

October 3, 2018

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

**RE: Indoor Air Quality Inspection Report – September 2018**  
**Reutter Elementary School**  
**Epic Project No. 18-3150**

Dear Mr. Rambone:

**Epic Environmental Services, LLC (Epic)** was retained by the Franklin Township Board of Education (District) to perform an indoor air quality inspection at the Reutter Elementary School. The investigation consisted of a visual inspection and the collection of temperature, relative humidity, and carbon dioxide data. Additionally, samples for airborne mold spores were collected in three random locations throughout the school.

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

Temperature, relative humidity, and carbon dioxide data was compared to current New Jersey Indoor Air Quality and industry standards.

Epic Environmental performed the inspection September 14, 2018.

### **Acceptable Temperature, Relative Humidity, and Carbon Dioxide 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: Room 28, Room 26, Room 24, Room 54/55, Room 50/51, Room 21, Faculty Room, Room 16, Room 12, Room 14, Room 15, Room 11, Media Center, All Purpose Room, Room 42, Room 43, Room 3, Room 1, and Room 27.

Weather the day of the inspection: clouds/drizzle, 72°, and 72% relative humidity

## Observations, Comments, and Recommendations

### Room 28

No visible mold was observed.  
Relative humidity was elevated (84%).

### Room 26

No visible mold was observed.  
Relative humidity was elevated (75%).

### Room 24

No visible mold was observed.  
Relative humidity was elevated (79%).

### Room 54/55

No visible mold was observed.  
Relative humidity was elevated (60%).

### Room 50/51

No visible mold was observed.  
Relative humidity was elevated (64%).

### Room 21

No visible mold was observed.  
Relative humidity was elevated (77%).

### Faculty Room

No visible mold was observed.  
Relative humidity was elevated (77%).

### Room 16

No visible mold was observed.  
Relative humidity was elevated (87%).

### Room 12

Visible mold was observed on coat closet doors. ✓  
Relative humidity was elevated (83%).  
Clean mold using approved anti-fungal cleaner.

*Custodians cleaned  
week of Oct 2, 2018*

### Room 14

No visible mold was observed.  
Relative humidity was elevated (82%).

### Room 11

Visible mold was observed on coat closet doors. ✓  
Relative humidity was elevated (81%).  
Clean mold using approved anti-fungal cleaner.

### Media Center

No visible mold was observed.  
Relative humidity was elevated (72%).

## **Observations, Comments, and Recommendations (cont)**

### **All Purpose Room**

No visible mold was observed.

Relative humidity was elevated (77%).

### **Room 42**

No visible mold was observed.

Relative humidity was elevated (82%).

### **Room 44**

No visible mold was observed.

Relative humidity was elevated (77%).

### **Room 3**

No visible mold was observed.

Relative humidity was elevated (66%).

### **Room 1**

No visible mold was observed.

Relative humidity was elevated (77%).

### **Room 27**

No visible mold was observed.

Relative humidity was elevated (77%).

## **Air Sample Results**

Air samples were collected in three random locations throughout the school. Airborne mold spore concentrations were near or below background (outside) concentrations.

See Sample Data Summary

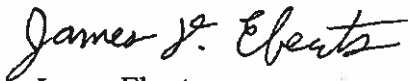
## Conclusions

- Elevated humidity has resulted in very minor mold activity in the school.
- Assure steps are taken to reduce relative humidity to a maximum of 60% during the summer cooling season. Although most mold activity is not likely to start until extended periods of 75% or higher relative humidity are experienced, it is recommended to have the goal of 60%.

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		September 14, 2018	
Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )		
	Total	Individual Mold Concentrations	
Room 27	5,400	Aspergillus/Penicillium	600
		Basidiospores	4,800
Room 47	6,760	Aspergillus/Penicillium	960
		Basidiospores	5,800
Room 35	18,580	Ascospores	200
		Aspergillus/Penicillium	500
		Basidiospores	17,800
		Pithomyces	80
Outside by Faculty Room	81,880	Ascospores	1,400
		Aspergillus/Penicillium	1,400
		Basidiospores	78,600
		Cladosporium	200
		Bispora	200

- 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  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

Order ID: 371816112  
Customer ID: EPIC62  
Customer PO: 18-3150  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
1930 Brown Road  
Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 09/14/2018  
Received: 09/14/2018  
Analyzed: 09/20/2018

Proj: Franklin Twp BOE - Semi-Annual IAQ Inspection - Reutter ES

Test Report: Micro-6™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Test Report: Micro-5(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods Micro-501 - 504, Revision 01/2017)									
Lab Sample Number:	371816112-0001			371816112-0002			371816112-0003		
Client Sample ID:	RES-01			RES-02			RES-03		
Volume (L):	25			25			25		
Sample Location:	Outside By Faculty Room			Rm 27			Rm 16		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascomycetes	17	1400	1.7	-	-	-	-	-	-
Aspergillus/Penicillium	18	1400	1.7	7	600	11.1	12	960	14.2
Basidiospores	982	78600	98	60	4800	88.9	73	5800	85.8
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	2	200	0.2	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	3	200	0.2	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Bispora	1	80	0.1	-	-	-	-	-	-
Total Fungi	1023	81880	100	67	5400	100	85	6760	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	2	-	-	1	-

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

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 09/20/2018 17:43:26

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

Test Report SPVER3-7.30.4 Printed: 9/20/2018 05:43:26PM

Page 1 of 2





# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

Order ID: 371816112  
Customer ID: EPIC62  
Customer PO: 18-3150  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
1930 Brown Road  
Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 09/14/2018  
Received: 09/14/2018  
Analyzed: 09/20/2018

Proj: Franklin Twp BOE - Semi-Annual IAQ Inspection - Reutter ES

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

Lab Sample Number:	371816112-0004		
Client Sample ID:	RES-04		
Volume (L):	25		
Sample Location:	Library/Media Center		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total
Alteriaria (Ulocladium)	-	-	-
Ascospores	2	200	1.1
Aspergillus/Penicillium	8	500	2.7
Basidiospores	222	17800	95.8
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces++	1	80	0.4
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Bispora	-	-	-
<b>Total Fungi</b>	<b>231</b>	<b>18580</b>	<b>100</b>
Hyphal Fragment	1	80	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	80	-
Analyt. Sensitivity 300x	-	40*	-
Skin Fragments (1-4)	-	3	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	3	-

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

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 09/20/2018 17:43:26

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

Test Report SPVER3-7.30.4 Printed: 9/20/2018 05:43:26PM

Page 2 of 2

371816112

# Environmental Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

Westmont, NJ  
107 Haddon Avenue  
Westmont, NJ 08108  
PHONE: (856) 858-4800  
FAX: (856) 858-4800

RECEIVED  
EMSL  
MINNAMINSON, N.J.

