

Treadway, David

From: Treadway, David
Sent: Friday, August 21, 2020 9:41 AM
To: Krol, Tina; Connelly, Teresa; Fuller, James; Shahzad, Erum; Levrier, Kendra
Cc: Barr, Shawn; Hughes, Jason; Cashman, Jinger
Subject: Limited Mold Assessment Band Room, Choir Room, and Cafeteria

Dr. Krol,

Good morning. On Friday 08/14, Ensolum LLC conducted a limited mold assessment in the band room, choir room, and cafeteria per a campus request. 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 the Band room was 7.1%, Choir Room was 4.5%, Cafeteria was 1.3% of the outdoor levels. Utilizing this theory, the indoor concentrations tested were well within the acceptable guidelines for areas with filtered air or air conditioning. If you have any questions or any other concerns related to indoor air quality at your campus please let me know.

Sincerely,
David Treadway
Environmental Compliance/IAQ
Lewisville ISD



August 24, 2020

Lewisville Independent School District
340 Lake Haven
Lewisville, Texas 75057
Attn: Mr. David Treadway

Re:

Limited Mold Assessment
Killian Middle School
Band Hall, Cafeteria and Choir Room
2651 FM 544
Lewisville, Texas
Ensolum Project No. 01A.1288.098

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within the band hall, cafeteria and choir room of Killian Middle School located at 2651 FM 544 in Lewisville, Texas. 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 R. Domain
Mold Assessment Consultant
MAC1479 EXP: 11/09/2021

Darren G. Bowden
Principal
MAC0321 EXP: 2/15/2020

1.0 INTRODUCTION

Ensolum was retained by Mr. David Treadway, LISD, to complete a Limited Mold Assessment of the band hall, cafeteria and the choir room of Killian Middle School located at 2651 FM 544 in Lewisville, Texas. The purpose of this investigation was to determine if elevated concentrations of airborne fungal spores and structures were present within the above-referenced areas.

Mr. Nolan Domain completed the on-site investigation on August 14, 2020. 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 the band hall, cafeteria and the choir room. No Visible water damage or odors were observed in the following locations:

VISIBLE WATER DAMAGE		
LOCATION	DATE	EXPLANATION
Choir Room	8-14-2020	N/A
Band Hall	8-14-2020	N/A
Cafeteria	8-14-2020	N/A

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
Choir Room	8-14-2020	75.2	44.5	58
Band Hall	8-14-2020	73.9	45.5	57
Cafeteria	8-14-2020	67.6	49	50
Exterior, Outside Cafeteria	8-14-2020	84.5	30.5	55
Exterior, Front of School	8-14-2020	96.2	44.4	112

Area air samples were collected with Allergenco-D 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 of time (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 of time (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
S/N = 4133658	Choir Room
S/N = 4133659	Band Hall
S/N = 4133660	Cafeteria
S/N = 4133661	Exterior, Outside Cafeteria
S/N = 4133662	Exterior, Front of School

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 in the room were considerably lower and were qualitatively similar to those measured outside of the building at the time the sampling was performed.

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 this day.

APPENDIX A

ANALYTICAL DATA



IAQ Mold Report

Summary

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC**Lab Job No. :** 20F-08428**Project :** Killian MS Band, Choir and Cafeteria**Report Date :** 08/18/2020**Project # :** 01A.1288.098**Sample Date:** Not Provided**Sample Type:** Spore Trap, Non-cultured**Spore Trap Type:** Allergenco D**Test Method:** Mold: ASTM D7391-20 - Standard Profile

Page 1 of 4

On 8/17/2020, five (5) samples were submitted by Nolan Domain of Ensolum, LLC (located at 2351 W. Northwest Hwy Suite #1203, Dallas, TX 75220) 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
4133658	75	Choir Room	Aspergillus / Penicillium Basidiospores Cladosporium Alternaria Curvularia Total:	67 36% 53 28% 27 14% 27 14% 13 7% 187 100%
4133659	75	Band Room	Cladosporium Basidiospores Hyphal / Spore Fragments - Dematiaceous Aspergillus / Penicillium Myxomycete / Periconia / Rust / Smut Fusicladium Drechslera / Bipolaris / Helminthosporium / Exserohilum group Curvularia Ascospores Total:	80 27% 53 18% 40 14% 40 14% 27 9% 13 4% 13 4% 13 4% 13 4% 292 100%
4133660	75	Cafeteria	Aspergillus / Penicillium Basidiospores Total:	40 75% 13 25% 53 100%



