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**From:** Treadway, David  
**Sent:** Wednesday, September 11, 2019 2:34 PM  
**To:** Lutz, Maria; Hughes, Jason; Barr, Shawn; Cashman, Susan  
**Subject:** Central Elementary Air Testing

Maria,

Good afternoon. On Thursday 9/5, Ensolum LLC conducted a limited mold assessment of the old cafeteria, old gym, and main hallway at Central Elementary per your request. It is typically assumed that indoor spore levels in an area with filtered or air conditioned air, and activity 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 old gym was **3.6%**, the old cafeteria was **10.7%**, and the main hallway was **3.71%** of the outdoor levels. Utilizing this theory, the indoor concentrations were well within the acceptable guidelines for areas with filtered or air conditioned air. I am attaching the report to this email. Please let me know if you or your team have any questions.

Sincerely,  
David Treadway  
Environmental Coordinator  
Lewisville ISD

Sent from [Mail](#) for Windows 10





# ENSOLUM

September 10, 2019

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

Re:

Limited Mold Assessment  
Central Elementary School – Cafeteria, Gym, Hallway  
400 High School Dr.  
Lewisville, Texas  
Ensolum Project No. 01A.1288.042

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within the cafeteria, gym and hallway of Central Elementary School located at 400 High School Drive 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 Domain  
Mold Assessment Consultant  
MAC1479 EXP: 11/09/2019

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 cafeteria, gym and hallway of Central Elementary School located at 400 High School Drive 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 room.

Mr. Nolan Domain completed the on-site investigation on September 5, 2019. The Limited Mold Assessment was performed in response to a complaint of possible indoor air quality issues within the specific areas.

## 2.0 PROCEDURE

Ensolum visually inspected accessible areas of the office. No Visible water damage or odors were observed in the following locations:

VISIBLE WATER DAMAGE		
LOCATION	DATE	EXPLANATION
Cafeteria	9-5-2019	N/A
Gym	9-5-2019	N/A
Hallway	9-5-2019	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
Cafeteria	9-5-2019	77	30.1%	41.93
Old Gym	9-5-2019	79	49.8%	74.70
Hallway	9-5-2019	75.9	38%	51.13

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
1	Cafeteria
2	Old Gym
3	Hallway
4	Outdoor
5	Outdoor

### 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. However, the specific humidity should be lowered below 60 in the gym.

## 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**Project :** LISD, Central ES**Project # :** 01A.1288.042**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile**Lab Job No. :** 19F-11262**Report Date :** 09/06/2019 8:50 AM**Sample Date:** 09/05/2019**Spore Trap Type:** Allergenco D

Page 1 of 3

On 9/5/2019, 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
1	75	252205, Old Cafeteria	Basidiospores Aspergillus / Penicillium Ascospores Cladosporium Agaricales group Myxomycete / Periconia / Rust / Smut  Total:	706 52% 227 17% 213 16% 160 12% 27 2% 13 <1%  1346 100%
2	75	252208, Old Gym	Cladosporium Basidiospores Curvularia Aspergillus / Penicillium Ascospores Hyphal / Spore Fragments - Dematiaceous Hyphal / Spore Fragments - Hyaline  Total:	240 53% 93 21% 40 9% 27 6% 27 6% 13 3% 13 3%  453 100%
3	75	252198, Hall by Time Clock	Basidiospores Cladosporium Ascospores Curvularia Drechslera / Bipolaris / Helminthosporium / Exserohilum group Aspergillus / Penicillium  Total:	173 37% 120 26% 120 26% 27 6% 13 3% 13 3%  466 100%





## IAQ Mold Report

### Summary

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AIHA EMPAT ID: 102577

2051 Valley View Lane

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

**Client :** Ensolum, LLC**Project :** LISD, Central ES**Project # :** 01A.1288.042**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile**Lab Job No. :** 19F-11262**Report Date :** 09/06/2019 8:50 AM**Sample Date:** 09/05/2019**Spore Trap Type:** Allergenco D

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
4	75	252216, Outdoor by Old Gym * See Analytical Notes report for further details	Basidiospores Cladosporium Ascospores Aspergillus / Penicillium Myxomycete / Periconia / Rust / Smut Drechslera / Bipolaris / Helminthosporium / Exserohilum group Cercospora / Pseudocercospora Paecilomyces Agaricales group Hyphal / Spore Fragments - Dematiaceous Curvularia Coprinus group Pithomyces Fusarium Ganoderma Alternaria Cerebella / Monodictys / Acrodictys Nigrospora Hyphal / Spore Fragments - Hyaline Torula  Total:	5200 44% 3169 27% 1186 10% 600 5% 280 2% 187 2%  120 1% 120 1% 107 <1% 107 <1%  107 <1% 93 <1% 93 <1% 80 <1% 80 <1% 53 <1% 53 <1% 40 <1% 13 <1% 13 <1%  11701 100%