EMSL ANALYTICAL, INC.  
ANALYTICAL SERVICES

Company: Epic Environmental Services, LLC		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments*	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Nowfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Franklin Twp BOE - Semi-Annual IAQ Inspection - <i>Reuther ES</i>			
Please Provide Results: Email		Purchase Order: 18-3150	
		Specs Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 1 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. (ATs are subject to methodology requirements)			
Non Culturable Air Samples (Spore Traps)			
<ul style="list-style-type: none"> <li>• M001 Air-O-Cell</li> <li>• M048 BioSIS</li> <li>• M030 Micro 5</li> <li>• M173 Alegro M2</li> <li>• M063 Burkard</li> <li>• M174 MoldSnap</li> <li>• M064 Allergenco</li> <li>• M063 Cyclax</li> <li>• M176 Rette Smart</li> <li>• M032 Allergenco-D</li> <li>• M002 Cyclax-4</li> <li>• M130 Via-Cell</li> <li>• M172 Vortex Trap</li> </ul>			
Other Microbiology Test Codes			
<ul style="list-style-type: none"> <li>• M041 Fungal Direct Examination</li> <li>• M005 Viable Fungi ID and Count</li> <li>• M006 Viable Fungi ID and Count (Speciation)</li> <li>• M007 Culturable Fungi</li> <li>• M008 Culturable Fungi (Speciation)</li> <li>• M009 Gram Stain Culturable Bacteria</li> <li>• M010 Bacterial Count and ID - 3 Most Prominent</li> <li>• M011 Bacterial Count and ID - 5 Most Prominent</li> <li>• M012 Sewage Contamination in Buildings</li> <li>• M014 Endotoxin Analysis</li> <li>• M015 Heterotrophic Plate Count</li> <li>• M100 Real Time Q-PCR-ERMJ 36 Panel</li> <li>• M018 Total Coliform (Membrane Filtration)</li> <li>• M028 Fecal Streptococcus (Membrane Filtration)</li> <li>• M210-213 Legionella Detection</li> <li>• M026 Recreational Water Screen</li> <li>• M027 Mycotoxin Analysis</li> <li>• M029 Enterococci</li> <li>• M078 Fecal Coliform</li> <li>• M133 MRSA Analysis</li> <li>• M025 Cryptococcus neoformans Detection</li> <li>• M128 Histoplasma capsulatum Detection</li> <li>• M033-38 Allergen Testing</li> <li>• M044 Group A Strep (Cat, Dog, Cockroach, Dustmites)</li> <li>• Other See Analytical Price Guide</li> </ul>			
Preservation Method (Water):			
Name of Sampler: James Eberts		Signature of Sampler: <i>James Eberts</i>	
Sample #	Sample Location	Sample Type	Test Code
RES-01	Outside by Faculty Rm	Air	M030
RES-02	Rm 27	I	
RES-03	Rm 16	I	
RES-04	Library / media ctr.	I	
	End of Samples		
Client Sample # (s): RES-01 - 704		Total # of Samples: 4	
Relinquished (Client): <i>James Eberts</i>		Date: 9/14/18	Time: 8:20
Received (Client): <i>[Signature]</i>		Date: 9/14/18	Time: 8:20
Comments/Special Instructions:			





## AIHA Laboratory Accreditation Programs, LLC

*acknowledges that*

### EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 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 17025:2005 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: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL LEAD         | Accreditation Expires: September 01, 2018 |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: September 01, 2018 |
| <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 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website ([www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org)) for the most current Scope.

*William Walsh*

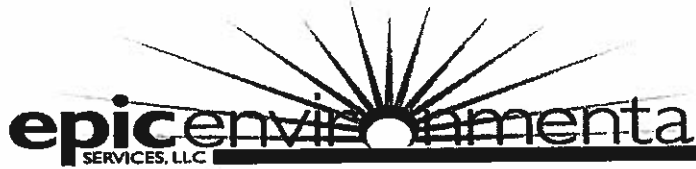
William Walsh, CIH  
Chairperson, Analytical Accreditation Board

Revision 15: 03/30/2016

*Cheryl O. Morton*

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

Date Issued: 08/31/2016



November 2, 2018

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

**RE: Indoor Air Quality Inspection and Follow-up Report**  
**Main Road Elementary School**  
**Epic Project No. 18-3150/18-4199**

Dear Mr. Rambone:

**Epic Environmental Services, LLC (Epic)** was retained by the Franklin Township Board of Education (District) to perform an indoor air quality inspection at the Main Road Elementary School. The investigation consisted of a visual inspection and the collection of temperature, relative humidity, and carbon dioxide data. Additionally, samples for airborne mold spores were collected in four random locations throughout the school.

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

Temperature, relative humidity, and carbon dioxide data was compared to current New Jersey Indoor Air Quality and industry standards.

Epic Environmental performed the inspection September 18, 2018.

### **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 initial scope of the inspection was to include random inspections of classrooms in each hallway of the school. The scope of the inspection was expanded when mold was identified in each hallway of the school.

Visible mold was observed in the following rooms: 36, 12, 21, 17, 18, 19, 20, 22, 16, 15, 13, 14, 53, 70, 59, 57, and 66. Mold was observed on book shelves, tables, cabinets, under tables, and chairs. It is likely that mold activity is also present in additional classrooms as well.

Air samples were collected in four locations throughout the school. Airborne mold spore concentrations were near or below background (outside) concentrations. It is not likely that, on the day of the inspection, the mold activity was causing elevated airborne spore concentrations.

See Sample Data Summary

#### **HEALTH**

Epic Environmental Services, LLC  
Tele: 856.205.1077

#### **SAFETY**

1930 Brown Road  
www.epic-env.com

#### **ENVIRONMENT**

Newfield, New Jersey 08344  
Fax: 856.205.0413

The mold activity has been triggered by significantly elevated relative humidity present in the school. Relative humidity levels ranged from 75% to 94%. The ideal high relative humidity level is 60%. Depending on conditions, mold activity can be triggered by extended periods above 75%. Several rooms had relative humidity levels above 85% (Rooms 36, 21, 17, 18, 83, 16, 92, 13, 14, 53, 70, and 57).

The District decided that the mold clean-up will be performed by school maintenance and custodial personnel. It was strongly recommended that the cleanup include all surfaces mentioned previously in the report, and should be done in every classroom, not just the rooms listed and that preferably, the clean-up should be performed by a professional company.