IAQ Mold Report

Summary

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
4133661	75	Outdoor by Cafeteria	Cladosporium	1440	42%
			Basidiospores	387	11%
			Ascospores	293	9%
			Aspergillus / Penicillium	227	7%
			Myxomycete / Periconia / Rust / Smut	213	6%
			Alternaria	173	5%
			Hyphal / Spore Fragments - Dematiaceous	147	4%
			Coprinus group	120	4%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	67	2%
			Pithomyces	67	2%
			Fusarium	53	2%
			Curvularia	40	1%
			Ganoderma	27	<1%
			Epicoccum	27	<1%
			Nigrospora	27	<1%
			Hyphal / Spore Fragments - Hyaline	27	<1%
			Fusicladium	13	<1%
			Helicomycetes	13	<1%
			Pyricularia	13	<1%
			Oidium / Peronospora	13	<1%
			Cercospora / Pseudocercospora	13	<1%
			Torula	13	<1%



IAQ Mold Report

Summary

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

Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: ASTM D7391-20 - Standard Profile

Lab Job No. : 20F-08428
Report Date : 08/18/2020
Sample Date: Not Provided
Spore Trap Type: Allergenco D

Page 3 of 4

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter	
4133662	75	Outdoor Front * See Analytical Notes report for further details	Cladosporium	1496	36%
			Aspergillus / Penicillium	746	18%
			Basidiospores	373	9%
			Alternaria	280	7%
			Myxomycete / Periconia / Rust / Smut	253	6%
			Ascospores	187	5%
			Fusarium	133	3%
			Hyphal / Spore Fragments - Dematiaceous	120	3%
			Coprinus group	93	2%
			Curvularia	80	2%
			Nigrospora	80	2%
			Drechslera / Bipolaris / Helminthosporum / Exserohilum group	67	2%
			Ganoderma	40	<1%
			Epicoccum	27	<1%
			Torula	27	<1%
			Hyphal / Spore Fragments - Hyaline	27	<1%
			Fusicladium	13	<1%
			Pyricularia	13	<1%
			Spegazzinia	13	<1%
			Cercospora / Pseudocercospora	13	<1%
			Cerebella / Monodictys / Acrodictys	13	<1%
			Pithomyces	13	<1%
			Total:		



IAQ Mold Report

Summary

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2051 Valley View Lane

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Client : Ensolum, LLC**Project :** Killian MS Band, Choir and Cafeteria**Project # :** 01A.1288.098**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: ASTM D7391-20 - Standard Profile**Lab Job No. :** 20F-08428**Report Date :** 08/18/2020**Sample Date:** Not Provided**Spore Trap Type:** Allergenco D

Page 4 of 4

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter

Results may not be reported except in full. Data contained in this test report relates only to the samples tested. This report does not express or imply interpretation of the results contained herein. Interpretation should be made by a qualified professional.

Moody Labs assumes no responsibility for the manner in which these samples were collected or handled prior to being received at this laboratory. Volume, area, and/or weight is provided by the customer. Moody Labs assumes no responsibility for the qualifications of personnel performing sampling and/or interpretations of this data.

Analyst(s): Christine Sauri

Lab Director : Heather Lopez

Lab Director : Bruce Crabb

Approved Signatory : _____

Approved Signatory : _____

Thank you for choosing Moody Labs

SMLMS v13.57



IAQ Mold Report

Data Detail

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

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

Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: ASTM D7391-20 - Standard Profile

Lab Job No. : 20F-08428
Report Date : 08/18/2020
Sample Date: Not Provided
Spore Trap Type: Allergenco D

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:	4133658					4133659					4133660				
Location:	Choir Room					Band Room					Cafeteria				
Media Expires On:	Jul 2021					Jul 2021					Jul 2021				
Notes Included:															
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	2	13	27	14%	30										
Ascospores						1	13	13	4%	10					
Aspergillus / Penicillium	5	13	67	36%	70	3	13	40	14%	40	3	13	40	75%	40
Basidiospores	4	13	53	28%	50	4	13	53	18%	50	1	13	13	25%	10
Cercospora / Pseudocercospora															
Cerebella / Monodictys / Acrodictys															
Chaetomium															
Cladosporium	2	13	27	14%	30	6	13	80	27%	80					
Coprinus group															
Curvularia	1	13	13	7%	10	1	13	13	4%	10					
Drechslera / Bipolaris / Helminthosp						1	13	13	4%	10					
Epicoecum															
Fusarium															
Fusicladium						1	13	13	4%	10					
Ganoderma															
Helicomyces															
Hyphal / Spore Fragments - Dematia						3	13	40	14%	40					
Hyphal / Spore Fragments - Hyaline															
Myxomycete / Periconia / Rust / Sm						2	13	27	9%	30					
Nigrospora															
Oidium / Peronospora															
Pithomyces															
Pyricularia															
Spegazzinia															
Stachybotrys															
Torula															
TOTALS	14		187	100%	190	22		292	100%	290	4		53	100%	53
Analyst	Christine Sauri					Christine Sauri					Christine Sauri				
Analysis Date	8/18/2020					8/18/2020					8/18/2020				
Debris Rating	1					2					1				
Debris Composition															
Fibers	1/5					1/5					0/5				
Inorganic/Other	1/5					2/5					1/5				
Insect Parts	0/5					0/5					0/5				
Pollen	1/5					0/5					0/5				
Skin/Dander	1/5					1/5					1/5				



