August 30, 2022

Ms. Margaret Durham
Facilities Manager
Delsea Regional High School District
Fries Mill Road
Franklinville, NJ 08322

RE: Indoor Air Quality Inspection Report – August 2022
Delsea Middle School
Epic Project No. 22-3182

Dear Ms. Durham:

Epic Environmental Services, LLC (Epic) was retained by the Delsea Regional High School District (District) to perform indoor air quality inspections for six randomly selected areas at the Delsea Middle School. The inspections consisted of visual observations and the collection of temperature/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 visual inspections and collected air samples on August 19, 2022.

Acceptable Temperature, Relative Humidity

Acceptable Indoor Temperature Range:	**68° - 79° Fahrenheit**
Ideal Relative Humidity Range:	**30-60%**

The following rooms/areas were inspected:

Room A-3, Room A-12, Room B-5, Room C-4, Room C-5, Room D-9

Observations, Comments, and Recommendations

Room A-3
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within ideal range (51%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room A-12
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within ideal range (50.6%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room B-5
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within ideal range (55.7%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room C-4
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within ideal range (50.3%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room C-5
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was within ideal range (49.1%). Temperature was within the acceptable range.
Airborne mold spore concentrations were near or below outside (background) concentrations.
No action required at this time.

Room D-9
No visible mold was observed.
No evidence of recent water intrusion was observed.
Relative humidity was slightly elevated (66.1%). 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 6 random locations throughout the school. Airborne mold spore concentrations were near or below background (outside) concentrations.

See Sample Data Summary

Conclusions

- 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 Jr. Eberts

James Eberts
President
Epic Environmental Services, LLC

Sample Data Summary

Air Sampling

Air Samples August 19, 2022

Air Sample Location	Airborne Mold Concentrations (spores/m³)		
	Total	Individual Mold Concentrations	
Room A-3	440	Basidiospores	200
		Cladosporium	80
		Curvularia	80
		Epicoccum	40
		Pithomyces	40
Room A-12	280	Basidiospores	200
		Cladosporium	80
Room B-5	2560	Ascospores	80
		Aspergillus/Penicillium	80
		Basidiospores	2200
		Cladosporium	200
Room C-4	660	Ascospores	80
		Basidiospores	500
		Cladosporium	80
Room C-5	1980	Basidiospores	1900
		Cladosporium	80
Room D-9	740	Basidiospores	600
		Cladosporium	100
		Rust	40
Outside	**22440**	**Ascospores**	**1200**
		Aspergillus/Penicillium	**300**
		Basidiospores	**19100**
		Cladosporium	**960**
		Curvularia	**80**
		Epicoccum	**200**
		Ganoderma	**200**
		Myxomycetes	**80**
		Rust	**40**
		Cercospora	**80**
		Pithomyces	**80**
		Chaetoconis	**80**
		Torula	**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.

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

EMSL Order: 372213415
Customer ID: EPIC62
Customer PO: 17-2068
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: 08/19/2022
Received Date: 08/22/2022
Analyzed Date: 08/25/2022

Project: Delsea Middle School TAQ

Test Report: Micro-6(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-281, ASTM D7391)

Lab Sample Number:	372213415-0001			372213415-0002			372213415-0003		
Client Sample ID:	MS-A3			MS-A12			MS-B6		
Volume (L):	25			25			25		
Sample Location:	Room A3			Room A12			Room B6		
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	3.1
Aspergillus/Penicillium	-	-	-	-	-	-	1	80	3.1
Basidiospores	3	200	45.5	2	200	71.4	27	2200	85.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	1	80	18.2	1	80	28.6	3	200	7.8
Curvularia	1	80	18.2	-	-	-	-	-	-
Epicoccum	1*	40*	9.1	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	1*	40*	9.1	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Chaetoconis	-	-	-	-	-	-	-	-	-
Torula++	-	-	-	-	-	-	-	-	-
Total Fungi	7	440	100	3	280	100	32	2680	100
Hyphal Fragment	3	200	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	80	-	-	80	-	-	80	-
Analyt. Sensitivity 300x	-	40*	-	-	40*	-	-	40*	-
Skin Fragments (1-4)	-	2	-	-	3	-	-	2	-
Fibrous Particulate (1-4)	-	2	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	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

Initial report from: 08/26/2022 09:35 AM

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

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

EMSL Order: 372213415
Customer ID: EPIC82
Customer PO: 17-2068
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: 08/19/2022
Received Date: 08/22/2022
Analyzed Date: 08/25/2022