# 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. :** 19F-11262**Project :** LISD, Central ES**Report Date :** 09/06/2019 8:50 AM**Project # :** 01A.1288.042**Sample Date:** 09/05/2019**Sample Type:** Spore Trap, Non-cultured**Spore Trap Type:** Allergenco D**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

Page 3 of 3

On 9/5/2019, 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
5	75	252210, Outdoor Front * See Analytical Notes report for further details	Basidiospores Cladosporium Ascospores Aspergillus / Penicillium Myxomycete / Periconia / Rust / Smut Curvularia Alternaria Cercospora / Pseudocercospora Agaricales group Drechslera / Bipolaris / Helminthosporium / Exserohilum group Fusarium Coprinus group Hyphal / Spore Fragments - Dematiaceous Pithomyces Nigrospora Ganoderma Hyphal / Spore Fragments - Hyaline Epicoccum Ulocladium / Stemphylium Torula  Total:	6000 48% 2222 18% 1253 10% 1120 9% 387 3% 240 2% 200 2% 173 1% 147 1% 147 1% 133 1% 133 1% 120 <1% 67 <1% 67 <1% 40 <1% 40 <1% 13 <1% 13 <1% 13 <1%  12528 100%

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): Phoebe Stell

Lab Director : Heather Lopez

Approved Signatory : \_\_\_\_\_

Lab Director : Bruce Crabb

Approved Signatory : \_\_\_\_\_

Thank you for choosing Moody Labs

SMLMS v13.28

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# 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 :** LISD, Central ES**Project # :** 01A.1288.042**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile**Lab Job No. :** 19F-11262**Report Date :** 09/06/2019 8:50 AM**Sample Date:** 09/05/2019**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:	1					2					3				
Location:	252205, Old Cafeteria					252208, Old Gym					252198, Hall by Time Clock				
Media Expires On:	Aug 2020					Aug 2020					Aug 2020				
Notes Included:															
Volume:	75					75					75				
	raw ct.	RL	spores/m <sup>3</sup>	%total	spores/m <sup>3</sup> SF	raw ct.	RL	spores/m <sup>3</sup>	%total	spores/m <sup>3</sup> SF	raw ct.	RL	spores/m <sup>3</sup>	%total	spores/m <sup>3</sup> SF
Agaricales group	2	13	27	2%	30										
Alternaria															
Ascospores	16	13	213	16%	210	2	13	27	6%	30	9	13	120	26%	120
Aspergillus / Penicillium	17	13	227	17%	230	2	13	27	6%	30	1	13	13	3%	10
Basidiospores	53	13	706	52%	710	7	13	93	21%	90	13	13	173	37%	170
Cercospora / Pseudocercospora															
Cerebella / Monodictys / Acrodictys															
Chaetomium															
Cladosporium	12	13	160	12%	160	18	13	240	53%	240	9	13	120	26%	120
Coprinus group															
Curvularia						3	13	40	9%	40	2	13	27	6%	30
Drechslera / Bipolaris / Helminthosporu											1	13	13	3%	10
Epicoccum															
Fusarium															
Ganoderma															
Hyphal / Spore Fragments - Dematiace						1	13	13	3%	10					
Hyphal / Spore Fragments - Hyaline						1	13	13	3%	10					
Memnoniella															
Myxomycete / Periconia / Rust / Smut	1	13	13	<1%	10										
Nigrospora															
Paecilomyces															
Pithomyces															
Stachybotrys															
Torula															
Ulocladium / Stemphylium															
TOTALS	101		1346	100%	1300	34		453	100%	450	35		466	100%	470
Analyst	Phoebe Stell					Phoebe Stell					Phoebe Stell				
Analysis Date	9/6/2019					9/6/2019					9/6/2019				
Debris Rating	2					3					3				
Debris Composition															
Fibers	1/5					1/5					1/5				
Inorganic/Other	1/5					1/5					2/5				
Insect Parts	0/5					0/5					1/5				
Pollen	0/5					0/5					0/5				
Skin/Dander	2/5					3/5					2/5				