The District was also advised that airborne mold spore concentrations will increase during cleanup activities, and that surfaces and rags must be wetted before cleaning.

### **Follow-up Inspections and Sampling**

Epic performed follow-up inspections and air sampling October 10, 2018. The following rooms were inspected and sampled: 4, 6, 12, 13, 16, 18, 20, 36, 53, 59, and 66.

No visible mold was observed in the rooms inspected. Mold spore concentrations in each room sampled were near or below background (outside) concentrations with the exception of Room 53. Maintenance inspected the room and identified a malfunctioning compressor in the room's air conditioner.

The air conditioner was addressed and Room 53 was resampled on October 23, 2018. Airborne mold concentrations were near or below background (outside) concentrations.

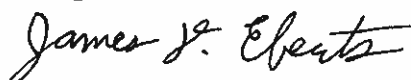
### **Conclusions and Recommendations**

- Elevated humidity had resulted in mold activity throughout the school.
- Visible surface mold was effectively cleaned by school staff.
- Assure steps are taken to reduce relative humidity to a maximum of 60% during the summer cooling season. Although most mold activity is not likely to start until extended periods of 75% or higher relative humidity are experienced, it is recommended to have the goal of 60%.

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

September 18, 2018

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Room 12	2,480	Aspergillus/Penicillium 1,100
		Basidiospores 800
		Cladosporium 300
		Ganoderma 200
		Pithomyces 40
		Rust 40
Room 18	4,360	Ascospores 400
		Aspergillus/Penicillium 80
		Basidiospores 3,000
		Bipolaris 80
		Cladosporium 400
		Myxomycetes 400
Room 59	6,780	Ascospores 200
		Aspergillus/Penicillium 880
		Basidiospores 4,900
		Cladosporium 200
		Myxomycetes 600
Room 6	18,780	Alternaria 40
		Ascospores 400
		Aspergillus/Penicillium 700
		Basidiospores 17,400
		Cladosporium 80
		Myxomycetes 80
		Cercospora 80
Outside by Main Entrance	55,260	Alternaria 200
		Ascospores 1,700
		Aspergillus/Penicillium 1,800
		Basidiospores 48,900
		Cladosporium 1,700
		Curvularia 40
		Fusarium 200
		Ganoderma 80
		Pithomyces 200
		Cercospora 200
		Nigrospora 200
		Pestalotia/Pestalotiopsis 40

- 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.

#### HEALTH

Epic Environmental Services, LLC  
Tele: 856.205.1077

#### SAFETY

1930 Brown Road  
www.epic-env.com

#### ENVIRONMENT

Newfield, New Jersey 08344  
Fax: 856.205.0413

## Sample Data Summary

### Follow-up Air Sampling

#### Air Samples

October 10, 2018

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Room 4	1,540	Ascospores 40
		Aspergillus/Penicillium 200
		Basidiospores 700
		Cladosporium 400
		Myxomycetes 200
Room 6	3,860	Ascospores 200
		Aspergillus/Penicillium 300
		Basidiospores 1,400
		Cladosporium 500
		Ganoderma 80
		Myxomycetes 800
		Cercospora 80
Room 12	1,040	Paecilomyces-like 500
		Aspergillus/Penicillium 300
		Basidiospores 80
		Cladosporium 500
		Myxomycetes 80
Room 13	600	Nigrospora 80
		Ascospores 80
		Aspergillus/Penicillium 200
		Basidiospores 200
		Myxomycetes 80
Room 16	4,700	Unidentifiable Spores 40
		Ascospores 80
		Aspergillus/Penicillium 2,300
		Basidiospores 960
		Cladosporium 1,000
		Fusarium 40
		Ganoderma 80
		Myxomycetes 80
Room 18	4,060	Cercospora 80
		Torula-like 80
		Ascospores 500
		Aspergillus/Penicillium 600
		Basidiospores 2,100
		Cladosporium 700
		Myxomycetes 80
		Cercospora 80

- 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.

#### HEALTH

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## Sample Data Summary

### Follow-up Air Sampling

#### Air Samples

October 10, 2018

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Room 20	3,140	Ascospores 200
		Aspergillus/Penicillium 600
		Basidiospores 600
		Cladosporium 700
		Curvularia 80
		Myxomycetes 800
		Pithomyces 80
		Unidentifiable Spores 80
Room 36	1,160	Ascospores 200
		Aspergillus/Penicillium 300
		Basidiospores 300
		Curvularia 80
		Myxomycetes 200
		Cercospora 80
Room 53	9,180	Ascospores 80
		Aspergillus/Penicillium 7,700
		Basidiospores 600
		Cladosporium 300
		Myxomycetes 500
Room 59	5,280	Ascospores 200
		Aspergillus/Penicillium 200
		Basidiospores 1,700
		Cladosporium 1,800
		Fusarium 80
		Ganoderma 200
		Myxomycetes 200
		Cercospora 200
Room 66	10,040	Paecilomyces-like 700
		Alternaria 80
		Ascospores 200
		Aspergillus/Penicillium 1,400
		Basidiospores 3,000
		Cladosporium 200
		Curvularia 80
		Myxomycetes 5,000
		Cercospora 80

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- 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.
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## Sample Data Summary

### Follow-up Air Sampling

#### Air Samples

October 10, 2018

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Outside by Main Entrance	12,640	Ascospores 600
		Aspergillus/Penicillium 2,200
		Basidiospores 4,700
		Cladosporium 2,700
		Epicoccum 40
		Fusarium 300
		Ganoderma 80
		Myxomycetes 200
		Acremonium-like 700
		Cercospora 700
		Chromelosporium 200
		Coelomycetes 40
		Nigrospora 40
		Pyricularia 40
		Torula-like 100

- 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.

Mold spore concentrations in each room sampled were near or below background (outside) concentrations with the exception of Room 53.

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## Sample Data Summary

### Follow-up Air Sampling

#### Air Samples

October 23, 2018

Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )	
	Total	Individual Mold Concentrations
Outside by Main Entrance	10,220	Alternaria 40
		Ascospores 500
		Aspergillus/Penicillium 2,000
		Basidiospores 3,300
		Cladosporium 2,000
		Curvularia 40
		Ganoderma 80
		Myxomycetes 1,300
		Paecilomyces-like 800
		Pestalotia/Pestalotiopsis 80
		Torula-like 80
Room 53	6,840	Ascospores 400
		Aspergillus/Penicillium 2,200
		Basidiospores 2,400
		Chaetomium 80
		Cladosporium 1,400
		Myxomycetes 200
		Arthrimum 80
		Torula-like 80

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- 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 concentrations were near or below background (outside) concentrations.

