Limited Mold Assessment Morningside Elementary Rms. B7, B8, and B9

Treadway, David <treadwayd@lisd.net>

Tue 9/19/2023 10:52 AM

To:Richardson, Tabitha <richardsontl@lisd.net>;Mcfadden, Shannon <mcfaddens@lisd.net>;Diaz, Graciela <diazgm@lisd.net>
Cc:Hughes, Jason <hughesjk@lisd.net>;Jones, Steven <jonessa@lisd.net>;Cashman, Jinger <cashmans@lisd.net>

Mrs. Richardson,

Good morning. This email is to follow up with the results of the limited mold assessment in rooms B7, B8, and B9 per a campus request. On 9/11/23, Ensolum LLC conducted a limited mold assessment at Morningside Elementary. It is typically assumed that indoor spore levels in an area with filtered or air-conditioned air, and activity levels associated with schools, average below the outdoor levels. Data from the airborne fungi sampling indicated that the total indoor concentration of mold/fungi in room **B7** was ***6%***, **B8** was ***8%***, and **B9** was ***12%*** of the outdoor levels. Utilizing this theory, the indoor concentration levels were well within the acceptable levels for areas with filtered or air-conditioned air. The final report will be available on the LISD website once I receive it from the vendor. Please let me know if you have any questions.

Sincerely,
David Treadway

David Treadway
LISD Environmental Coordinator
Facility Services Department

ENSOLUM

September 11, 2023

Lewisville Independent School District
1597 Edmonds Lane
Lewisville, Texas 75067
Attn: David Treadway

Re: Limited Mold Assessment Report
Morningside Elementary Rooms B7, B8, B9
6350 Paige Road
The Colony, TX 75056
Ensolum Proposal No. P01A1288194

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within rooms B7, B8, and B9 of Morningside Elementary School, 6350 Paige Road, The Colony, TX 75056. Enclosed is the report, including analytical data.

Ensolum appreciates this opportunity to be of service and looks forward to our continued work together. Please contact the undersigned with any questions or concerns you may have.

Sincerely,

Nolan Domain
Mold Assessment Consultant
MAC1479

Darren G. Bowden
Principal
MAC0321 EXP: 2/15/2024

1.0 INTRODUCTION

Ensolum was retained by David Treadway, LISD, to complete a Limited Mold Assessment within rooms B7, B8, and B9 of Morningside Elementary School, 6350 Paige Road, The Colony, Texas 75056. The purpose of this investigation was to determine if elevated concentrations of airborne fungal spores and structures were present within the above-referenced areas. Ensolum completed the on-site investigation on September 11, 2023. The Limited Mold Assessment was performed in response to a complaint of possible indoor air quality issues within specific areas.

2.0 PROCEDURE

Ensolum visually inspected accessible areas of Room B7, B8, and B9. Water damage was not observed in the following locations:

VISIBLE WATER DAMAGE		
LOCATION	DATE	EXPLANATION
Rm. B7, B8, B9	9/11/2023	No Visible Water Damage

Following the inspection of potential water-damaged building materials, Ensolum conducted a moisture investigation in the identified areas to determine if nonvisible water-damaged materials and other building materials within the investigation area were present. The moisture investigation was completed with a GE Protimeter BLD5364 moisture meter on accessible porous and semi-porous building materials in each area of concern. At the time of investigation, monitored building materials did not exhibit elevated moisture concentrations in comparison with similar and non-affected building materials in the structure and standard scientific guidelines.

Representative Relative Humidity readings were collected and recorded using an Extech Instruments Humidity / Temperature Pen. Measurements recorded during the investigation are listed in the chart below:

TEMPERATURE, RELATIVE HUMIDITY & SPECIFIC HUMIDITY				
LOCATION	**DATE**	**Temperature: F**	**Relative Humidity**	**Specific Humidity (GPP)**
Exterior, Front	9/11/2023	83°F	35%	59
Room B7	9/11/2023	74 °F	33%	41
Room B8	9/11/2023	74 °F	49%	61
Room B9	9/11/2023	72 °F	35%	41
Outdoor Back B-Wing	9/11/2023	87 °F	32%	61

Area air samples were collected with spore trap cassettes and analyzed for airborne fungal spores and structures. Samples were collected at a rate of 15 liters per minute. Indoor air sample(s) were collected for a five (5) minute period (75 liters) at a height of approximately five (5) feet above finished floor (AFF). Outdoor air samples were collected for a five (5) minutes period (75 liters) at a height of approximately five (5) feet above level ground. American Conference of Governmental Industrial Hygienists (ACGIH) guidelines were followed for the sample collection. Fungal air samples were collected in the following areas:

SPORE TRAP LOCATIONS	
SAMPLE NUMBER	**LOCATION**
ST-1	Exterior, Front
ST-2	Room B7
ST-3	Room B8
ST-4	Room B9
ST-5	Exterior – Back B-Wing

3.0 RESULTS

Currently, there are no regulatory standards for airborne fungal contamination. Therefore, results of the fungal analysis are compared against scientific guidelines. Bioaerosol samples are evaluated by comparing the indoor samples against the outdoor sample. The same types of fungi should be found in both the indoor and outdoor samples.

Should higher fungal concentrations occur in the indoor sample(s) or complaint areas, this generally indicates there is a source of fungal growth in the area. The types of fungi are also evaluated-the same types/genus of fungi should be present in both the indoor/complaint and outdoor/non-complaint samples.

The results of the fungal air samples collected were evaluated. Air testing performed using spore traps found that airborne mold spores within the investigation area were considerably lower and were qualitatively like those measured outside of the building at the time the sampling was performed.

4.0 CONCLUSIONS

Based on ENSOLUM's limited assessment and the analytical results, it appears that the indoor air quality, as it relates to airborne fungi, was within recommended guidelines on the day of the assessment.

APPENDIX A

ANALYTICAL DATA

IAQ Mold Report

Summary

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 23F-10989
Report Date : 09/13/2023
Sample Date: 09/11/2023
Spore Trap Type: Zefon - Air-O-Cell

On 9/11/2023, five (5) samples were submitted by a representative of Ensolum, LLC (located at 8330 LBJ Freeway, Suite 830 8330 LBJ Freeway, Suite 830, Dallas, TX 75243) for Spore Trap, Non-cultured mold analysis. This report consists of three sections; a summary section, a data detail section, and an analytical notes section.

Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
ST-1	75	Outdoor - Front * See Analytical Notes report for further details	Cladosporium	4073	51%
			Basidiospores	893	11%
			Aspergillus / Penicillium	653	8%
			Hyphal / Spore Fragments - Dematiaceous	373	5%
			Alternaria	360	4%
			Myxomycete / Periconia / Rust / Smut	347	4%
			Paecilomyces	267	3%
			Ascospores	253	3%
			Cercospora / Pseudocercospora	253	3%
			Coprinus group	120	1%
			Fusarium	67	<1%
			Hyphal / Spore Fragments - Hyaline	67	<1%
			Curvularia	67	<1%
			Ganoderma	53	<1%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	53	<1%
			Chaetomium	40	<1%
			Epicoccum	27	<1%
			Nigrospora	27	<1%
			Pithomyces	13	<1%
			Total:	8006	100%

IAQ Mold Report

Summary

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
ST-2	75	Room B7	Aspergillus / Penicillium	133	28%
			Basidiospores	107	22%
			Cladosporium	80	17%
			Hyphal / Spore Fragments - Dematiaceous	53	11%
			Alternaria	40	8%
			Curvularia	27	6%
			Myxomycete / Periconia / Rust / Smut	13	3%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	13	3%
			Ascospores	13	3%
			Total:	479	100%
ST-3	75	Room B8	Aspergillus / Penicillium	160	25%
			Cladosporium	133	21%
			Basidiospores	120	19%
			Myxomycete / Periconia / Rust / Smut	107	17%
			Hyphal / Spore Fragments - Dematiaceous	53	8%
			Curvularia	27	4%
			Hyphal / Spore Fragments - Hyaline	13	2%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	13	2%
			Ascospores	13	2%
			Total:	639	100%

IAQ Mold Report

Summary

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
ST-4	75	Room B9	Cladosporium	267	30%
			Aspergillus / Penicillium	213	24%
			Basidiospores	173	19%
			Hyphal / Spore Fragments - Dematiaceous	53	6%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	53	6%
			Curvularia	53	6%
			Myxomycete / Periconia / Rust / Smut	40	4%
			Cercospora / Pseudocercospora	13	1%
			Nigrospora	13	1%
			Epicoccum	13	1%
			Total:	891	100%

IAQ Mold Report

Summary

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 23F-10989
Report Date : 09/13/2023
Sample Date: 09/11/2023
Spore Trap Type: Zefon - Air-O-Cell

On 9/11/2023, five (5) samples were submitted by a representative of Ensolum, LLC (located at 8330 LBJ Freeway, Suite 830 8330 LBJ Freeway, Suite 830, Dallas, TX 75243) for Spore Trap, Non-cultured mold analysis. This report consists of three sections; a summary section, a data detail section, and an analytical notes section.

Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
ST-5	75	Outdoor Back B Wing * See Analytical Notes report for further details	Cladosporium	3367	59%
			Basidiospores	680	12%
			Aspergillus / Penicillium	480	8%
			Cercospora / Pseudocercospora	240	4%
			Hyphal / Spore Fragments - Dematiaceous	227	4%
			Paecilomyces	160	3%
			Ascospores	107	2%
			Myxomycete / Periconia / Rust / Smut	93	2%
			Ganoderma	93	2%
			Coprinus group	80	1%
			Fusarium	80	1%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	27	<1%
			Alternaria	27	<1%
			Hyphal / Spore Fragments - Hyaline	13	<1%
			Curvularia	13	<1%
			Total:	5687	100%

Analyst(s): Elham Mohammadian

Lab Director : Heather Lopez

Approved Signatory : Heather Lopez

Lab Director : Bruce Crabb

Approved Signatory : Bruce Crabb

End of Summary section (23F-10989)

Thank you for choosing Moody Labs

IAQ Mold Report

Data Detail

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 23F-10989
Report Date : 09/13/2023
Sample Date: 09/11/2023

Spore Trap Type: Zefon - Air-O-Cell

This report consists of three sections; a summary section, a data detail section, and an analytical notes section. Results may not be reported except in full.

Sample ID:	ST-1					ST-2					ST-3				
Location:	Outdoor - Front					Room B7					Room B8				
Media Expires On:	Jul 2024					Jul 2024					Jul 2024				
Notes Included:	See Analytical Notes														
Volume:	75					75					75				
	Raw Ct	RL	spores/m³	%Total	spores/m³ SF	Raw Ct	RL	spores/m³	%Total	spores/m³ SF	Raw Ct	RL	spores/m³	%Total	spores/m³ SF
Alternaria	27	13	360	4%	360	3	13	40	8%	40					
Ascospores	19	13	253	3%	250	1	13	13	3%	10	1	13	13	2%	10
Aspergillus / Penicillium	49	13	653	8%	650	10	13	133	28%	130	12	13	160	25%	160
Basidiospores	67	13	893	11%	890	8	13	107	22%	100	9	13	120	19%	120
Cercospora / Pseudocercospora	19	13	253	3%	250										
Chaetomium	3	13	40	<1%	40										
Cladosporium	112	36	4073	51%	4100	6	13	80	17%	80	10	13	133	21%	130
Coprinus group	9	13	120	1%	120										
Curvularia	5	13	67	<1%	70	2	13	27	6%	30	2	13	27	4%	30
Drechslera / Bipolaris / Helminthosporum /	4	13	53	<1%	50	1	13	13	3%	10	1	13	13	2%	10
Epicoccum	2	13	27	<1%	30										
Fusarium	5	13	67	<1%	70										
Ganoderma	4	13	53	<1%	50										
Hyphal / Spore Fragments - Dematiaceous	28	13	373	5%	370	4	13	53	11%	50	4	13	53	8%	50
Hyphal / Spore Fragments - Hyaline	5	13	67	<1%	70						1	13	13	2%	10
Myxomycete / Periconia / Rust / Smut	26	13	347	4%	350	1	13	13	3%	10	8	13	107	17%	100
Nigrospora	2	13	27	<1%	30										
Paecilomyces	20	13	267	3%	270										
Pithomyces	1	13	13	<1%	10										
Stachybotrys															
TOTALS	407		8006	100%	8000	36		479	100%	480	48		639	100%	640
Analyst	Elham Mohammadian					Elham Mohammadian					Elham Mohammadian				
Analysis Date	9/13/2023					9/13/2023					9/13/2023				
Debris Rating	3					3					3				
Debris Composition															
Fibers	1/5					1/5					1/5				
Inorganic/Other	3/5					1/5					1/5				
Insect Parts	0/5					0/5					0/5				
Pollen	0/5					0/5					0/5				
Skin/Dander	1/5					3/5					3/5				

IAQ Mold Report

Data Detail

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

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Client : Ensolum, LLC
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Sample Type: Spore Trap, Non-cultured
Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 23F-10989
Report Date : 09/13/2023
Sample Date: 09/11/2023