# 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 :** LISD, Central ES

**Project # :** 01A.1288.042

**Sample Type:** Spore Trap, Non-cultured

**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

**Lab Job No. :** 19F-11262

**Report Date :** 09/06/2019 8:50 AM

**Sample Date:** 09/05/2019

**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:	4					5									
Location:	252216, Outdoor by Old Gym					252210, Outdoor Front									
Media Expires On:	Aug 2020					Aug 2020									
Notes Included:	See Analytical Notes					See Analytical Notes									
Volume:	75					75									
	raw ct.	RL	spores/m³	%total	spores/m³ SF	raw ct.	RL	spores/m³	%total	spores/m³ SF					
Agaricales group	8	13	107	<1%	100	11	13	147	1%	150					
Alternaria	4	13	53	<1%	50	15	13	200	2%	200					
Ascospores	89	13	1186	10%	1200	94	13	1253	10%	1300					
Aspergillus / Penicillium	45	13	600	5%	600	84	13	1120	9%	1100					
Basidiospores	104	50	5200	44%	5200	105	57	6000	48%	6000					
Cercospora / Pseudocercospora	9	13	120	1%	120	13	13	173	1%	170					
Cerebella / Monodictys / Acrodictys	4	13	53	<1%	50										
Chaetomium															
Cladosporium	103	31	3169	27%	3200	100	22	2222	18%	2200					
Coprinus group	7	13	93	<1%	90	10	13	133	1%	130					
Curvularia	8	13	107	<1%	100	18	13	240	2%	240					
Drechslera / Bipolaris / Helminthosporu	14	13	187	2%	190	11	13	147	1%	150					
Epicoccum						1	13	13	<1%	10					
Fusarium	6	13	80	<1%	80	10	13	133	1%	130					
Ganoderma	6	13	80	<1%	80	3	13	40	<1%	40					
Hyphal / Spore Fragments - Dematiace	8	13	107	<1%	100	9	13	120	<1%	120					
Hyphal / Spore Fragments - Hyaline	1	13	13	<1%	10	3	13	40	<1%	40					
Memnoniella															
Myxomycete / Periconia / Rust / Smut	21	13	280	2%	280	29	13	387	3%	390					
Nigrospora	3	13	40	<1%	40	5	13	67	<1%	70					
Paecilomyces	9	13	120	1%	120										
Pithomyces	7	13	93	<1%	90	5	13	67	<1%	70					
Stachybotrys															
Torula	1	13	13	<1%	10	1	13	13	<1%	10					
Ulocladium / Stemphylium						1	13	13	<1%	10					
TOTALS	457		11701	100%	12000	528		12528	100%	13000					
Analyst	Phoebe Stell					Phoebe Stell									
Analysis Date	9/6/2019					9/6/2019									
Debris Rating	3					3									
Debris Composition															
Fibers	0/5					1/5									
Inorganic/Other	3/5					3/5									
Insect Parts	1/5					1/5									
Pollen	2/5					2/5									
Skin/Dander	0/5					0/5									





## 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 :** LISD, Central ES

**Project # :** 01A.1288.042

**Sample Type:** Spore Trap, Non-cultured

**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

**Lab Job No. :** 19F-11262

**Report Date :** 09/06/2019 8:50 AM

**Sample Date:** 09/05/2019

**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

19F-11262

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## 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

**Project :** LISD, Central ES

**Project # :** 01A.1288.042

**Sample Type:** Spore Trap, Non-cultured

**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

**Lab Job No. :** 19F-11262

**Report Date :** 09/06/2019 8:50 AM

**Sample Date :** 09/05/2019

**Spore Trap Type:** Allergenco D

Page 1 of 3

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.

### Samples Analyzed

Sample No 4 : 252216, Outdoor by Old Gym

Notes: Please note: the minimum reporting limit for Basidiospores is 50 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.  
Please note: the minimum reporting limit for Cladosporium is 31 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Sample No 5 : 252210, Outdoor Front

Notes: Please note: the minimum reporting limit for Basidiospores is 57 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.  
Please note: the minimum reporting limit for Cladosporium is 22 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.**



## 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

**Project :** LISD, Central ES

**Project # :** 01A.1288.042

**Sample Type:** Spore Trap, Non-cultured

**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

**Lab Job No. :** 19F-11262

**Report Date :** 09/06/2019 8:50 AM

**Sample Date :** 09/05/2019

**Spore Trap Type:** Allergenco D

Page 2 of 3

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.

### Methods

Method: ASTM D7391-17e1: 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 D7391-17e1.

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

AIHA EMPAT ID: 102577

2051 Valley View Lane

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

**Client :** Ensolum, LLC

**Project :** LISD, Central ES

**Project # :** 01A.1288.042

**Sample Type:** Spore Trap, Non-cultured

**Test Method:** Mold: ASTM D7391-17e1 - Standard Profile

**Lab Job No. :** 19F-11262

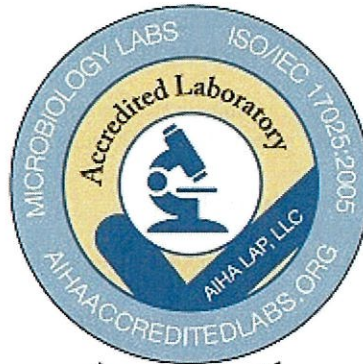
**Report Date :** 09/06/2019 8:50 AM

**Sample Date :** 09/05/2019

**Spore Trap Type:** Allergenco D

Page 3 of 3

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End of Analytical Notes section  
19F-11262