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Order ID: 371818419  
Customer ID: EPIC62  
Customer PO: 18-4199  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
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Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 10/10/2018  
Received: 10/11/2018  
Analyzed: 10/12/2018

Proj: Franklin Twp BOE - Main Road School Follow-Up IAQ Inspection

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

Lab Sample Number:	371818419-0001			371818419-0002			371818419-0003		
Client Sample ID:	MRS-01			MRS-02			MRS-03		
Volume (L):	25			25			25		
Sample Location:	Room 6			Room 4			Room 12		
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	2	200	5.2	1*	40*	2.6	-	-	-
Aspergillus/Penicillium	4	300	7.8	2	200	13	4	300	28.8
Basidiospores	18	1400	36.3	9	700	45.5	1	80	7.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	6	500	13	5	400	26	6	500	48.1
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	1	80	2.1	-	-	-	-	-	-
Myxomycetes++	10	800	20.7	3	200	13	1	80	7.7
Pithomyces++	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Acremonium-like	-	-	-	-	-	-	-	-	-
Cercospora++	1	80	2.1	-	-	-	-	-	-
Chromelosporium++	-	-	-	-	-	-	-	-	-
Coelomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	1	80	7.7
Paecilomyces-like	6	500	13	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>48</b>	<b>3860</b>	<b>100</b>	<b>20</b>	<b>1540</b>	<b>100</b>	<b>13</b>	<b>1040</b>	<b>100</b>
Hyphal Fragment	1	80	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1	80	-	-	-	-	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	-	-	2	-

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

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 10/12/2018 10:52:56

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

Test Report SPVER3-7.30.4 Printed: 10/12/2018 10:52:56AM

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Epic Environmental Services, LLC  
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Newfield, NJ 08344

Phone: (856) 205-1077  
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Collected: 10/10/2018  
Received: 10/11/2018  
Analyzed: 10/12/2018

Proj: Franklin Twp BOE - Main Road School Follow-Up IAQ Inspection

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

Lab Sample Number:	371818419-0004			371818419-0005			371818419-0006		
Client Sample ID:	MRS-04			MRS-05			MRS-06		
Volume (L):	25			25			25		
Sample Location:	Room 13			Room 16			Room 18		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	2*	80*	13.3	1	80	1.7	6	500	12.3
Aspergillus/Penicillium	2	200	33.3	29	2300	48.9	8	600	14.8
Basidiospores	3	200	33.3	12	960	20.4	26	2100	51.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	13	1000	21.3	9	700	17.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	1*	40*	0.9	-	-	-
Ganoderma	-	-	-	1	80	1.7	-	-	-
Myxomycetes++	1	80	13.3	1	80	1.7	1	80	2
Pithomyces++	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	1*	40*	6.7	-	-	-	-	-	-
Acremonium-like	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	1	80	1.7	1	80	2
Chromelosporium++	-	-	-	-	-	-	-	-	-
Coelomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces-like	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	1	80	1.7	-	-	-
Total Fungi	9	600	100	60	4700	100	51	4060	100
Hyphal Fragment	3	200	-	-	-	-	1*	40*	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	1	-

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

*Vincent Iuzzolino*

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

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

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

Initial report from: 10/12/2018 10:52:56

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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Customer ID: EPIC62  
Customer PO: 18-4199  
Project ID:

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Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 10/10/2018  
Received: 10/11/2018  
Analyzed: 10/12/2018

Proj: Franklin Twp BOE - Main Road School Follow-Up IAQ Inspection

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

Lab Sample Number:	371818419-0007			371818419-0008			371818419-0009		
Client Sample ID:	MRS-07			MRS-08			MRS-09		
Volume (L):	25			25			25		
Sample Location:	Room 20			Room 36			Room 53		
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	2	200	6.4	2	200	17.2	1	80	0.9
Aspergillus/Penicillium	7	600	19.1	4	300	25.9	96	7700	83.9
Basidiospores	8	600	19.1	4	300	25.9	7	600	6.5
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	9	700	22.3	-	-	-	4	300	3.3
Curvularia	1	80	2.5	1	80	6.9	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	10	800	25.5	3	200	17.2	6	500	5.4
Pithomyces++	1	80	2.5	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	1	80	2.5	-	-	-	-	-	-
Acremonium-like	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	1	80	6.9	-	-	-
Chromelosporium++	-	-	-	-	-	-	-	-	-
Coelomycetes	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Paecilomyces-like	-	-	-	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	-	-	-
Torula-like	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>39</b>	<b>3140</b>	<b>100</b>	<b>15</b>	<b>1160</b>	<b>100</b>	<b>114</b>	<b>9180</b>	<b>100</b>
Hyphal Fragment	-	-	-	-	-	-	1	80	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
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	-	-	2	-

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

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

*Vincent Iuzzolino*

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

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Initial report from: 10/12/2018 10:52:56

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Collected: 10/10/2018  
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Proj: Franklin Twp BOE - Main Road School Follow-Up IAQ Inspection

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

Lab Sample Number:	371818419-0010			371818419-0011			371818419-0012		
Client Sample ID:	MRS-10			MRS-11			MRS-12		
Volume (L):	25			25			25		
Sample Location:	Room 59			Room 66			Outside By Front Entrance		
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)	-	-	-	1	80	0.8	-	-	-
Ascospores	2	200	3.8	3	200	2	8	600	4.7
Aspergillus/Penicillium	3	200	3.8	18	1400	13.9	27	2200	17.4
Basidiospores	21	1700	32.2	37	3000	29.9	59	4700	37.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	22	1800	34.1	3	200	2	34	2700	21.4
Curvularia	-	-	-	1	80	0.8	-	-	-
Epicoccum	-	-	-	-	-	-	1*	40*	0.3
Fusarium	1	80	1.5	-	-	-	4	300	2.4
Ganoderma	3	200	3.8	-	-	-	1	80	0.8
Myxomycetes++	3	200	3.8	63	5000	49.8	2	200	1.6
Pithomyces++	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Acremonium-like	-	-	-	-	-	-	9	700	5.5
Cercospora++	2	200	3.8	1	80	0.8	9	700	5.5
Chromelosporium++	-	-	-	-	-	-	2	200	1.6
Coelomycetes	-	-	-	-	-	-	1*	40*	0.3
Nigrospora	-	-	-	-	-	-	1*	40*	0.3
Paecilomyces-like	9	700	13.3	-	-	-	-	-	-
Pyricularia	-	-	-	-	-	-	1*	40*	0.3
Torula-like	-	-	-	-	-	-	3*	100*	0.8
<b>Total Fungi</b>	<b>66</b>	<b>5280</b>	<b>100</b>	<b>127</b>	<b>10040</b>	<b>100</b>	<b>162</b>	<b>12640</b>	<b>100</b>
Hyphal Fragment	-	-	-	2	200	-	1*	40*	-
Insect Fragment	-	-	-	1	80	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	4	-	-	1	-