Spore Trap Type: Zefon - Air-O-Cell

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Sample ID:	ST-4					ST-5				
Location:	Room B9					Outdoor Back B Wing				
Media Expires On:	Jul 2024					Jul 2024				
Notes Included:						See Analytical Notes				
Volume:	75					75				
	Raw Ct	RL	spores/m³	%Total	spores/m³ SF	Raw Ct	RL	spores/m³	%Total	spores/m³ SF
Alternaria						2	13	27	<1%	30
Ascospores						8	13	107	2%	100
Aspergillus / Penicillium	16	13	213	24%	210	36	13	480	8%	480
Basidiospores	13	13	173	19%	170	51	13	680	12%	680
Cercospora / Pseudocercospora	1	13	13	1%	10	18	13	240	4%	240
Chaetomium										
Cladosporium	20	13	267	30%	270	101	33	3367	59%	3400
Coprinus group						6	13	80	1%	80
Curvularia	4	13	53	6%	50	1	13	13	<1%	10
Drechslera / Bipolaris / Helminthosporum /	4	13	53	6%	50	2	13	27	<1%	30
Epicoccum	1	13	13	1%	10					
Fusarium						6	13	80	1%	80
Ganoderma						7	13	93	2%	90
Hyphal / Spore Fragments - Dematiaceous	4	13	53	6%	50	17	13	227	4%	230
Hyphal / Spore Fragments - Hyaline						1	13	13	<1%	10
Myxomycete / Periconia / Rust / Smut	3	13	40	4%	40	7	13	93	2%	90
Nigrospora	1	13	13	1%	10					
Paecilomyces						12	13	160	3%	160
Pithomyces										
Stachybotrys										
TOTALS	67		891	100%	890	275		5687	100%	5700
Analyst	Elham Mohammadian					Elham Mohammadian				
Analysis Date	9/13/2023					9/13/2023				
Debris Rating	3					2				
Debris Composition										
Fibers	1/5					1/5				
Inorganic/Other	1/5					2/5				
Insect Parts	0/5					0/5				
Pollen	0/5					0/5				
Skin/Dander	3/5					1/5				

End of Data Detail section
23F-10989

IAQ Mold Report

Analytical Notes

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117
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Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 23F-10989
Report Date : 09/13/2023
Sample Date : 09/11/2023
Spore Trap Type: Zefon - Air-O-Cell

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Samples Analyzed

Sample No	ST-1 : Outdoor - Front
Notes:	Please note: the minimum reporting limit for Cladosporium is 36 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.
Sample No	ST-5 : Outdoor Back B Wing
Notes:	Please note: the minimum reporting limit for Cladosporium is 33 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Field Blanks

No discernable field blanks were submitted with this set of samples.

NOTE: All remaining samples suitable for analysis.

Methods

Method: MLQ - 0112 / ASTM D7391: Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction.
Sample by Optical Microscopy.
Samples are read at 100% under 400x magnification unless noted. Partial readings may be employed when concentrations are elevated. Use final spore concentrations, not raw spore counts, for interpretation of results.
Calculation: Spores/cubic meter = (Raw spore count)*(RL)
Note: RL (Reporting Limit) is based upon 1 raw spore count.
Moody Labs recommends two significant figures for calculated values based on ASTM D7391.

This report must not be used by the customer to claim product certification, approval, or endorsement by AIHA LAP, LLC, ISO, or any agency of the Federal Government.

Debris Rating Key

0 - No linear trace detected
1 - Trace particulate/debris
2 - Light particulate/debris
3 - Moderate particulate/debris
4 - Substantial particulate/debris
5 - Extensive particulate/debris
6 - Field blank
10 - Hold Sample
11 - Modified Analysis per Client Instructions

NOTE: Particulate/debris are defined as skin, fibers, pollen grains, insect parts, fungal and/or other non-fungal particles.

IAQ Mold Report

Analytical Notes

Moody Labs
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Lab ID # 102577

Statewide Historically Underutilized Business Program

Woman Owned Small Business

Small Business Enterprise Program

End of Analytical Notes section
23F-10989

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

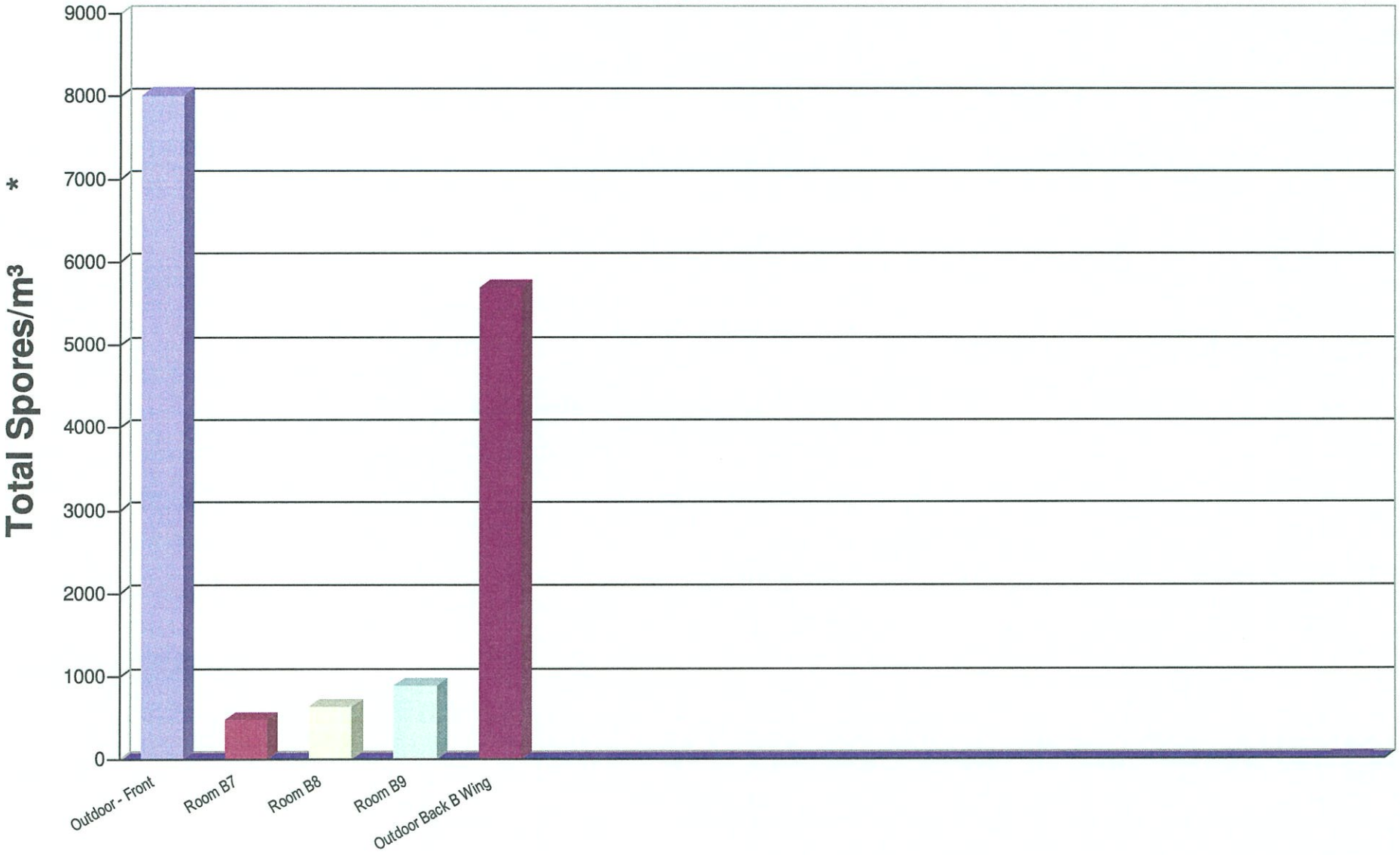
IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194