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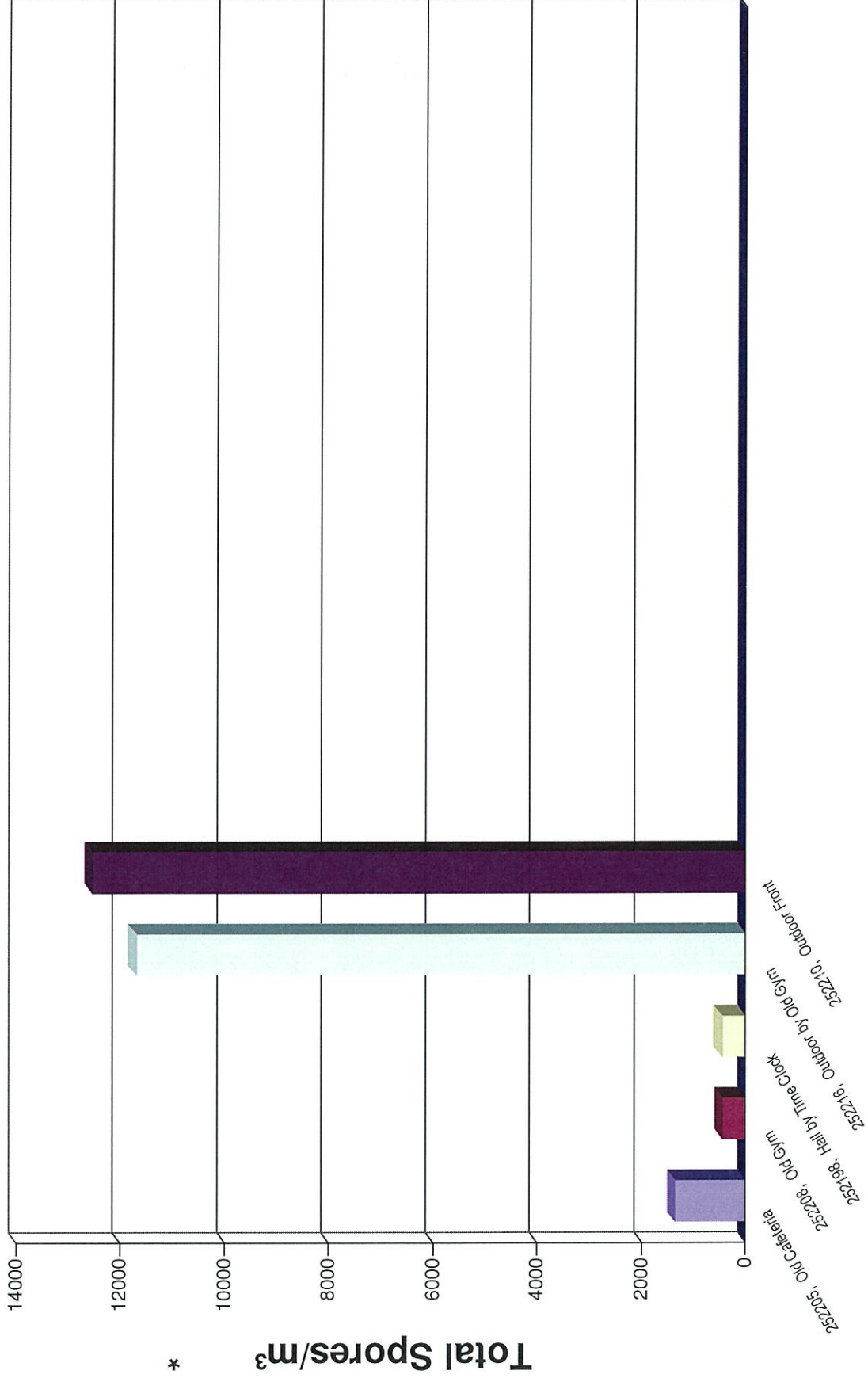
IAQ Mold Report  
Supplemental Overview

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  
Project : LISD, Central ES  
Project # : 01A.1288.042

Lab Job No. 19F-11262  
Report Date 09/06/2019 8:50 AM  
Sample Date : 09/05/2019