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

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 10/12/2018 10:52:56

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

Test Report SPVER3-7.30.4 Printed: 10/12/2018 10:52:56AM

Page 4 of 4

*Vincent Iuzzolino*

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

371818419

## Environmental Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

Westmont, NJ  
107 Haddon Avenue  
Westmont, NJ 08108  
PHONE: (856) 859-4800  
FAX: (856) 859-4980



Company: Epic Environmental Services, LLC		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Franklin Twp BOE - Main Road School Follow-up IAQ Inspection			
Please Provide Results: Email		Purchase Order: 18-4199	
		State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions Attached in the Laboratory Price Guide. TATs are subject to extraordinary requirements.			
Non-Culturable Air Samples (Spore Traps)			
<input type="checkbox"/> M001 Air-O-Chek <input type="checkbox"/> M172 Alpha M2 <input type="checkbox"/> M004 Allergenco <input type="checkbox"/> M032 Allergenco-D <input type="checkbox"/> M172 Varsa Trap <input type="checkbox"/> M005 BioStat <input type="checkbox"/> M003 BioRad <input type="checkbox"/> M003 Cyclone <input type="checkbox"/> M002 Cyclone-d <input type="checkbox"/> <input type="checkbox"/> M006 Micro B <input type="checkbox"/> M174 MoldSnap <input type="checkbox"/> M175 Hella Smart <input type="checkbox"/> M130 Via Cell			
Other Microbiology Test Codes			
<input type="checkbox"/> M041 Fungal Direct Examination <input type="checkbox"/> M005 Viable Fung. ID and Count <input type="checkbox"/> M006 Viable Fung. ID and Count (Speciation) <input type="checkbox"/> M007 Culturable Fung. <input type="checkbox"/> M008 Culturable Fung. (Speciation) <input type="checkbox"/> M009 Gram Stain Culturable Bacteria <input type="checkbox"/> M010 Bacterial Count and ID - 3 Most Prominent <input type="checkbox"/> M011 Bacterial Count and ID - 5 Most Prominent <input type="checkbox"/> M013 Sewage Contamination in Buildings <input type="checkbox"/> M014 Endotoxin Analysis <input type="checkbox"/> M015 Microscopic Plate Count <input type="checkbox"/> M160 Real Time qPCR-ERMI 35 Panel <input type="checkbox"/> M016 Total Dettoren (Membrane Filtration) <input type="checkbox"/> M020 Fecal Streptococcus (Membrane Filtration) <input type="checkbox"/> M210-215 Legionella Detection <input type="checkbox"/> M022 Recreational Water Screen <input type="checkbox"/> M023 Urinalysis Analysis <input type="checkbox"/> M025 Enterobacter <input type="checkbox"/> M019 Fecal Coliform <input type="checkbox"/> M123 MREA Analysis <input type="checkbox"/> M028 Cryptosporidium oocysts Detection <input type="checkbox"/> M126 Histoplasma capsulatum Detection <input type="checkbox"/> M023-35 Allergen Testing <input type="checkbox"/> M044 Group Allergen (Cat, Dog, Cockroach, Dustmites) <input type="checkbox"/> Other See Analytical Price Guide			
Preservation Method (Water):			
Name of Sampler: James Eberts		Signature of Sampler: James Eberts	
Sample #	Sample Location	Sample Type	Test Code
MRS-01	Room 6	Air	M070
MRS-02	Room 7		
MRS-03	Room 12		
MRS-04	Room 13		
MRS-05	Room 16		
MRS-06	Room 18		
MRS-07	Room 20		
MRS-08	Room 36		
MRS-09	Room 53		
MRS-10	Room 59		
Client Sample # (all)	MRS-01 - 12	Total # of Samples:	12
Relinquished (Client):	Date: 10/11/18	Time:	
Received (Client):	Date: 10/11/18	Time: 1140am	
Comments/Special Instructions:			