Project: Delsea Middle School TAQ

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

Lab Sample Number:	372213415-0004			372213415-0005			372213415-0006		
Client Sample ID:	MS-C4			MSC-5			MS-D9		
Volume (L):	25			25			25		
Sample Location:	Room C4			Room C5			Room D9		
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	12.1	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-
Basidiospores	6	500	75.8	24	1900	96	8	600	81.1
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	1	80	12.1	1	80	4	3*	100*	13.5
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	1*	40*	5.4
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Chaetoconis	-	-	-	-	-	-	-	-	-
Torula++	-	-	-	-	-	-	-	-	-
Total Fungi	8	660	100	25	1980	100	12	740	100
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, M.S., Laboratory Director
or other Approved Signatory

Initial report from: 08/26/2022 09:36 AM

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EMSL Order:	372213415
Customer ID:	EPIC62
Customer PO:	17-2068
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: 08/19/2022
Received Date: 08/22/2022
Analyzed Date: 08/25/2022

Project: Delsea Middle School TAQ

Test Report: Micro-S(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-391, ASTM D7391)

Lab Sample Number:	372213415-0007		
Client Sample ID:	MS-OUT		
Volume (L):	25		
Sample Location:	Outside		

Spore Types	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-
Ascospores	15	1200	5.3
Aspergillus/Penicillium	4	300	1.3
Basidiospores	239	19100	85.1
Bipolaris++	-	-	-
Chaetomium++	-	-	-
Cladosporium	12	960	4.3
Curvularia	1	80	0.4
Epicoccum	2	200	0.9
Fusarium++	-	-	-
Ganoderma	2	200	0.9
Myxomycetes++	1	80	0.4
Pithomyces++	1	80	0.4
Rust	1*	40*	0.2
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Cercospora++	1	80	0.4
Chaetoconis	1	80	0.4
Torula++	1*	40*	0.2
Total Fungi	**281**	**22440**	**100**
Hyphal Fragment	1	80	-
Insect Fragment	-	-	-
Pollen	1*	40*	-
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

Initial report from: 08/26/2022 09:35 AM

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

EMSL ANALYTICAL, INC.

Environmental Microbiology Chain of Custody

EMSL Order Number(Lab Use Only): 372213415

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

RECEIVED EMSL CINNAMINSON, NJ 22 AUG 22 PM 2:51

Company: Epic Environmental Services, LLC	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 1930 Brown Road	
City/State/Zip: Newfield, NJ 08344	
Report To (Name): James Eberts	**Fax:** 856-205-0413
Telephone: 856-205-1077	**Email Address:** jeberts@epic-env.com
Project Name/Number: ~~Wenonah BOE – IAQ Inspection~~ Delsea Middle School IAQ	
Please Provide Results: Email	**Purchase Order:** 17-2068	**State Samples Taken:** NJ

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☑ 1 Week ☐ 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)

• M001 Air-O-Cell	• M173 Allegro M2	• M004 Allergenco	• M032 Allergenco-D	• M172 Versa Trap
• M049 BioSIS	• M003 Burkard	• M043 Cyclex	• M002 Cyclex-d	
• M030 Micro 5	• M174 MoldSnap	• M176 Relic Smart	• M130 Via-Cell	

Other Microbiology Test Codes

• M041 Fungal Direct Examination	• M014 Endotoxin Analysis	• M029 *Enterococci*
• M005 Viable Fungi ID and Count	• M015 Heterotrophic Plate Count	• M019 Fecal Coliform
• M006 Viable Fungi ID and Count (Speciation)	• M180 Real Time Q-PCR-ERMI 36 Panel	• M133 MRSA Analysis
• M007 Culturable Fungi	• M018 Total Coliform (Membrane Filtration)	• M028 *Cryptococcus neoformans* Detection
• M008 Culturable Fungi (Speciation)	• M020 Fecal *Streptococcus* (Membrane Filtration)	• M120 *Histoplasma capsulatum* Detection
• M009 Gram Stain Culturable Bacteria	• M210-215 *Legionella* Detection	• M033-39 Allergen Testing
• M010 Bacterial Count and ID – 3 Most Prominent	• M026 Recreational Water Screen	• M044 Group Alergen (Cat, Dog, Cockroach, Dustmites)
• M011 Bacterial Count and ID – 5 Most Prominent	• M027 Mycotoxin Analysis	• Other See Analytical Price Guide
• M013 Sewage Contamination in Buildings		

Preservation Method (Water):

Name of Sampler: ~~James Eberts~~ Casey Eberts **Signature of Sampler:** Casey Eberts

Sample #	Sample Location	Sample Type	Test Code	Volume/Area	Date/Time Collected
MS-A3	Room A3	Air	M030	25L	8/19/22 0925
MS-A12	Room A12	↓	↓	↓	8/19/22 0935
MS-B5	Room B5	↓	↓	↓	8/19/22 0945
MS-C4	Room C4	↓	↓	↓	8/19/22 0955
MS-C5	Room C5	↓	↓	↓	8/19/22 1005
MS-D9	Room D9	↓	↓	↓	8/19/22 1015
MS-OUT	Outside	↓	↓	↓	8/19/22 1030