Lab Job No. 23F-10989
Report Date 09/13/2023
Sample Date : 09/11/2023



Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

IAQ Mold Report

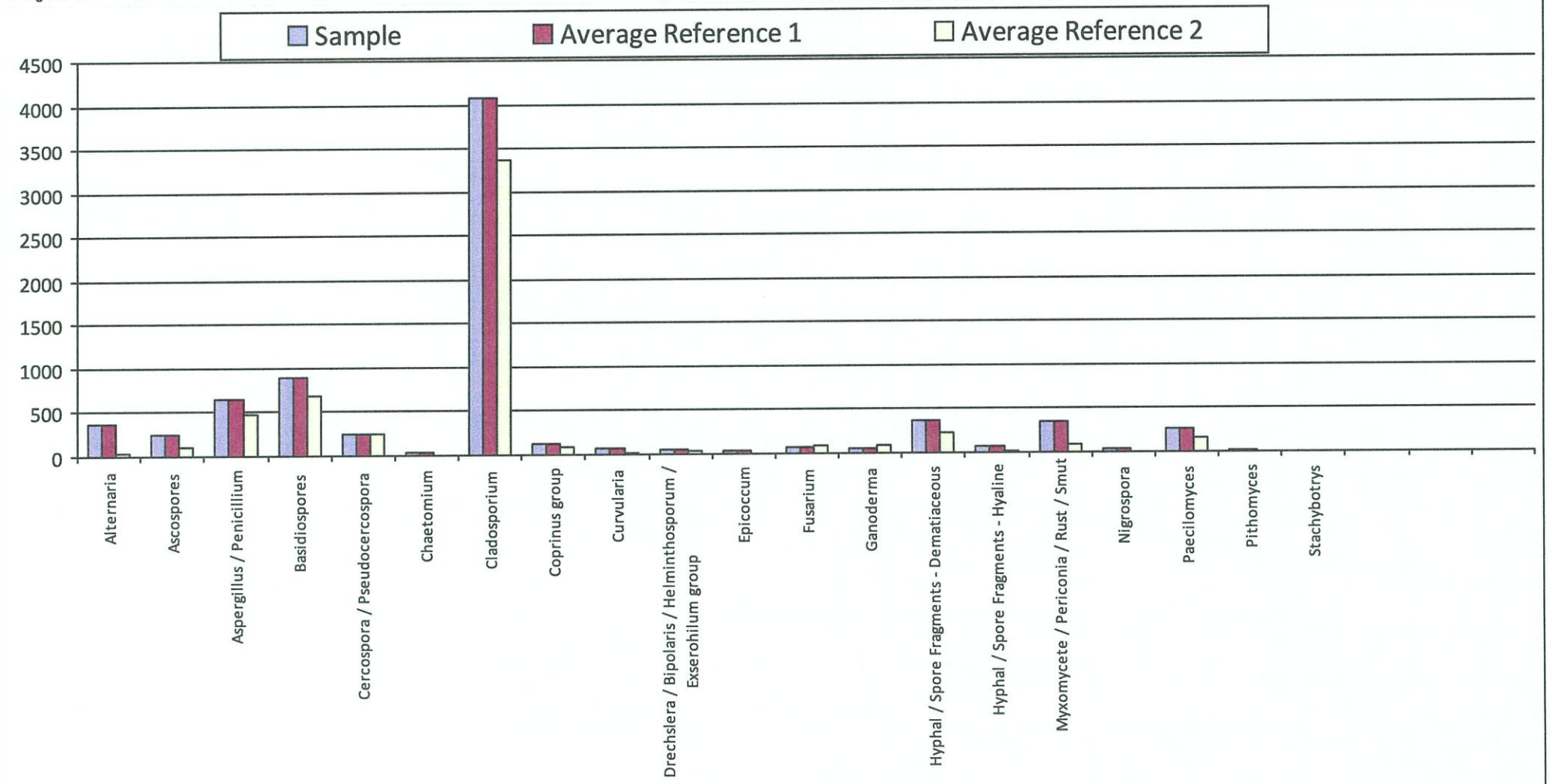
Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194