IAQ Mold Report

Data Detail

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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

Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098
Sample Type: Spore Trap, Non-cultured
Test Method: Mold: ASTM D7391-20 - Standard Profile

Lab Job No. : 20F-08428
Report Date : 08/18/2020
Sample Date: Not Provided
Spore Trap Type: Allergenco D

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:	4133661					4133662								
Location:	Outdoor by Cafeteria					Outdoor Front								
Media Expires On:	Jul 2021					Jul 2021								
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	13	13	173	5%	170	21	13	280	7%	280				
Ascospores	22	13	293	9%	290	14	13	187	5%	190				
Aspergillus / Penicillium	17	13	227	7%	230	56	13	746	18%	750				
Basidiospores	29	13	387	11%	390	28	13	373	9%	370				
Cercospora / Pseudocercospora	1	13	13	<1%	10	1	13	13	<1%	10				
Cerebella / Monodictys / Acrodictys						1	13	13	<1%	10				
Chaetomium														
Cladosporium	108	13	1440	42%	1400	101	15	1496	36%	1500				
Coprinus group	9	13	120	4%	120	7	13	93	2%	90				
Curvularia	3	13	40	1%	40	6	13	80	2%	80				
Drechslera / Bipolaris / Helminthosp	5	13	67	2%	70	5	13	67	2%	70				
Epicoecum	2	13	27	<1%	30	2	13	27	<1%	30				
Fusarium	4	13	53	2%	50	10	13	133	3%	130				
Fusicladium	1	13	13	<1%	10	1	13	13	<1%	10				
Ganoderma	2	13	27	<1%	30	3	13	40	<1%	40				
Helicomyces	1	13	13	<1%	10									
Hyphal / Spore Fragments - Dematia	11	13	147	4%	150	9	13	120	3%	120				
Hyphal / Spore Fragments - Hyaline	2	13	27	<1%	30	2	13	27	<1%	30				
Myxomycete / Periconia / Rust / Sm	16	13	213	6%	210	19	13	253	6%	250				
Nigrospora	2	13	27	<1%	30	6	13	80	2%	80				
Oidium / Peronospora	1	13	13	<1%	10									
Pithomyces	5	13	67	2%	70	1	13	13	<1%	10				
Pyricularia	1	13	13	<1%	10	1	13	13	<1%	10				
Spegazzinia						1	13	13	<1%	10				
Stachybotrys														
Torula	1	13	13	<1%	10	2	13	27	<1%	30				
TOTALS	256		3413	100%	3400	297		4107	100%	4100				
Analyst	Christine Sauri					Christine Sauri								
Analysis Date	8/18/2020					8/18/2020								
Debris Rating	3					3								
Debris Composition														
Fibers	1/5					1/5								
Inorganic/Other	3/5					3/5								
Insect Parts	1/5					0/5								
Pollen	1/5					1/5								
Skin/Dander	1/5					1/5								



IAQ Mold Report

Data Detail

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

2051 Valley View Lane

Farmers Branch, TX 75234 Phone: (972) 241-8460

Client : Ensolum, LLC

Project : Killian MS Band, Choir and Cafeteria

Project # : 01A.1288.098

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-20 - Standard Profile

Lab Job No. : 20F-08428

Report Date : 08/18/2020

Sample Date: Not Provided

Spore Trap Type: Allergenco D

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.

End of Data Detail section

20F-08428

SMLMS v13.57



IAQ Mold Report

Analytical Notes

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

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

Client : Ensolum, LLC
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Sample Type: Spore Trap, Non-cultured
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Lab Job No. : 20F-08428
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Sample Date : Not Provided
Spore Trap Type: Allergenco D

Page 1 of 2

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Samples Analyzed

Sample No: 4133662 : Outdoor Front

Notes: Please note: the minimum reporting limit for Cladosporium is 15 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: ASTM D7391-20: Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction Sample by Optical Microscopy.
Samples are read at 100% 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 D7391-20.

This report must not be used by the customer to claim product certification, approval, or endorsement by AIHA, 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

TDLR License No.: LAB0117

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Project : Killian MS Band, Choir and Cafeteria

Project # : 01A.1288.098

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: ASTM D7391-20 - Standard Profile