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

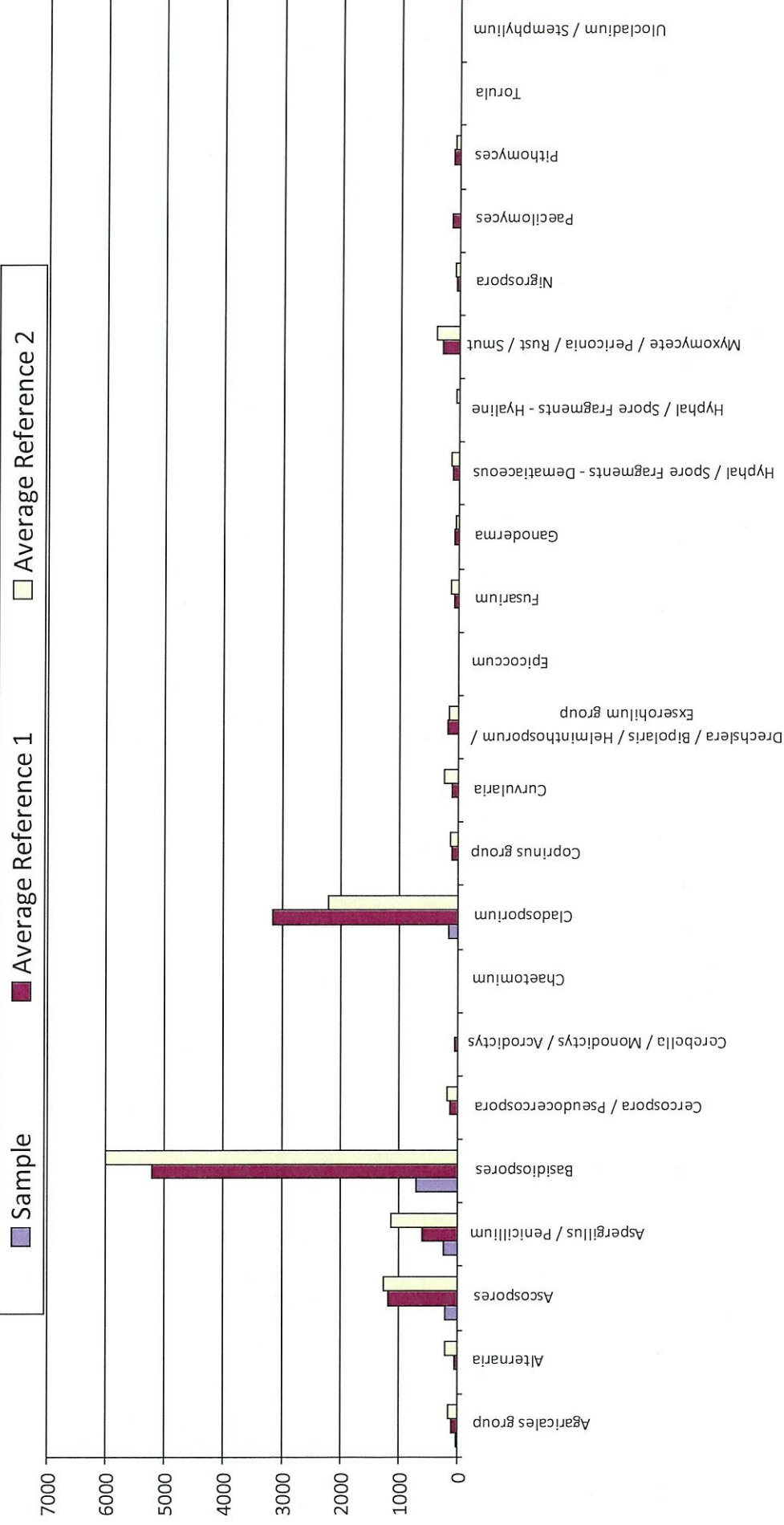
## IAQ Mold Report Supplemental Overview