Outdoor - Front

Lab Job No. 23F-10989
Report Date 09/13/2023
Sample Date : 09/11/2023



Average Reference 1 = Outdoor - Front

Average Reference 2 = Outdoor Back B Wing

Moody Labs

IAQ Mold Report

Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

2051 Valley View Lane
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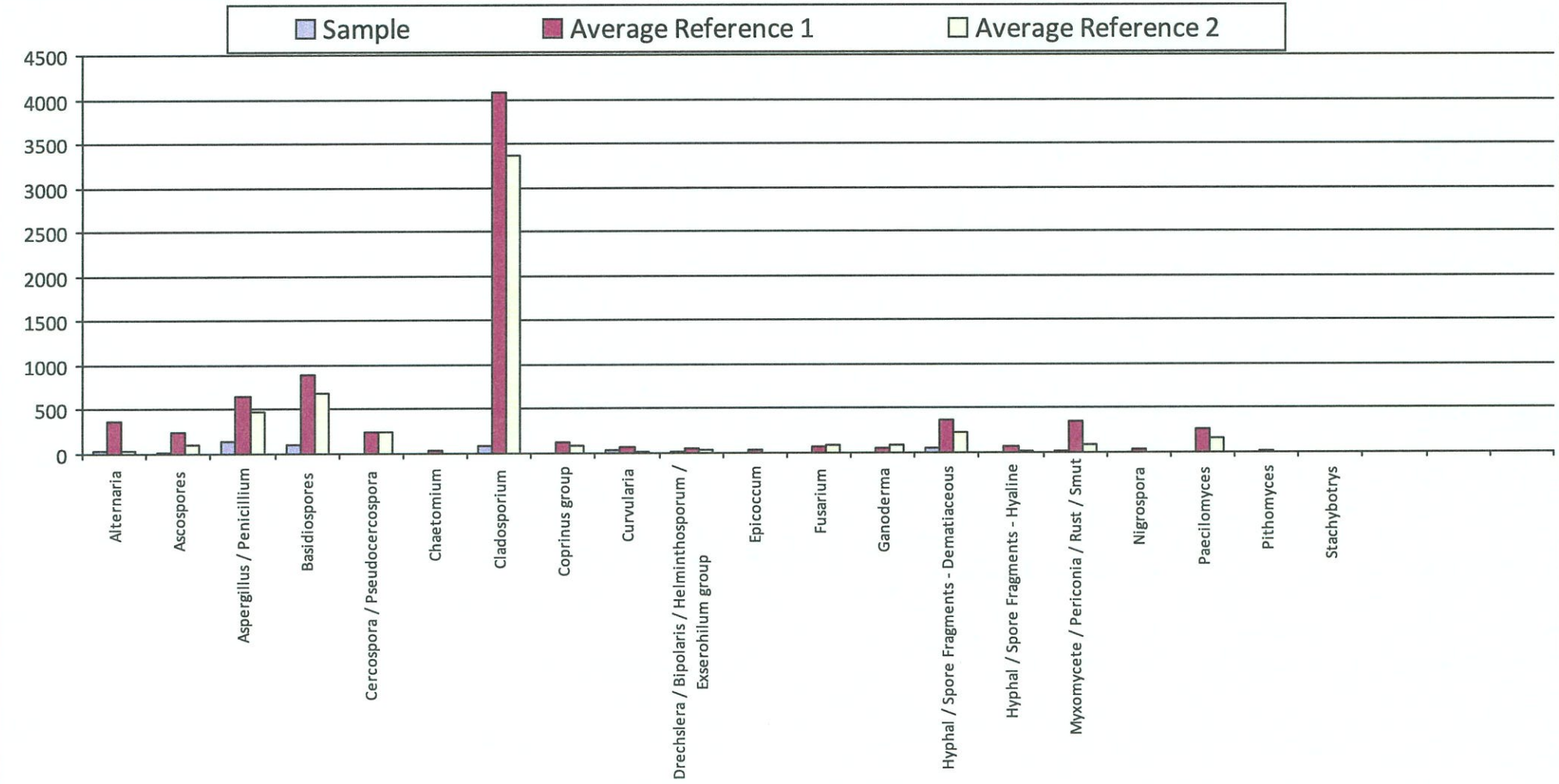
Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194

Lab Job No. 23F-10989
Report Date 09/13/2023
Sample Date : 09/11/2023

Room B7



Average Reference 1 = Outdoor - Front

Average Reference 2 = Outdoor Back B Wing

IAQ Mold Report

Supplemental Overview

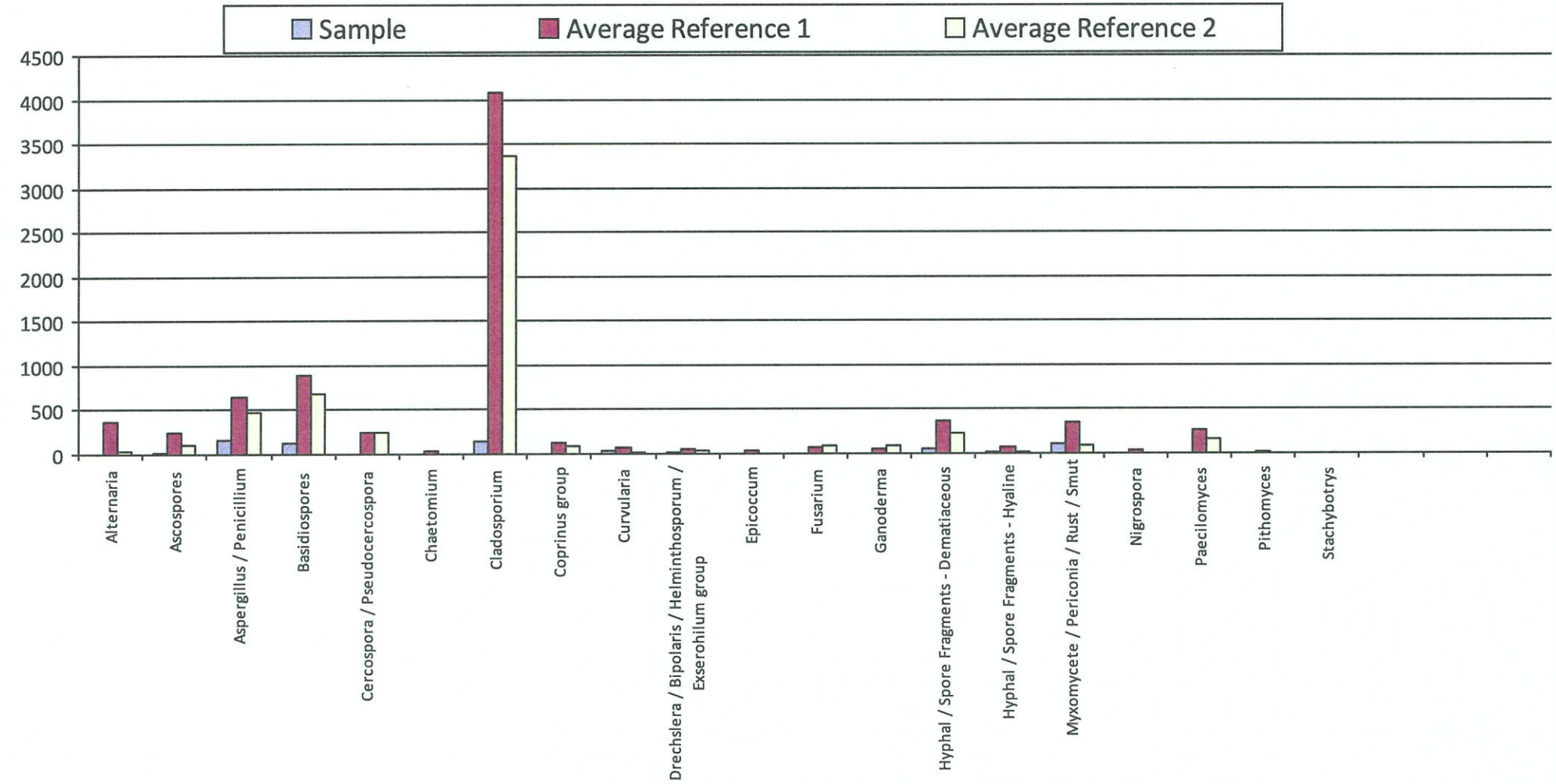
Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194