Lab Job No. : 20F-08428

Report Date : 08/18/2020

Sample Date : Not Provided

Spore Trap Type: Allergenco D

Page 2 of 2

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Lab ID # 102577



TEXAS DEPARTMENT OF TRANSPORTATION

Small Business Enterprise Program



End of Analytical Notes section

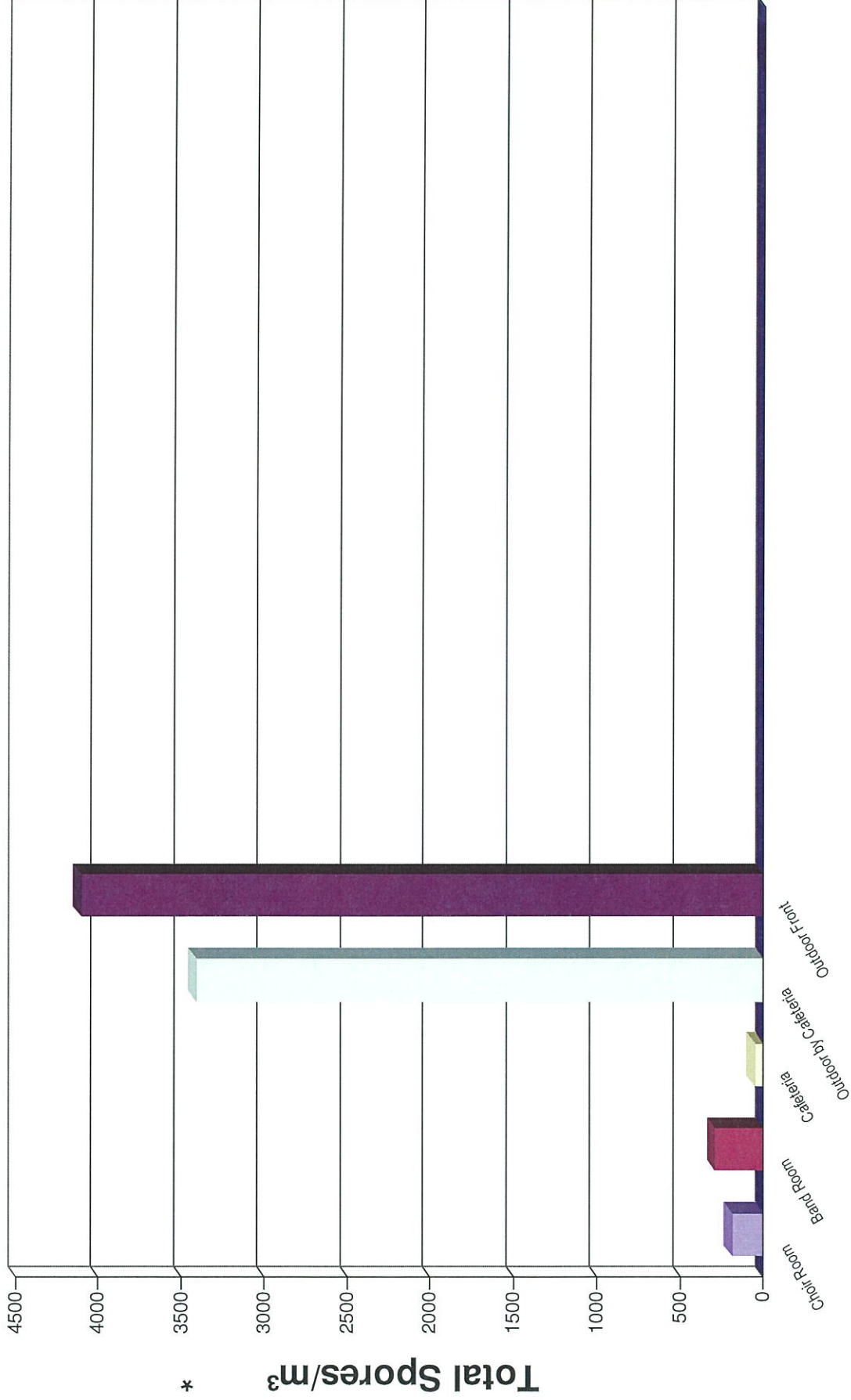
20F-08428

IAQ Mold Report
Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

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

Client :	Ensolum, LLC	Lab Job No.	20F-08428
Project :	Killian MS Band, Choir and Cafeteria	Report Date	08/18/2020
Project # :	01A.1288.098	Sample Date :	Not Provided