12/24



**ENSL Order Number (Lab Use Only):**

**Westmont, NJ**  
107 Haddon Avenue  
Westmont, NJ 08108  
PHONE: (856) 858-4800  
FAX: (856) 858-4960

<b>Company:</b> Epic Environmental Services, LLC		<b>EMSL-Bill to:</b> <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If bill is to different note instructions in Comments*			
<b>Street:</b> 193D Brown Road		<b>Third Party Billing requires written authorization from third party</b>			
<b>City/State/Zip:</b> Newfield, NJ 08344					
<b>Report To (Name):</b> James Eberts	<b>Fax:</b> 856-205-0413				
<b>Telephone:</b> 856-205-1077	<b>Email Address:</b> jeberts@epicenviro.com				
<b>Project Name/Number:</b> Franklin Twp BOE - Main Road School Follow-up		<b>AQ Inspection</b>			
<b>Please Provide Results:</b> Email	<b>Purchase Order:</b> 18-4199	<b>State Samples Taken:</b> NJ			
<b>Turnaround Time (TAT) Options* Please Check</b>					
<input type="checkbox"/> 1 Hour	<input type="checkbox"/> 4 Hours	<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours		
<input type="checkbox"/> 72 Hours	<input type="checkbox"/> 96 Hours	<input type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Weeks		
*Analysis completed in accordance with EMSL's Times and Conditions listed in the Analytical Price Guide. TAT is not subject to methodology requirements.					
<b>Non-Culturable Air Samples (Spore Traps)</b>					
<input type="checkbox"/> M001 Air-O-Cell	<input type="checkbox"/> M175 Allergo-M2	<input type="checkbox"/> M004 Allergen-D	<input type="checkbox"/> M032 Allergen-D		
<input type="checkbox"/> M002 Bio-Sed	<input type="checkbox"/> M003 Bio-Rad	<input type="checkbox"/> M043 Cycloplex	<input type="checkbox"/> M002 Cycloplex		
<input type="checkbox"/> M000 Micro-S	<input type="checkbox"/> M174 Micro-Snap	<input type="checkbox"/> M176 Rite-Snap	<input type="checkbox"/> M150 Vira-Cell		
<b>Other Microbiology Test Codes:</b>					
<input type="checkbox"/> M001 Fungal Direct Examination	<input type="checkbox"/> M014 Endotoxin Analysis	<input type="checkbox"/> M026 Emergence			
<input type="checkbox"/> M005 Visible Fung ID and Count	<input type="checkbox"/> M016 Heterotrophic Plate Count	<input type="checkbox"/> M019 Fecal Coliform			
<input type="checkbox"/> M006 Yeast Fung ID and Count (Speciation)	<input type="checkbox"/> M100 Real Time Q-POR-ERM 36	<input type="checkbox"/> M133 MRSA Analysis			
<input type="checkbox"/> M007 Culturable Fung	<input type="checkbox"/> Pated	<input type="checkbox"/> M028 Cryptosporidium Detection			
<input type="checkbox"/> M008 Culturable Fung (Speciation)	<input type="checkbox"/> M016 Total Coliform (Membrane Filtration)	<input type="checkbox"/> M126 Helicobacter pylori Detection			
<input type="checkbox"/> M009 Gram Stain Culturable Bacteria	<input type="checkbox"/> M026 Fecal Streptococcus (Membrane Filtration)	<input type="checkbox"/> M043-35 Allergen Testing			
<input type="checkbox"/> M010 Bacterial Count and ID - 5 Most Probable	<input type="checkbox"/> M210-215 Legionella Detection	<input type="checkbox"/> M044 Group Allergen (Cat, Dog, Cockroach, Dust/Mites)			
<input type="checkbox"/> M011 Bacterial Count and ID - 5 Most Probable	<input type="checkbox"/> M028 Fluorescent Water Screen	<input type="checkbox"/> Other See Analytical Price Guide			
<input type="checkbox"/> M012 Sewage Contamination in Buildings	<input type="checkbox"/> M027 Mycotoxin Analysis				
<b>Preservation Method (Water):</b>					
<b>Name of Sampler:</b> James Eberts		<b>Signature of Sampler:</b>			
Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
MRS-11	Room 66	Air	m930	25L	10/16/18 1630
MRS-12	outside-by front Ent. End of samples	L	L	25L	2 1530
<b>Client Sample # (if):</b>		<b>Total # of Samples:</b>			
<b>Relinquished (Client):</b>		<b>Date:</b>	<b>Time:</b>		
<b>Received (Client):</b>		<b>Date:</b>	<b>Time:</b>		
<b>Comments/Special Instructions:</b>					
See Page I					



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

Order ID: 371819562  
Customer ID: EPIC62  
Customer PO: 18-4199  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
1930 Brown Road  
Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 10/23/2018  
Received: 10/25/2018  
Analyzed: 10/25/2018

Proj: Franklin Twp BOE - Main Road School Follow-Up IAQ Inspection

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

Lab Sample Number:	371819562-0001	371819562-0002	
Client Sample ID:	MRS-01	MRS-02	
Volume (L):	25	25	
Sample Location:	Outside By Main Entrance	Room 53	
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total
Alternaria (Ulocladium)	1*	40*	0.4
Ascospores	6	500	4.9
Aspergillus/Penicillium	25	2000	19.6
Basidiospores	41	3300	32.3
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	25	2000	19.6
Curvularia	1*	40*	0.4
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	1	80	0.8
Myxomycetes++	16	1300	12.7
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Arthrimum	-	-	-
Paecilomyces-like	10	800	7.8
Pestalotia/Pestalotiopsis	1	80	0.8
Torula-like	1	80	0.8
<b>Total Fungi</b>	<b>128</b>	<b>10220</b>	<b>100</b>
Hyphal Fragment	7	600	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	80	-
Analyt. Sensitivity 300x	-	40*	-
Skin Fragments (1-4)	-	2	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	2	-

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

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 10/26/2018 09:28:44

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

Test Report SPVER3-7.30.4 Printed: 10/26/2018 09:28:44AM



RECEIVED  
EMSLEnvironmental Microbiology Chain of  
Custody2018 OCT 25 AM 11:12  
EMSL Order Number (Lab Use Only):

371819562

Westmont, NJ  
107 Haddon Avenue  
Westmont, NJ 08108  
PHONE: (856) 858-4800  
FAX: (856) 858-4880

Company: Epic Environmental Services, LLC		EMSL-BB for: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If different note instructions in Comments*	
Street: 1030 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Franklin Twp BOE - Main Road School Follow-up IAQ Inspection			
Please Provide Results: Email		Purchase Order: 18-4199	
		State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis performed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TAT is subject to methodology requirements.			
Non Culturable Air Samples (Spore Traps)			
<input type="checkbox"/> M001 Air-Gel Cell <input type="checkbox"/> M173 Aqueous M2 <input type="checkbox"/> M004 Allergen-D <input type="checkbox"/> M002 Allergen-D <input type="checkbox"/> M172 Virus Trap <input type="checkbox"/> M009 Bio-Sil <input type="checkbox"/> M003 Burkard <input type="checkbox"/> M005 Cyclon <input type="checkbox"/> M002 Cyclon <input type="checkbox"/> <input type="checkbox"/> M000 Micro S <input type="checkbox"/> M174 MoldTrap <input type="checkbox"/> M175 Heli-Smart <input type="checkbox"/> M130 Via-Gel			
Other Microbiology Test Codes			
<input type="checkbox"/> M041 Fungal Direct Examination <input type="checkbox"/> M014 Endotoxin Analysis <input type="checkbox"/> M028 Enterobacter <input type="checkbox"/> M005 Viable Fung ID and Count <input type="checkbox"/> M015 Microbiologic Plate Count <input type="checkbox"/> M019 Fecal Coliform <input type="checkbox"/> M006 Viable Fung ID and Count (Speciation) <input type="checkbox"/> M180 Real Time Q-PCR-ERM 06 <input type="checkbox"/> M153 MRSA Analysis <input type="checkbox"/> M007 Culturable Fung <input type="checkbox"/> Panel <input type="checkbox"/> M028 <i>Corynebacterium jeikeium</i> Detection <input type="checkbox"/> M008 Culturable Fung (Speciation) <input type="checkbox"/> M018 Total Coliform <input type="checkbox"/> M120 <i>Staphylococcus saprophyticus</i> Detection <input type="checkbox"/> M009 Gram Stain Culturable Bacteria <input type="checkbox"/> M020 Fecal Streptococcus <input type="checkbox"/> M038-89 Allergen Testing <input type="checkbox"/> M010 Bacterial Count and ID - 3 Most Probable <input type="checkbox"/> M021 Fecal Streptococcus (Membrane Filtration) <input type="checkbox"/> M044 Group A Staph <input type="checkbox"/> M011 Bacterial Count and ID - 5 Most Probable <input type="checkbox"/> M026-215 Legionella Detection <input type="checkbox"/> JCA, Dog, Cockroach, Disturbance <input type="checkbox"/> M013 Sewage Contamination in Buildings <input type="checkbox"/> M027 Mycobacterium Analysis <input type="checkbox"/> Other See Analytical Price Guide			
Preservation Method (Water):			
Name of Sampler: James Eberts		Signature of Sampler: <i>James Eberts</i>	
Sample #	Sample Location	Sample Type	Date/Time Collected
MRS-01	Outside by Main Ent	Air	10/23/18 1505
MRS-02	Room 53	Air	10/23/18 1515
	End of Samples		
Clear Sample # (s): MRS-01 → 02		Total # of Samples: 2	
Noted/Reviewed (Client): <i>Jan H.P.</i>		Date: 10/25/18	
Received (Client): <i>ER WI</i>		Time: 11:10 am	
Comments/Special Instructions:			



