



March 12, 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
Janvier Elementary School
Epic Project No. 18-1003

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.

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 on February 28, 2018.

Acceptable Temperature, Relative Humidity, and Carbon Dioxide Criteria

Acceptable Indoor Temperature Range:	68° - 79° Fahrenheit
Carbon Dioxide Trigger Level for Corrective Action:	1,000 ppm
Ideal Relative Humidity Range:	30-60%

The following rooms/areas were inspected: Main Office Suite, Room 47, Room 33, Room 31, Library, Room 16, Room 23, Custodian's Office, All Purpose Room, and Room 4.

Observations

Main Office Suite

Slight dust buildup on air supply registers and surrounding ceiling tile

Room 47

No issues

Room 33

Carbon dioxide levels above 1,000 ppm (1010 ppm). Room was occupied.

Room 31

No issues

Library

Slight dust buildup on air supply registers.

Room 16

No issues

Room 23

No issues

Custodian's Office

No issues

All Purpose Room

Slight dust buildup on air supply registers.

Room 4

No issues

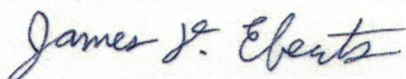
Recommendations

- Dust build-up was observed on air supply registers in the Main Office, Library, and All Purpose Room. These registers should be cleaned and put on a routine cleaning schedule.
- Carbon dioxide concentrations were elevated in Room 33. Fresh air must be increased to assure that carbon dioxide concentrations remain below 1,000 ppm.
- Air samples for mold were collected in several areas in the school. Airborne mold concentrations were near or below outside (background) levels.

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		February 28, 2018	
Air Sample Location	Airborne Mold Concentrations (spores/m³)		
	Total	Individual Mold Concentrations	
Outside by Front Entrance	7,280	Ascospores	500
		Aspergillus/Penicillium	300
		Basidiospores	5,400
		Cladosporium	1,000
		Epicoccum	80
Library/Media Center	1,000	Aspergillus/Penicillium	200
		Basidiospores	600
		Cladosporium	200
APR – near Stage	1,160	Ascospores	80
		Aspergillus/Penicillium	200
		Basidiospores	600
		Cladosporium	200
		Fusarium	80
Room 4	1,160	Basidiospores	1,000
		Cladosporium	80
		Arthrinium	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.



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

Order ID: 371803829
Customer ID: EPIC62
Customer PO: 18-1003
Project ID:

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

Phone: (856) 205-1077
Fax: (856) 205-0413
Collected: 02/28/2018
Received: 03/01/2018
Analyzed: 03/06/2018

Proj: Franklin Twp BOE - IAQ Inspection - Janvier ES

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

Lab Sample Number:	371803829-0001			371803829-0002			371803829-0003		
Client Sample ID:	JES-01			JES-02			JES-03		
Volume (L):	25			25			25		
Sample Location:	Outside - By Front Ent			Media Center/Library			APR - Near Stage		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascomycetes	6	500	6.9	-	-	-	1	80	6.9
Aspergillus/Penicillium	4	300	4.1	2	200	20	2	200	17.2
Basidiospores	68	5400	74.2	8	600	60	7	600	51.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	13	1000	13.7	2	200	20	2	200	17.2
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1	80	1.1	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	1	80	6.9
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Arthrimum	-	-	-	-	-	-	-	-	-
Total Fungi	92	7280	100	12	1000	100	13	1160	100
Hyphal Fragment	-	-	-	-	-	-	1	80	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	2*	80*	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	2	-
Background (1-5)	-	1	-	-	2	-	-	2	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum
Myxomycetes++ = Myxomycetes/Periconia/Smut

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

Vincent Iuzzolino

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

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. 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 received in good condition unless otherwise noted.

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

Initial report from: 03/06/2018 15:00:05

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com



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Collected: 02/28/2018
Received: 03/01/2018
Analyzed: 03/06/2018

Proj: Franklin Twp BOE - IAQ Inspection - Janvier ES

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

Lab Sample Number:	371803829-0004		
Client Sample ID:	JES-04		
Volume (L):	25		
Sample Location:	Room 4		
Spore Types	Raw Count	Count/m³	% of Total
Alternaria	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	13	1000	86.2
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	1	80	6.9
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces	-	-	-
Rust	-	-	-
Scopulariopsis	-	-	-
Stachybotrys	-	-	-
Torula	-	-	-
Ulocladium	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Arthrinium	1	80	6.9
Total Fungi	15	1160	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	80	-
Analyt. Sensitivity 300x	-	40*	-
Skin Fragments (1-4)	-	3	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	1	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum
Myxomycetes++ = Myxomycetes/Periconia/Smut

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

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Initial report from: 03/06/2018 15:00:05

For Information on the fungi listed in this report please visit the Resources section at www.emsl.com

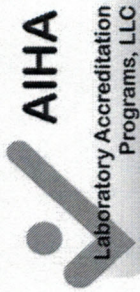


Environmental Microbiology Chain of Custody

EMSL Order Number (Lab Use Only):
371803829

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

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 - IAQ Inspection - <u>Janvier ES</u>			
Please Provide Results: Email		Purchase Order: 18-1003	
		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 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. TATs are subject to methodology requirements.			
Non Culturable Air Samples (Spore Traps)			
<ul style="list-style-type: none"> • M001 Air-O-Cell • M049 BioSIS • M030 Micro 5 	<ul style="list-style-type: none"> • M173 Alegro M2 • M003 Burkard • M174 MoldSnap 	<ul style="list-style-type: none"> • M004 Allergenco • M043 Cyclex • M176 Rette Smart 	<ul style="list-style-type: none"> • M032 Allergenco-D • M002 Cyclex-d • M130 Via-Cell
Other Microbiology Test Codes			
<ul style="list-style-type: none"> • M041 Fungal Direct Examination • M005 Viable Fungi ID and Count • M006 Viable Fungi ID and Count (Speciation) • M007 Culturable Fungi • M008 Culturable Fungi (Speciation) • M009 Gram Stain Culturable Bacteria • M010 Bacterial Count and ID - 3 Most Prominent • M011 Bacterial Count and ID - 5 Most Prominent • M013 Sewage Contamination in Buildings 	<ul style="list-style-type: none"> • M014 Endotoxin Analysis • M015 Heterotrophic Plate Count • M180 Real Time Q-PCR-ERMI 36 Panel • M018 Total Coliform (Membrane Filtration) • M020 Fecal Streptococcus (Membrane Filtration) • M210-215 Legionella Detection • M026 Recreational Water Screen • M027 Mycotoxin Analysis 	<ul style="list-style-type: none"> • M029 Enterococci • M019 Fecal Coliform • M133 MRSA Analysis • M026 Cryptococcus neoformans Detection • M120 Histoplasma capsulatum Detection • M039-39 Allergen Testing • M044 Group Allergen (Cat, Dog, Cockroach, Dustmites) • Other See Analytical Price Guide 	
Preservation Method (Water):			
Name of Sampler: James Eberts		Signature of Sampler: <u>James Eberts</u>	
Sample #	Sample Location	Sample Type	Test Code
JES-01	Outside - by Front Exit	Air	M030
JES-02	Media Center/Library	↓	↓
JES-03	APR - Near Stage	↓	↓
JES-04	Room 4	↓	↓
	End of Sample		
Client Sample # (s): JES-01 → 04		Total # of Samples: 4	
Relinquished (Client): <u>James Eberts</u>		Date: 2/28/18	Time: 1530
Received (Client): <u>Don</u>		Date: 3/1/18	Time: 1030
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) 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