TDLR License No.: LAB0117  
AIHA EMPAT ID: 102577

**Client :** Ensolum, LLC  
**Project :** LISD, Central ES  
**Project # :** 01A.1288.042

**Lab Job No.** 19F-11262  
**Report Date** 09/06/2019 8:50 AM  
**Sample Date :** 09/05/2019

252205, Old Cafeteria



Average Reference 1 = 252216, Outdoor by Old Gym

Average Reference 2 = 252210, Outdoor Front



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

# IAQ Mold Report

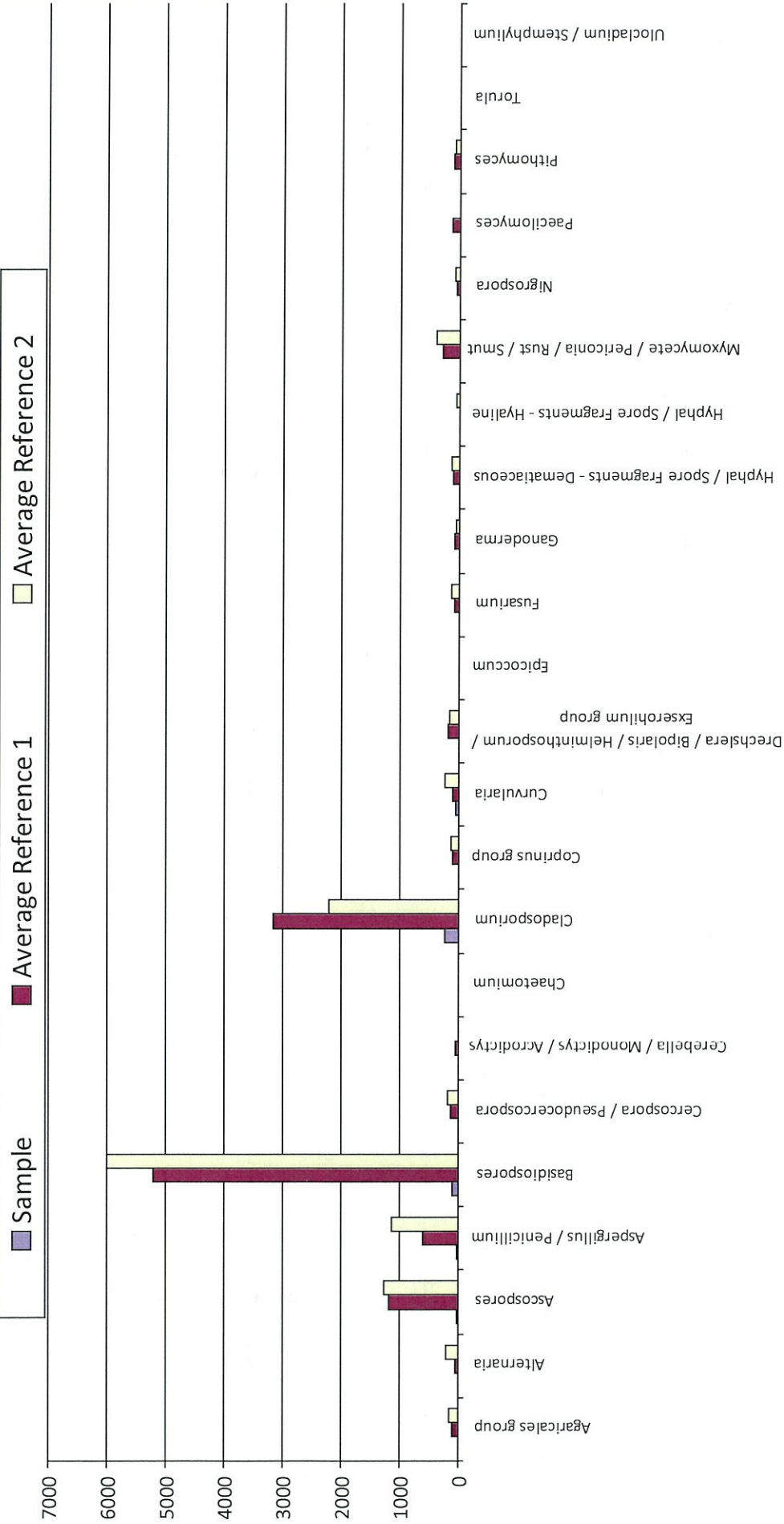
## Supplemental Overview

TDLR License No.: LAB0117  