October 4, 2018

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

**RE: Indoor Air Quality Inspection Report – September 2018**  
**Janvier Elementary School**  
**Epic Project No. 18-3150**

Dear Mr. Rambone:

**Epic Environmental Services, LLC (Epic)** was retained by the Franklin Township Board of Education (District) to perform an indoor air quality inspection at the Janvier Elementary School. The investigation consisted of a visual inspection and the collection of temperature, relative humidity, and carbon dioxide data. Additionally, samples for airborne mold spores were collected in four random locations throughout the school.

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

Temperature, relative humidity, and carbon dioxide data was compared to current New Jersey Indoor Air Quality and industry standards.

Epic Environmental performed the inspection September 21 and 24, 2018.

### **Acceptable Temperature, Relative Humidity, and Carbon Dioxide 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: Room 33, Room 37, Room 38, Room 34, Room 31, Room 47, Room 28, Room 27, Media Center, Room 24, Room 17, Room 21, Room 13, Room 11, Room 10, Room 6, and Room 4.

---

#### **HEALTH**

Epic Environmental Services, LLC  
Tele: 856.205.1077

#### **SAFETY**

1930 Brown Road  
www.epic-env.com

#### **ENVIRONMENT**

Newfield, New Jersey 08344  
Fax: 856.205.0413

## Observations, Comments, and Recommendations

### Room 33

Slight mold inside closet and restroom door. ✓  
Relative humidity was elevated (78%).  
Clean mold using approved anti-fungal cleaner.

Custodians Cleaned  
week of Oct. 9, 2018

### Room 37

Slight mold on restroom door, under desk, under old table. *(removed)*  
Relative humidity was elevated (77%).  
Clean mold using approved anti-fungal cleaner.  
Dispose of old table.

"

"

### Room 38

Slight mold on toy refrigerator. ✓  
Relative humidity was elevated (81%).  
Clean mold using approved anti-fungal cleaner.

### Room 34

Mold under old table. *(removed)*.  
Relative humidity was elevated (77%).  
Dispose of old table.

### Room 31

No visible mold was observed..  
Relative humidity was elevated (74%).

### Room 47

Visible mold on wooden bookcase, under table, plastic toy shelf, and under teacher's desk. ✓  
Relative humidity was elevated (77%).  
Clean mold using approved anti-fungal cleaner.

### Room 28

No visible mold was observed.  
Relative humidity was elevated (74%).

### Room 27

No visible mold was observed.  
Relative humidity was elevated (71%).

### Media Center

No visible mold was observed.  
Relative humidity was elevated (78%).

### Room 24

No visible mold was observed.  
Relative humidity was elevated (85%).

### Room 17

No visible mold was observed.  
Relative humidity was elevated (82%).

## Observations, Comments, and Recommendations (cont)

### Room 21

Slight visible mold under teacher's desk.  
Relative humidity was elevated (82%).  
Clean mold using approved anti-fungal cleaner.

Custodians cleaned  
work of Oct. 9, 2018

### Room 13

No visible mold was observed.  
Relative humidity was elevated (74%).

### Room 11

No visible mold was observed.  
Relative humidity was elevated (75%).

### Room 10

Slight mold on restroom door, under desk, under old table  
Relative humidity was elevated (76%).  
Clean mold using approved anti-fungal cleaner.  
Dispose of old table.

Removed

### Room 6

No visible mold was observed.  
Relative humidity was elevated (74%).

### Room 4

Mold under old table.  
Relative humidity was elevated (76%).  
Dispose of old table.

Removed

## Air Sample Results

Air samples were collected in three random locations throughout the school. Airborne mold spore concentrations were near or below background (outside) concentrations.

See Sample Data Summary

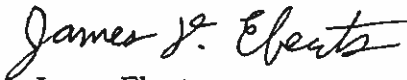
## Conclusions

- Elevated humidity has resulted in minor mold activity in the school.
- Assure steps are taken to reduce relative humidity to a maximum of 60% during the summer cooling season. Although most mold activity is not likely to start until extended periods of 75% or higher relative humidity are experienced, it is recommended to have the goal of 60%.

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

---

### HEALTH

Epic Environmental Services, LLC  
Tele: 856.205.1077

### SAFETY

1930 Brown Road  
[www.epic-env.com](http://www.epic-env.com)

### ENVIRONMENT

Newfield, New Jersey 08344  
Fax: 856.205.0413



## Sample Data Summary

### Air Sampling

Air Samples		September 24, 2018	
Air Sample Location	Airborne Mold Concentrations (spores/m <sup>3</sup> )		
	Total	Individual Mold Concentrations	
Room 19	35,700	Ascospores	1,800
		Aspergillus/Penicillium	200
		Basidiospores	33,700
Room 47	3,040	Aspergillus/Penicillium	1,400
		Basidiospores	1,600
		Myxomycetes	40
Room 35	13,160	Ascospores	80
		Aspergillus/Penicillium	880
		Basidiospores	12,200
Outside by Mechanical Room	74,660	Ascospores	1,800
		Aspergillus/Penicillium	80
		Basidiospores	71,800
		Cladosporium	300
		Ganoderma	200
		Myxomycetes	480

- 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  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

Order ID: 371816822  
Customer ID: EPIC62  
Customer PO: 18-3150  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
1930 Brown Road  
Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 09/24/2018  
Received: 09/24/2018  
Analyzed: 09/25/2018

Proj: Franklin Twp BOE - Semi Annual IAQ Inspection

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

Lab Sample Number:	371816822-0001			371816822-0002			371816822-0003		
Client Sample ID:	JES-01			JES-02			JES-03		
Volume (L):	25			25			25		
Sample Location:	Outside By Mech Room			Room 19			Room 47		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	23	1800	2.4	22	1800	5	-	-	-
Aspergillus/Penicillium	1	80	0.1	2	200	0.6	17	1400	46.1
Basidiospores	897	71800	96.2	421	33700	94.4	20	1600	52.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	4	300	0.4	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	2	200	0.3	-	-	-	-	-	-
Myxomycetes++	12*	480*	0.6	-	-	-	1*	40*	1.3
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	939	74680	100	445	35700	100	38	3040	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	1	-
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.