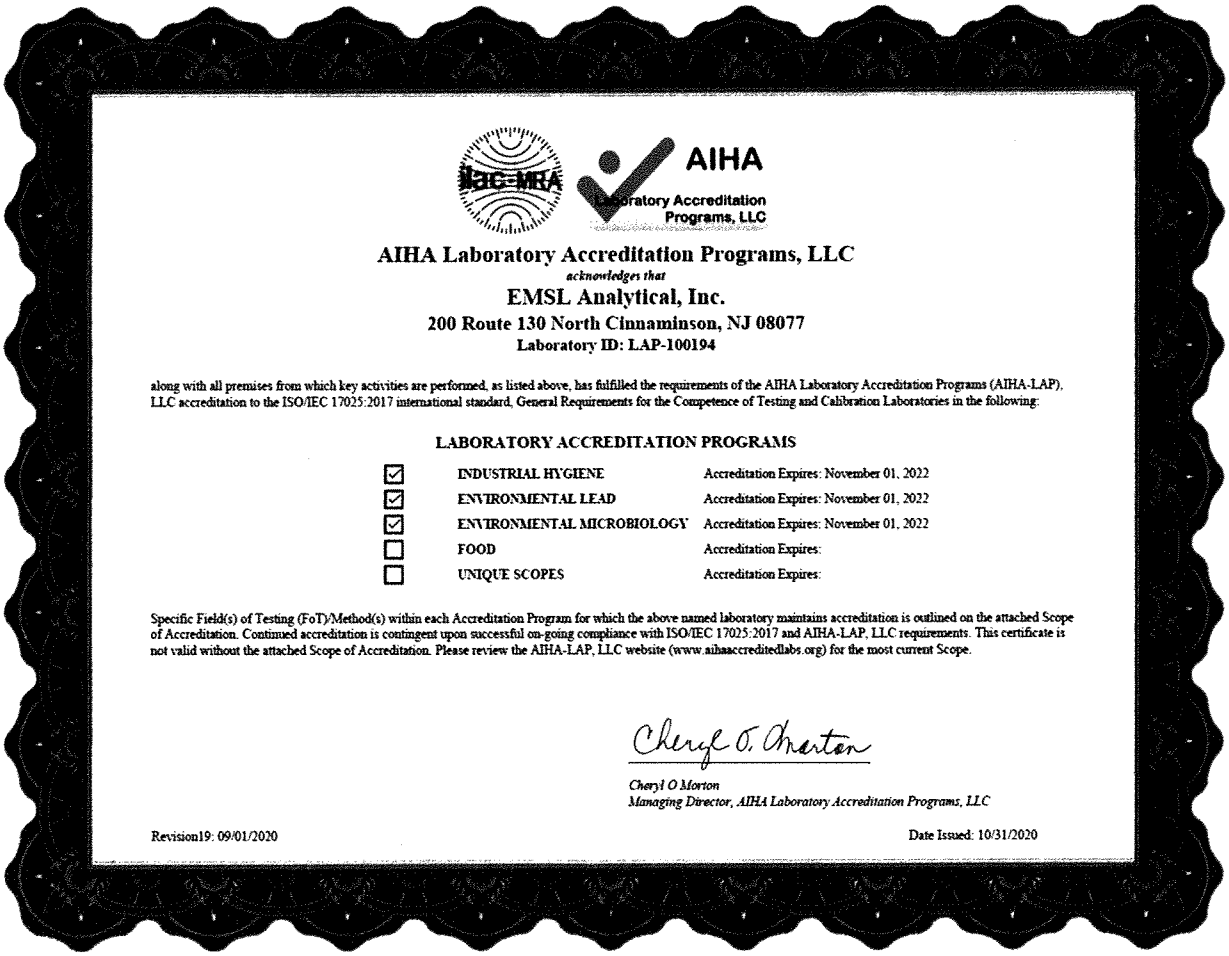
Client Sample # (s): MS-A3 – MS-OUT **Total # of Samples:** 7

Relinquished (Client): Casey Eberts **Date:** 8/22/22 **Time:**

Received (Client): [illegible signature] **Date:** 8-22-22 **Time:** 2:55pm

Comments/Special Instructions:

(7) m



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

☑	INDUSTRIAL HYGIENE	Accreditation Expires: November 01, 2022
☑	ENVIRONMENTAL LEAD	Accreditation Expires: November 01, 2022
☑	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: November 01, 2022
☐	FOOD	Accreditation Expires:
☐	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) 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