AIHA EMPAT ID: 102577

**Client :** Ensolum, LLC  
**Project :** LISD, Central ES  
**Project # :** 01A.1288.042

252208, Old Gym

**Lab Job No.** 19F-11262  
**Report Date** 09/06/2019 **8:50 AM**  
**Sample Date :** 09/05/2019



Average Reference 1 = 252216, Outdoor by Old Gym

Average Reference 2 = 252210, 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

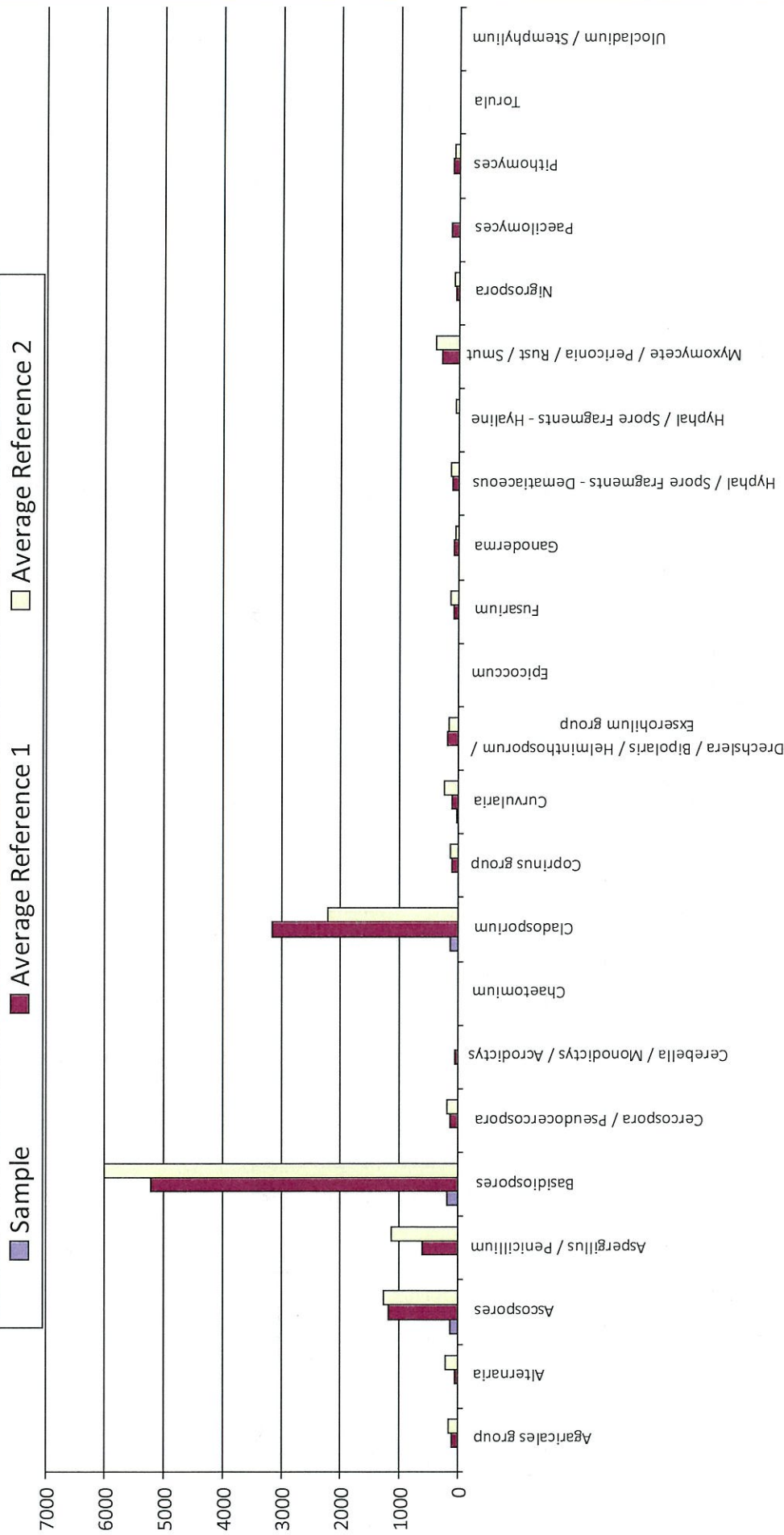
**Client:** Ensolum, LLC  
**Project:** LISD, Central ES  
**Project #:** 01A.1288.042