Room B8

Lab Job No. 23F-10989
Report Date 09/13/2023
Sample Date : 09/11/2023



Average Reference 1 = Outdoor - Front

Average Reference 2 = Outdoor Back B Wing

Moody Labs

IAQ Mold Report

Supplemental Overview

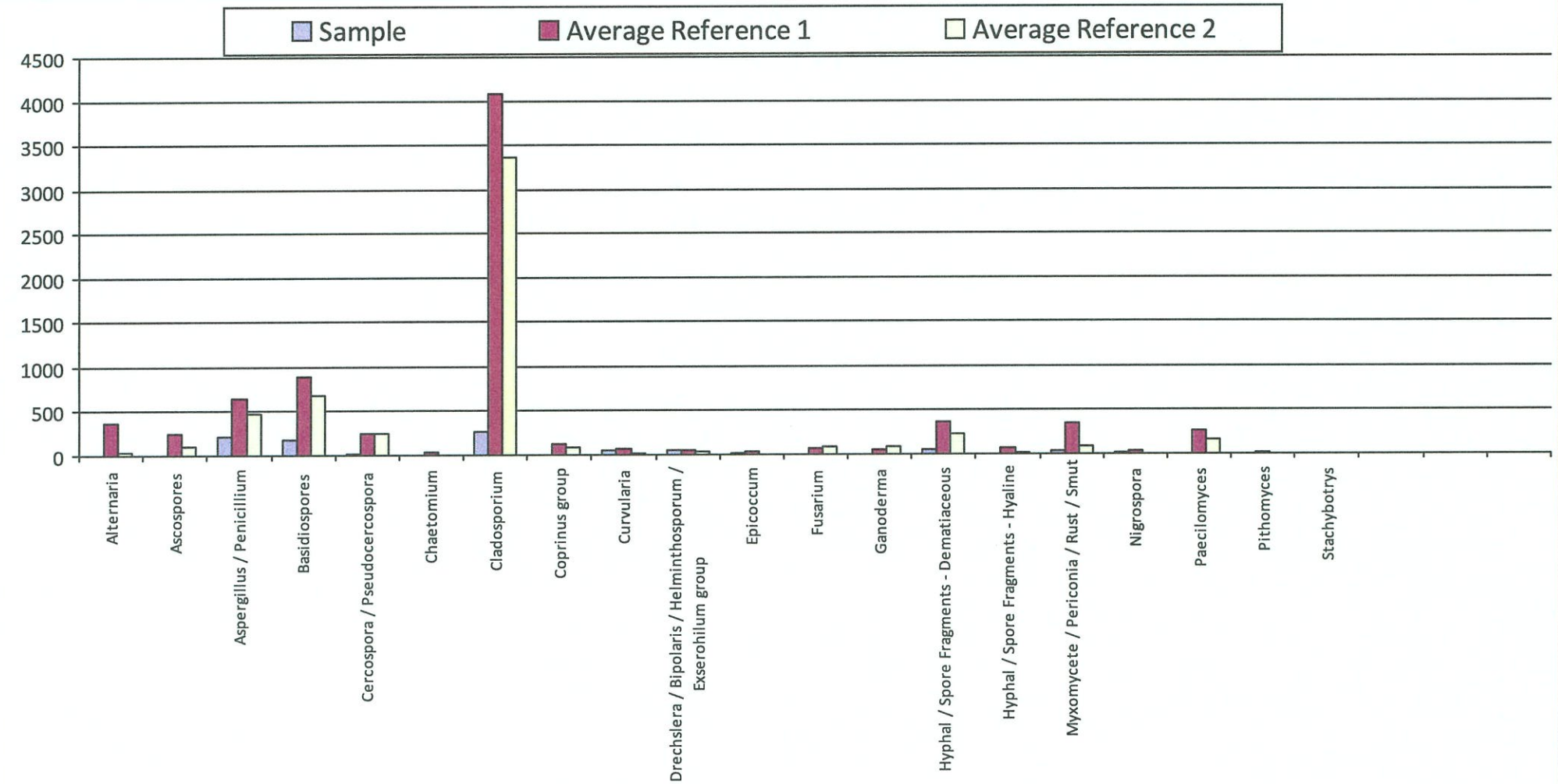
TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC
Project : LISD, Morning Side ES
Project # : 01A 1288 194

Lab Job No. 23F-10989
Report Date 09/13/2023
Sample Date : 09/11/2023

Room B9



Average Reference 1 = Outdoor - Front

Average Reference 2 = Outdoor Back B Wing

Moody Labs
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

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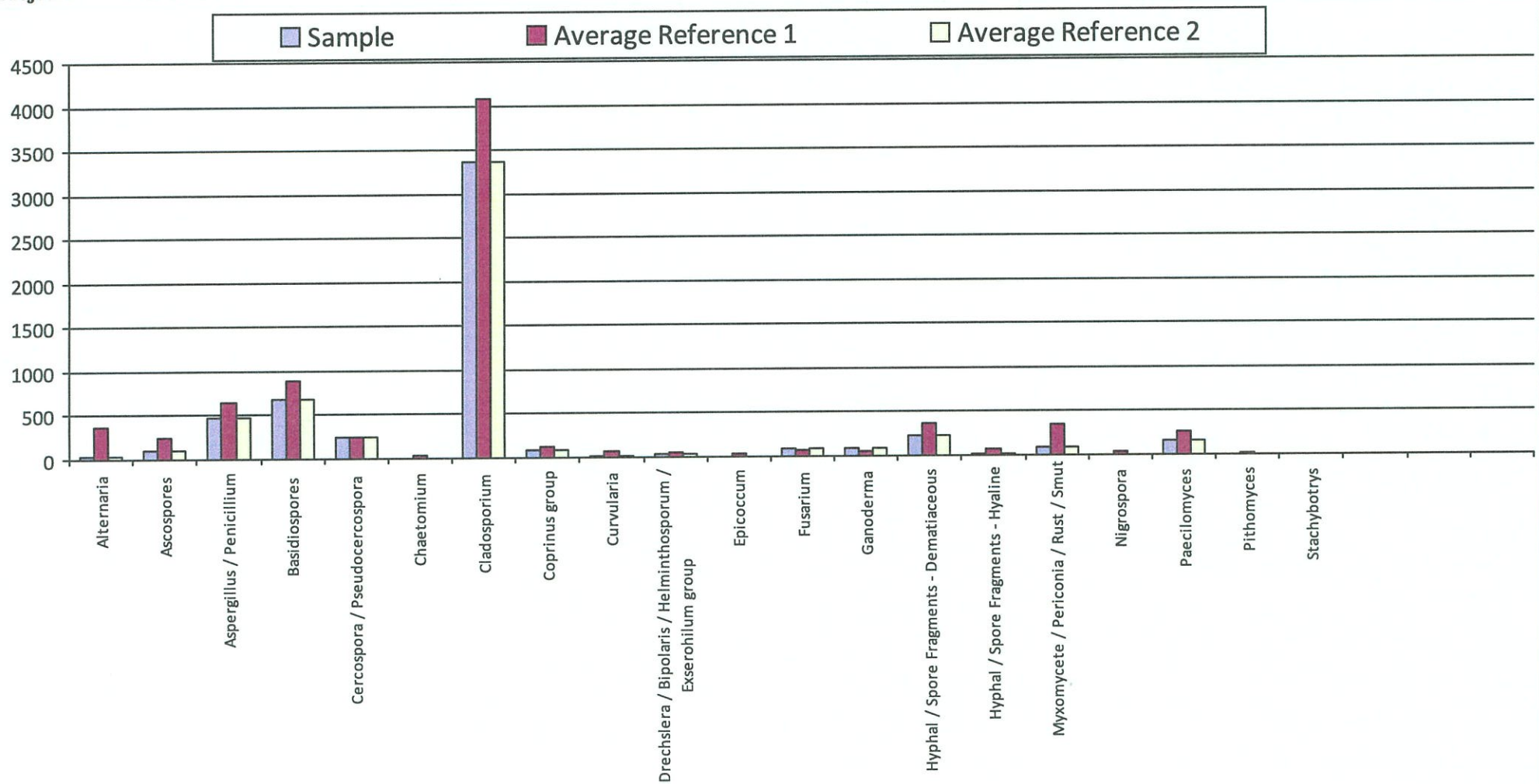
Outdoor Back B Wing