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

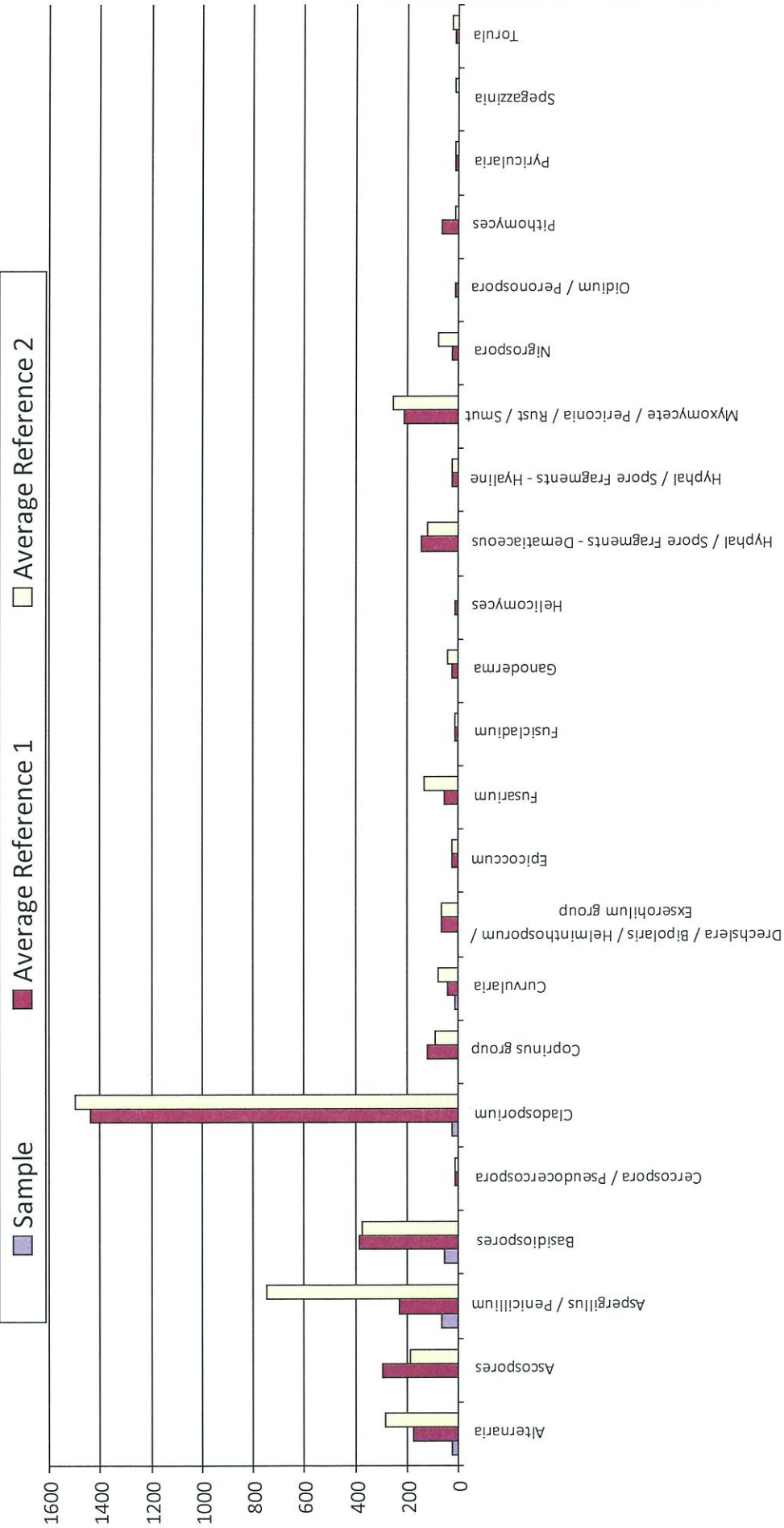
IAQ Mold Report Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098