**Lab Job No.** 19F-11262

**Report Date** 09/06/2019 8:50 AM

**Sample Date :** 09/05/2019

252198, Hall by Time Clock



Average Reference 1 = 252216, Outdoor by Old Gym

Average Reference 2 = 252210, 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 :** LISD, Central ES  
**Project # :** 01A.1288.042

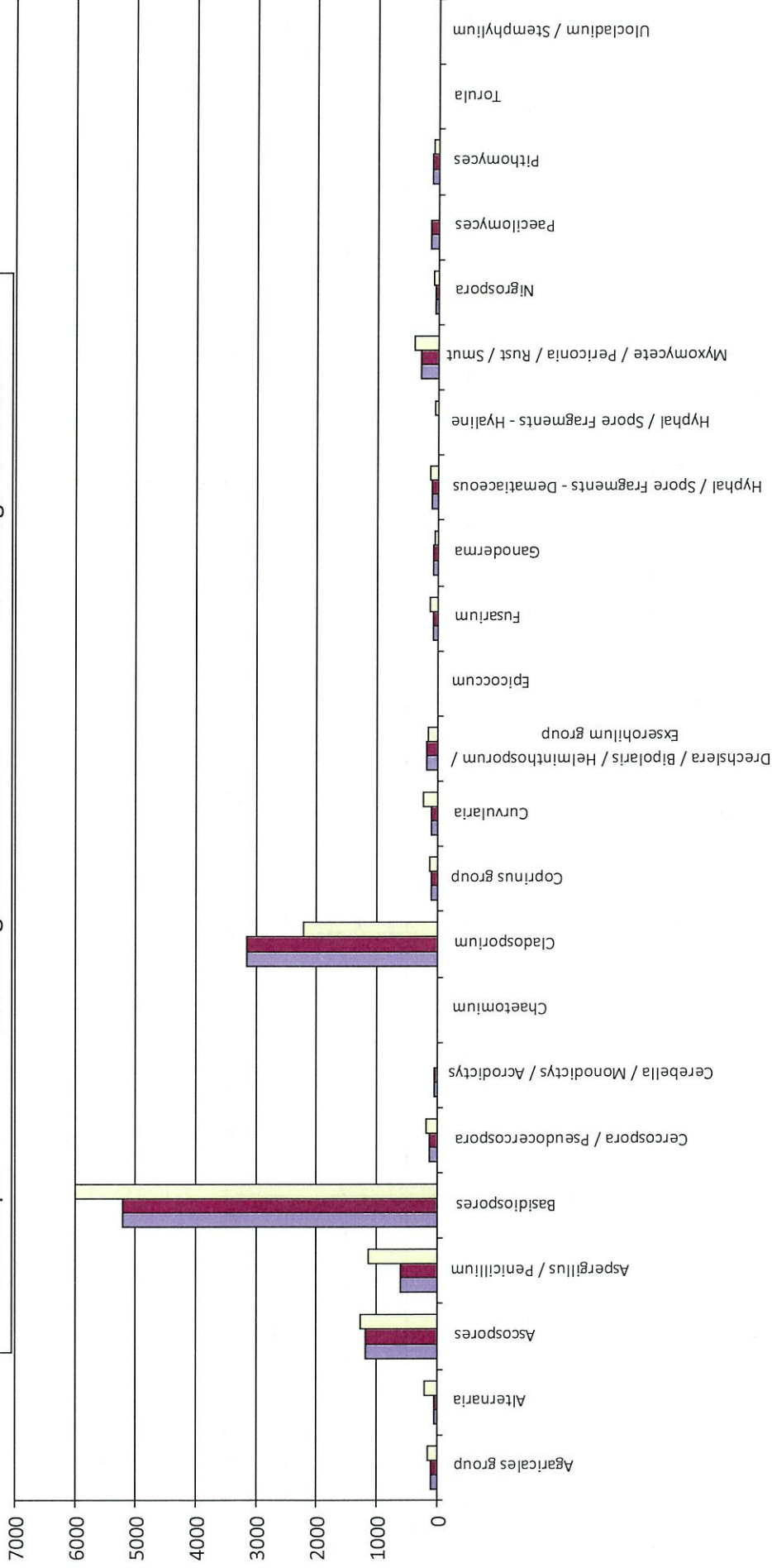
**Lab Job No.** 19F-11262

**Report Date** 09/06/2019 **8:50 AM**

**Sample Date :** 09/05/2019

252216, Outdoor by Old Gym

■ Sample ■ Average Reference 1 ■ Average Reference 2



Average Reference 1 = 252216, Outdoor by Old Gym

Average Reference 2 = 252210, Outdoor Front



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

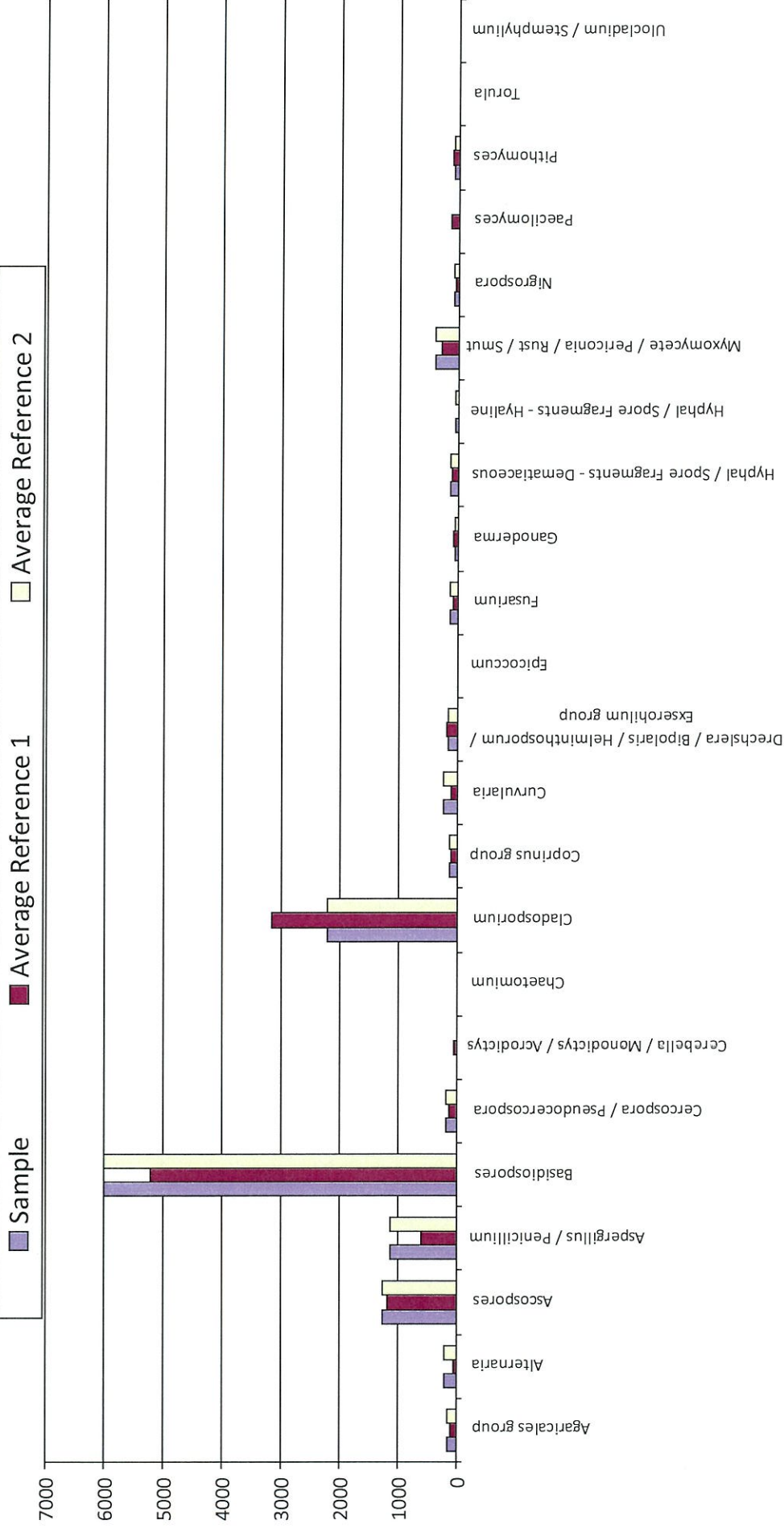
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## APPENDIX B

### 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 10<sup>th</sup> 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.