Average Reference 1 = Outdoor - Front

Average Reference 2 = Outdoor Back B Wing

End of Supplemental Overview section (23F-10989)

Chain of Custody

Lab Job # 235 - 10989 Std
Lab Job # PHA-C
Lab Job # ASC

AFTER HOURS / WEEKEND WORK: ☐ YES ☐ NO
Please call in advance for after hours / immediate pricing & availability

Page ____ of ____

ASBESTOS PLM

Bulk ☐ Immediate ☐ 1 day ☐ 2 day ☐ 3 day ☐ 5-7 day
☐ **Analyze All** ☐ **Positive Stop**

PCM Air (7400)

☐ Immediate ☐ 1 day ☐ 2 day ☐ 3 day ☐ 5 day
Analyze Blanks ☐ **Yes** ☐ **No**

TOTAL DUST(0500/0600)

☐ 1 day ☐ 2 day

ASBESTOS TEM

Air AHERA Method ☐ Late Night* ☐ 6 hr ☐ 12 hr ☐ 24 hr
Air 7402 (Modified) ☐ 1 day ☐ 2 day ☐ 3 day
Bulk ☐ 1 day ☐ 2 day ☐ 3 day ☐ 5 day
Water/Wipe/Micro Vac ☐ 1 day ☐ 2 day ☐ 3 day
Analyze Blanks ☐ **Yes** ☐ **No**

*Late night analysis surcharges apply

MOLD

Direct Exam ☐ Immed ☐ 1 day ☐ 2 day ☐ 5 day
Standard Air ☐ Immed ☐ 1 day ☒ 2 day ☐ 5 day
Expanded Air ☐ Immed ☐ 1 day ☐ 2 day ☐ 5 day
TPC w/ Yeast & Mold (TYMC)** ☐ 5 day
Culture** ☐ 10-14 days
Analyze Blanks ☐ **Yes** ☐ **No**

BACTERIA**

Total Plate Count (TAMC) ☐ 2 day
Coliform & E. coli (P/A) ☐ 1 day
Coliform & E. coli (Q) ☐ 1 day
Enterococci (P/A) ☐ 1 day

Please note Bateria / Mold Culture turnarounds are approximate and subject to analytical requirements

OTHER: _____

Billing Company / City: Ensolum LLC # of Samples: 5 Sample Date: 9-11-23
Project: LISD - Mohning Side ES Project #: 01A 1288 194
Contact Information: Name: _____ Phone #: 214 843 9931
E-mail Results to: _____ Mobile #: _____
Invoice Address: _____ P.O. #: _____

Please review paperwork and samples before submitting to lab. Unsealed / improperly packaged / damaged / expired samples or excessive administrative requests may incur additional fees

Notes: _____

Sample #	Sample Description	Vol. / Area (If applicable)	Location / Notes
ST-1	3656 1755	75	OUT Door - Front
	H=34.6 T=83.3		
ST-2	3656 1751	75	Room B7
	H=32.7 T=74.4		
ST-3	3656 1756	75	Room B8
	H=48.6 T=73.9		
ST-4	3656 1741	75	Room B9
	H=35.2 T=72.1		
ST-5	3656 1757	75	OUT Door Back Building
	H=31.5 T=86.9		

Released By:	Date / Time:	Received By:	Date / Time:
Nolan Domain	9-11-23 13:59		9/11/23 13:59
Released By:	Date / Time:	Received By:	Date / Time:

APPENDIX B

DEFINITIONS AND LIMITATION

ENSOLUM

Mold Services Definitions & Limitations

Ensolum performed services in accordance with generally accepted practices of the profession undertaken in similar services at the same time and in the same geographical area. No other warranties, express or implied, apply to the services hereunder or the final report.

Ensolum's services and any report have been prepared on behalf of and for the exclusive use of the Client solely for its use and reliance in assessing the presence of mold in the Investigation Areas of the site. The Client was the only party to which Ensolum explained the risks and limitations of the services and was solely involved in shaping the scope of services. Accordingly, reliance on this report by any other party may involve assumptions leading to an unintended interpretation of findings and opinions. With the consent of the Client, Ensolum may offer reliance to third parties or contract with other parties to develop findings and opinions related to such party's unique risk management concerns. Notwithstanding the foregoing, reliance by any and all third parties upon this deliverable, Ensolum's services or any subsequent report shall be limited in the aggregate to the fair market value of the services provided by Ensolum.

"Limited Mold Assessment". This deliverable uses the term "Limited Mold Assessment" to denote that Ensolum's mold assessment services are limited: (i) to certain portions of the building structure (e.g., the Investigation Areas), by non-destructive sampling methodologies, and/or by access limitations to building materials or components within the Investigation Area(s). In contrast to a "Limited Assessment" is a comprehensive assessment would involve destructive sampling methods with the assessment to be conducted throughout the entire building structure.