Lab Job No. 20F-08428
Report Date 08/18/2020
Sample Date : Not Provided

Choir Room



Average Reference 1 = Outdoor by Cafeteria

Average Reference 2 = Outdoor Front



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

IAQ Mold Report

Supplemental Overview

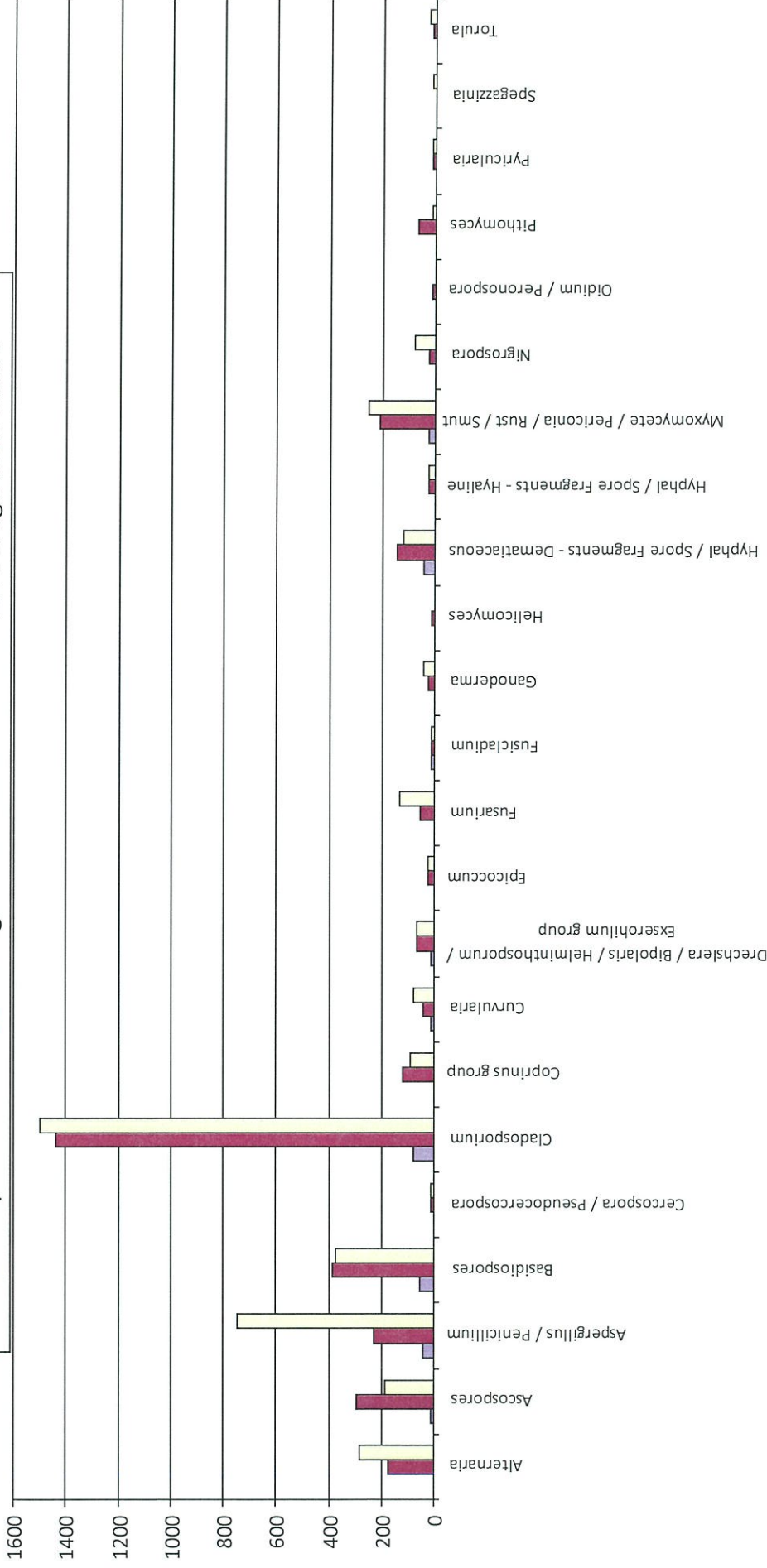
TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098

