	<b>3960</b>	<b>100</b>	<b>6</b>	<b>480</b>	<b>100</b>
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	1	80	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	2	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Vincent Iuzzolino, M.S., Laboratory Director  
or other Approved Signatory

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Initial report from: 03/23/2022 01:12 PM

For information on the fungi listed in this report, please visit the Resources section at [www.emsl.com](http://www.emsl.com)



# Microbiology Chain of Custody Form

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.  
200 Route 130 North  
Cinnaminson, NJ 08077

# 372204180

PHONE: (800) 220-3675

EMAIL: CinnMicroLab@emsl.com

EMSL ANALYTICAL, INC.  
TESTING LABS • PRODUCTS • TRAINING

\* Bill-To is the same as Report-To leave this section blank Third-party billing requires written authorization

Customer Information	Customer ID:	Billing ID:
	Company Name: <u>Epic Environmental</u>	Company Name:
	Contact Name: <u>Tim Ebers</u>	Billing Contact:
	Street Address: <u>80 Fork Bridge Rd</u>	Street Address:
	City, State, Zip: <u>Newfield, NJ, 08318</u> Country: <u>USA</u>	City, State, Zip: _____ Country: _____
	Phone: <u>609-501-9977</u>	Phone: _____
Email(s) for Report: <u>TIM + Jim Email</u>	Email(s) for Invoice: _____	

Project Information	
Project Name/No: <u>Restor IAQ</u>	Purchase Order: <u>22-1032</u>
EMSL LIMS Project ID (If applicable, EMSL will provide)	State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-taxable)
State Samples Collected: _____ Zip Code Collected: _____	

Sampled By Name: <u>Tim Ebers</u>	Sampled By Signature: <u>[Signature]</u>	No. of Samples in Shipment: <u>6</u>
-----------------------------------	--	--------------------------------------

Sterile, Sodium Thiosulfate Preserved Bottle Used:  Biocide Used in Source (specify) \_\_\_\_\_

Public Water Supply Samples:  Note: All results may automatically be reported to DOH if required by State.

Turn-Around-Time (TAT) Please call ahead for large projects and/or turnaround times 8 Hours or Less. \*32 Hour TAT available for select tests only; samples must be submitted by 11:30am.

3 Hour  6 Hour  24 Hour  32\* Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

MICROBIOLOGY TEST CODES			
M004 Air Q-Cell	M174 MoldSnap	M012 Pseudomonas aeruginosa (PIA***)	M115 Sewage Screen - Water (PIA***)
M030 Micro 5	M032 Allergenco-D	M024 Pseudomonas aeruginosa (MFT*)	M116 Sewage Screen - Water (MPN)
M041 Fungal Direct Examination		M015 Heterotrophic Plate Count	M117 Sewage Screen - Swab (PIA***)
M169 Pollen ID & Enumeration		M017 Total Coliform & E. Coli (Colilert PIA***)	M013 Sewage Screen - Swab (MFT*)
M280 Dust Characterization Level-1		M018 Total Coliform & E. Coli (MFT*)	M730 Methicillin-resistant Staph. aureus (MRSA)
M281 Dust Characterization Level-2		M114 Total Coliform & E. Coli Enumeration (Colilert MPN**)	M031 Rapid-growing non-TB Mycobacteria Detection & Enumeration
M005 Viable Fungi-Air Samples (Genus ID & Count)		M019 Fecal Coliform (MFT*)	M014 Endotoxin Analysis
M006 Viable Fungi-Air Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M020 Fecal Streptococcus (MFT*)	M044 Group Allergen (Cat, Dog, Cockroach, Dust Mite)
M007 Culturable Fungi-Surface Samples (Genus ID & Count)		M029 Enterococci (MFT*)	M095 Bacteroides
M008 Culturable Fungi-Surface Samples (Includes Penicillium, Aspergillus, Cladosporium, Stachybotrys Species ID & Count)		M129 Enterococci (Enterolert PIA***)	Other - See Analytical Price Guide for Test Code
M009 Bacteria Culture Gram Stain & Count		M180 Real Time qPCR-ERMI 36 Panel	Legionella Analysis Please use EMSL Legionella COC
M010 Bacteria Count & ID - 3 Most Prominent		M025 Sewage Screen - Water (MFT*)	
M011 Bacteria Count & ID - 5 Most Prominent		*MFT= Membrane Filtration Technique	
		**MPN = Most Probable Number	
		***PIA = Presence/Absence	

Sample #	Sample Location/Description	Sample Type (Matrix)	Potable / Non-Potable (Only for Water)	Test Code	Volume/Area	Date / Time Collected	Temperature (Lab Use Only)
<b>Examples:</b> Sample 1	Kitchen	Water	Potable	M017	1,000 ml	4/1/2021 8:30pm	
R-01	Outside	Air		M030	25L	3/18/22 1325	
R-02	libr-ry					1336	
R-03	Rm 16					1343	
R-04	Rm 11					1350	
R-05	Rm 15					1357	
R-06	ART RM					1405	

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Method of Shipment:	Sample Condition Upon Receipt
Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>
Date/Time: <u>3/21/22 1616</u>	Date/Time: <u>3/21/22 459</u>
Relinquished by:	Received by:
Date/Time:	Date/Time:

Controlled Document - CCC-34 Micro R13 03/02/2021  AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



**AIHA Laboratory Accreditation Programs, LLC**

*acknowledges that*

**EMSL Analytical, Inc.**

**200 Route 130 North Cinnaminson, NJ 08077**

**Laboratory ID: LAP-100194**

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**

- |                                     |                            |  |
|-------------------------------------|----------------------------|--|
| <input checked="" type="checkbox"/> | INDUSTRIAL HYGIENE         | Accreditation Expires: November 01, 2022 |
| <input checked="" type="checkbox"/> | ENVIRONMENTAL LEAD         | Accreditation Expires: November 01, 2022 |
| <input checked="" type="checkbox"/> | ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: November 01, 2022 |
| <input type="checkbox"/>            | FOOD                       | Accreditation Expires:                   |
| <input type="checkbox"/>            | 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](http://www.aihaaccreditedlabs.org)) for the most current Scope.

*Cheryl O. Morton*

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

Revision19: 09/01/2020

Date Issued: 10/31/2020