Time sensitive. One must keep in mind that mold assessments are essentially a "snap shot in time," and the results are only relevant at the time of site reconnaissance. Because mold, when biologically active, is a living organism, its presence is influenced and controlled by environmental conditions. Mold assessments, therefore, are "time sensitive" in that the presence and concentration of mold and similar organisms in building structures or in the air is directly influenced by environmental conditions (such as humidity, moisture, nutrients and substrates), whether natural or caused by man, which conditions may vary significantly over relatively short periods of time.

Methodologies. Currently, mold assessment methodologies and protocols in Texas are governed by persuasive guidelines (rather than promulgated federal/state or local regulations). Presently, there is no data that supports a threshold limit or dose-response relationship for exposure to mold aeroallergens, individual pathogens, opportunistic pathogens and/or mycotoxins. The Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety and Health (NIOSH) and other non-governmental associations, have not yet established permissible exposure limits (PELs), recommended exposure limits (RELs), or other limit values for fungi. Because no limit values presently exist. Ensolum will not and cannot represent that the site contains no harmful microbes, mold, fungi, or their metabolites, or other latent conditions beyond those identified by the limited scope of this mold assessment.

Findings limited. Findings in an LMA are limited due to the nature of the information obtained such as a visual reconnaissance of readily accessible areas of building structures, interview information, anecdotal information, and limited sampling data derived from one or more specific sampling events. Ensolum cannot warrant the accuracy of prior or subsequent information/data, reports and services performed by other firms at the Site. Ensolum assumes no responsibility or liability for errors in information or data provided by or through the client or third party sources. Ensolum's services are not to be construed as legal or medical interpretation or advice.

Moisture Intrusion Limitation. Ensolum performs mold assessment services and is not a moisture intrusion, HVAC, plumbing or building envelope specialist. However, during the course of conducting its mold assessment services, Ensolum will report observed areas of apparent moisture intrusion. Ensolum does not and will not investigate the cause or causes of such observed moisture intrusion. In the event apparent moisture intrusion is observed, Ensolum will recommend that the client contact a specialist (i.e., plumbing contractor, building envelope specialist, HVAC contractor, water intrusion specialist, etc.) to assist the client in determining the specific cause or causes of the moisture intrusion and remedial options.

Certificate of Mold Damage Remediation (CMDR). For mold remediation projects (above certain size thresholds), applicable Texas law (i.e., Texas Occupation Code Section 1958.54 and T.A.C. Section 295.397 (the Texas Mold Assessment and Remediation Rules), requires that a "Certificate of Mold Damage Remediation" be issued by the Mold Remediation Contractor upon successful completion of the project. This certificate must be provided to property owners no later than the 10th day after the date on which the mold remediation is completed at a property. The Mold Remediation Certificate issued by the Mold Remediation Contractor must include a certification by the Mold Assessor that the mold remediation project has been successfully completed in accordance with the mold remediation protocol.

Be advised that Ensolum's issuance of a CMDR upon successful completion of a Mold Remediation project does not mean, warrant or otherwise guarantee that mold will not be subsequently found in any portion of an Investigation Area or the Site. In the event that Ensolum is engaged to render services in connection with a mold remediation project, ENSOLUM will require Client to provide to Ensolum written documentation that all sources of moisture which contributed to the presence of mold in the Investigation Area have been fully remediated and corrected prior to achieving clearance.

APPENDIX C

LICENSES

TEXAS DEPARTMENT OF LICENSING AND REGULATION
P.O. Box 12157
Austin, Texas 78711-2157
1-800-803-9202 (512) 463-6599
www.tdlr.texas.gov

If you cut around the border of the license it will fit in a standard 5" x 7" frame.

ENSOLUM, LLC
SUITE 1203
2351 W NORTHWEST HWY
DALLAS TX 75220-4433

Rick Figueroa
Chair

Thomas F. Butler
Vice Chair

Gerald R. Callas, M.D., F.A.S.A.
Helen Callier
Nora Castañeda
Joel Garza
Gary F. Wesson, D.D.S., M.S.

Mold Assessment Company

ENSOLUM, LLC

2351 W NORTHWEST HWY SUITE 1203 DALLAS

License Number: ACO1138

The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: February 07, 2024

Brian E. Francis
Executive Director

Mold Analysis Laboratory

MOODY LABS LLC

2051 VALLEY VIEW LN FARMERS BRANCH

License Number: LAB0117

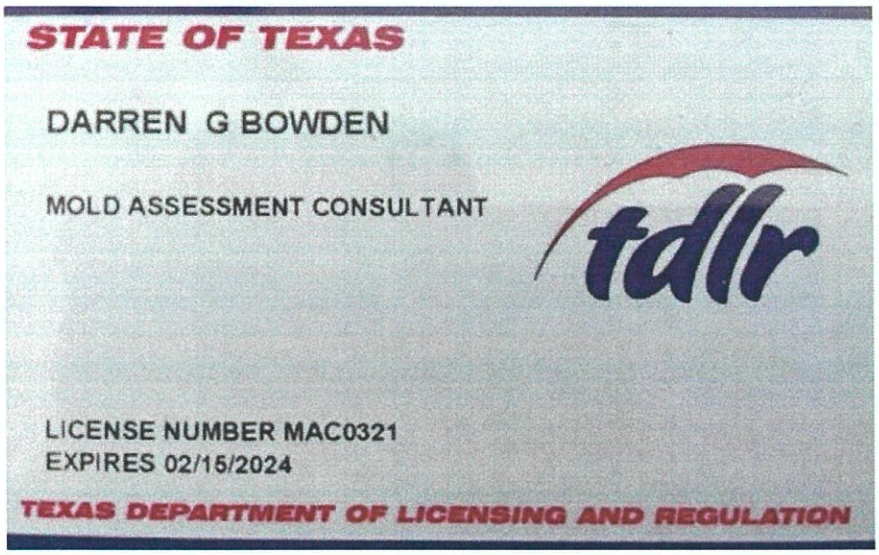
The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: March 01, 2024

Mike Arismendez, Jr.
Executive Director

ENSOLUM

Texas Department of Licensing and Regulation
Mold Assessment Consultant
Darren G Bowden
License No. MAC0321 Expires February 15, 2024



Rick Figueroa
Chair

Thomas F. Butler
Vice Chair

TEXAS DEPARTMENT OF LICENSING & REGULATION

Gerald R. Callas, M.D., F.A.S.A.
Helen Callier
Nora Castañeda
Joel Garza
Gary F. Wesson, D.D.S., M.S.

Mold Assessment Consultant

NOLAN R DOMAIN

License Number: MAC1479

The person named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: November 09, 2023

Brian E. Francis
Executive Director