Lab Job No. 20F-08428
Report Date 08/18/2020
Sample Date : Not Provided

Band Room

■ Sample ■ Average Reference 1 □ Average Reference 2



Average Reference 1 = Outdoor by Cafeteria

Average Reference 2 = Outdoor Front



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

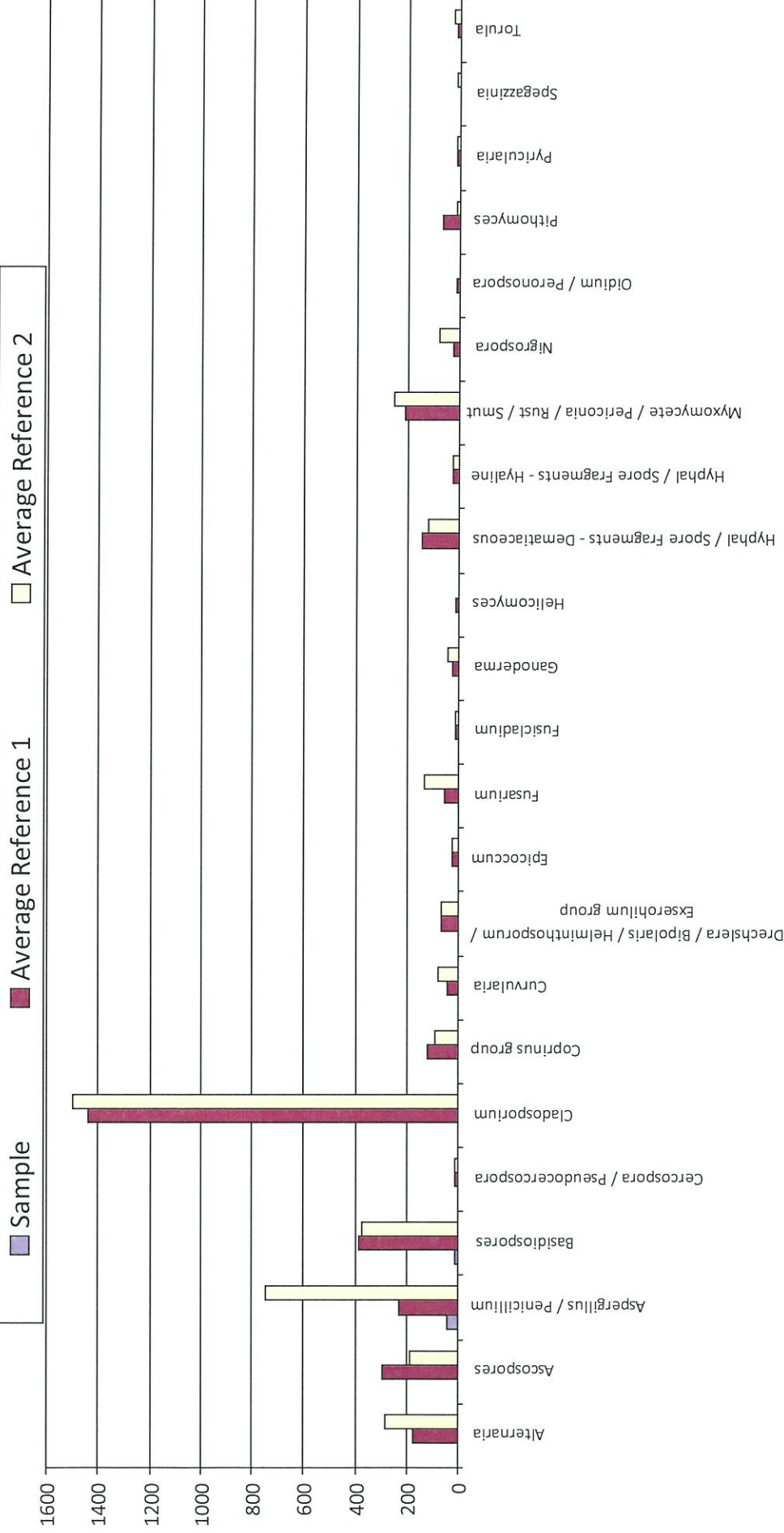
IAQ Mold Report

Supplemental Overview

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Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098

Lab Job No. 20F-08428
Report Date 08/18/2020
Sample Date : Not Provided
Cafeteria



Average Reference 1 = Outdoor by Cafeteria

Average Reference 2 = Outdoor Front



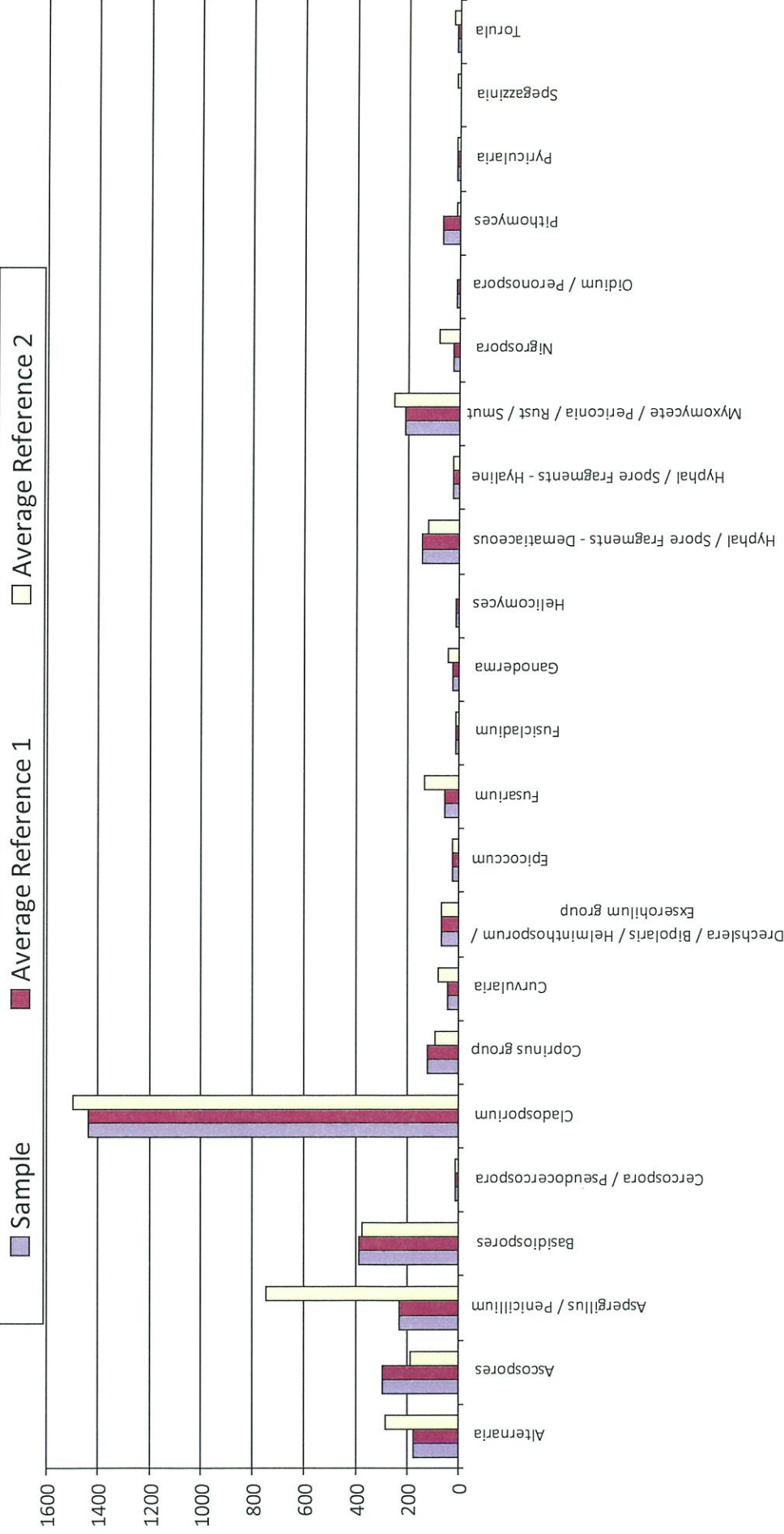
2051 Valley View Lane
Farmers Branch, TX 75234 Phone: (972) 241-8460