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Lab 100184

Initial report from: 09/25/2018 12:32:31

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

Test Report SPVER3-7.30.4 Printed: 9/25/2018 12:32:31PM

Page 1 of 2



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077  
Phone/Fax: (800) 220-3675 / (856) 786-0262  
<http://www.EMSL.com> / [cinnmicrolab@emsl.com](mailto:cinnmicrolab@emsl.com)

Order ID: 371816822  
Customer ID: EPIC62  
Customer PO: 18-3150  
Project ID:

Attn: James Eberts  
Epic Environmental Services, LLC  
1930 Brown Road  
Newfield, NJ 08344

Phone: (856) 205-1077  
Fax: (856) 205-0413  
Collected: 09/24/2018  
Received: 09/24/2018  
Analyzed: 09/25/2018

Proj: Franklin Twp BOE - Semi Annual IAQ Inspection

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

Lab Sample Number:	371816822-0004		
Client Sample ID:	JES-04		
Volume (L):	25		
Sample Location:	Room 35		
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total
Alternaria (Ulocladium)	-	-	-
Ascospores	1	80	0.6
Aspergillus/Penicillium	11	880	6.7
Basidiospores	153	12200	92.7
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicothium	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Phthomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Total Fungi	165	13160	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	80	-
Analyt. Sensitivity 300x	-	40*	-
Skin Fragments (1-4)	-	1	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	1	-

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

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

*Vincent Iuzzolino*

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

Samples received in good condition 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. "ND" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. 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. Interpretation and use of test results are the responsibility of the client.

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

Initial report from: 09/25/2018 12:32:31

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



371816822

## Environmental Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):

RECEIVED  
Westmont, NJ EMSL  
107 Haddon Avenue, N.J.  
Westmont, NJ 08108  
PHONE: (856) 858-4800  
FAX: (856) 858-2140 P 12:55



Company: Epic Environmental Services, LLC		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note Instructions in Comments	
Street: 1930 Brown Road		Third Party Billing requires written authorization from third party	
City/State/Zip: Newfield, NJ 08344			
Report To (Name): James Eberts		Fax: 856-205-0413	
Telephone: 856-205-1077		Email Address: jeberts@epicenviro.com	
Project Name/Number: Franklin Twp BOE - Semi-Annual IAQ Inspection -			
Please Provide Results: Email		Purchase Order: 18-3150	
		State Samples Taken: NJ	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input checked="" type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide. TATs are subject to methodology requirements			
Non Culturable Air Samples (Spore Traps)			
<ul style="list-style-type: none"> <li>• M001 Air-O-Cell</li> <li>• M048 BioSIS</li> <li>• M030 Micro 5</li> <li>• M173 Alegro M2</li> <li>• M063 Burkard</li> <li>• M174 MoldSnap</li> <li>• M004 Allergenco</li> <li>• M043 Cyclax</li> <li>• M176 Rite Smart</li> <li>• M032 Allergenco-D</li> <li>• M002 Cyclex-d</li> <li>• M130 Via-Cell</li> <li>• M172 Versa Trap</li> </ul>			
Other Microbiology Test Codes			
<ul style="list-style-type: none"> <li>• M041 Fungal Direct Examination</li> <li>• M005 Viable Fung ID and Count</li> <li>• M006 Viable Fung ID and Count (Speciation)</li> <li>• M007 Culturable Fung</li> <li>• M008 Culturable Fung (Speciation)</li> <li>• M009 Gram Stain Culturable Bacteria</li> <li>• M010 Bacterial Count and ID - 3 Most Prominent</li> <li>• M011 Bacterial Count and ID - 6 Most Prominent</li> <li>• M013 Sewage Contamination in Buildings</li> <li>• M014 Endotoxin Analysis</li> <li>• M015 Heterotrophic Plate Count</li> <li>• M100 Real Time Q-PCR-ERMI 36 Panel</li> <li>• M016 Total Coliform (Membrane Filtration)</li> <li>• M020 Fecal Streptococcus (Membrane Filtration)</li> <li>• M210-215 Legionella Detection</li> <li>• M024 Recreational Water Screen</li> <li>• M027 Mycotoxin Analysis</li> <li>• M023 Enterococci</li> <li>• M018 Fecal Coliform</li> <li>• M133 MRSA Analysis</li> <li>• M026 Cryptococcus neoformans Detection</li> <li>• M120 Histoplasma capsulatum Detection</li> <li>• M035-36 Allergen Testing</li> <li>• M044 Group Aergen (Cat, Dog, Cockroach, Dustmites)</li> <li>• Other See Analytical Price Guide</li> </ul>			
Preservation Method (Water):			
Name of Sampler: James Eberts		Signature of Sampler: <i>James Eberts</i>	
Sample #	Sample Location	Sample Type	Test Code
JES-01	Outside by Mech Rm	Air	M030
JES-02	Room 19	↓	↓
JES-03	Room 47	↓	↓
JES-04	Room 35	↓	↓
End of samples			
Client Sample # (s): JES-01 → 04		Total # of Samples: 4	
Relinquished (Client): <i>James Eberts</i>		Date: 9/24/18	Time:
Received (Client): <i>[Signature]</i>		Date: 9-24-18	Time: 12:55
Comments/Special Instructions:			



## AIHA Laboratory Accreditation Programs, LLC

*acknowledges that*

### EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Laboratory ID: 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 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

### LABORATORY ACCREDITATION PROGRAMS

- |  |   |
|--|---|
| ✓ INDUSTRIAL HYGIENE                   | Accreditation Expires: September 01, 2018 |
| ✓ ENVIRONMENTAL LEAD                   | Accreditation Expires: September 01, 2018 |
| ✓ ENVIRONMENTAL MICROBIOLOGY           | Accreditation Expires: September 01, 2018 |
| <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 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website ([www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org)) for the most current Scope.

*William Walsh*

William Walsh, CIH  
Chairperson, Analytical Accreditation Board

Revision 15: 03/30/2016

*Cheryl O. Morton*

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

Date Issued: 08/31/2016