IAQ Mold Report Supplemental Overview

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Client : Ensolum, LLC
Project : Killian MS Band, Choir and Cafeteria
Project # : 01A.1288.098

Lab Job No. 20F-08428
Report Date 08/18/2020
Sample Date : Not Provided
Outdoor by Cafeteria



Average Reference 1 = Outdoor by Cafeteria

Average Reference 2 = Outdoor Front



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

IAQ Mold Report

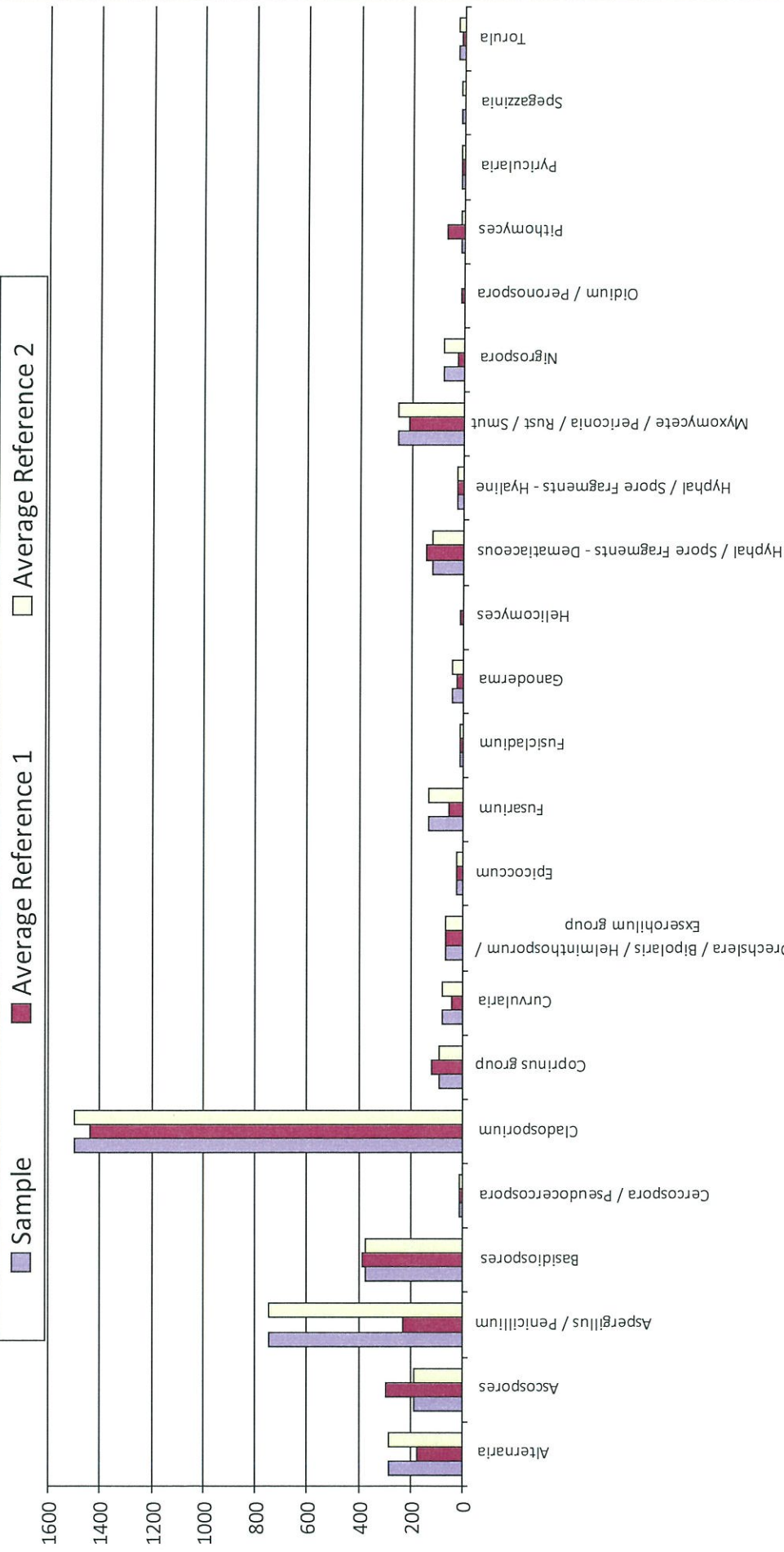
Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

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APPENDIX B

DEFINITIONS AND LIMITATIONS



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.

