

Limited Mold Assessment Room 1120

Treadway, David <treadwayd@lisd.net>

Thu 10/20/2022 3:27 PM

To: Knight, Kelly <knightk@lisd.net>; Fritz, Amy <fritza@lisd.net>; Hilliard, Karen <hilliardk@lisd.net>

Cc: Reibly, Ruth <reiblyr@lisd.net>; Hughes, Jason <hughesjk@lisd.net>; Jones, Steven <jonessa@lisd.net>; Cashman, Jinger <cashmans@lisd.net>; Overacker, Michael <overackerm@lisd.net>; Demming, Calvin <demmingc@lisd.net>

Mrs. Knight,

Good afternoon. I am sending this email to follow up with the results of a limited mold assessment conducted in Room 1120. Ensolum LLC. conducted a limited mold assessment in Room 1120 on September 30, 2022, 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 Room 1120 was 15% of the outdoor levels. Utilizing this theory, the indoor concentration levels were within the acceptable guidelines for areas with filtered or air-conditioned air. It is my recommendation that the room be thoroughly cleaned and sanitized. I would also recommend that the air purifier be cleaned and the filter changed. I have also requested that the West Zone check the HVAC system for any issues. They will also clean the unit and change the filter. Please let me know if you or your team have any questions.

Sincerely,
David Treadway

David Treadway
LISD Environmental Coordinator
Facility Services Department



October 21, 2022

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

Re: Limited Mold Assessment
McKamey MS Room 1120
2401 Old Settlers Rd.
Flower Mound, TX 75022
Ensolum Proposal No. P01A1288173

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within room 1120 of Killian Middle School, 2401 Old Settlers Rd., Flower Mound, TX 75022. 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,

Clinton S. Jech
Mold Assessment Consultant
MAC1444

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 room 1120 of Killian Middle School, 2401 Old Settlers Rd., Flower Mound, TX 75022. 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 30, 2022. 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 1120. Water damage was observed in the following locations:

VISIBLE WATER DAMAGE		
LOCATION	DATE	EXPLANATION
Room 1120	9/30/2022	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
Exterior, Southeast	9/30/2022	77	27.0	37.0
Exterior, Northeast	9/30/2022	75	25.0	32.0
Room 1120	9/30/2022	77	36.0	49.0

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 (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
1	Exterior, Southeast
2	Exterior Northeast
3	Room 1120

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.

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 RESULTS



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. : 22F-11120

Project : McKamy Middle School Room 1120

Report Date : 10/04/2022

Project # : 01A1288173

Sample Date: 09/30/2022

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: MLQ - 0112 - Standard Profile

Page 1 of 3

On 9/30/2022, three (3) samples were submitted by a representative 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	Exterior, Southeast * See Analytical Notes report for further details	Cladosporium Aspergillus / Penicillium Myxomycete / Periconia / Rust / Smut Hyphal / Spore Fragments - Dematiaceous Ascospores Basidiospores Drechslera / Bipolaris / Helminthosporium / Exserohilum group Curvularia Alternaria Cercospora / Pseudocercospora Nigrospora Hyphal / Spore Fragments - Hyaline Torula Epicoccum Ganoderma Chaetomium Pestalotia / Pestalotiopsis Spegazzinia Tetraploa Pithomyces Total:	2180 31% 1962 28% 1080 15% 573 8% 240 3% 187 3% 187 3% 173 2% 133 2% 120 2% 67 <1% 40 <1% 27 <1% 27 <1% 27 <1% 13 <1% 13 <1% 13 <1% 13 <1% 13 <1% 7088 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**Project :** McKamy Middle School Room 1120**Project # :** 01A1288173**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: MLQ - 0112 - Standard Profile**Lab Job No. :** 22F-11120**Report Date :** 10/04/2022**Sample Date:** 09/30/2022**Spore Trap Type:** Zefon - Air-O-Cell

Page 2 of 3

On 9/30/2022, three (3) samples were submitted by a representative 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
2	75	Exterior, Northeast * See Analytical Notes report for further details	Cladosporium Aspergillus / Penicillium Hyphal / Spore Fragments - Dematiaceous Myxomycete / Periconia / Rust / Smut Cercospora / Pseudocercospora Ascospores Basidiospores Alternaria Hyphal / Spore Fragments - Hyaline Nigrospora Coprinus group Fusarium Ganoderma Curvularia Epicoccum Torula Pithomyces Total:	2337 36% 1878 29% 547 8% 507 8% 347 5% 253 4% 213 3% 120 2% 67 1% 40 <1% 40 <1% 27 <1% 27 <1% 13 <1% 13 <1% 13 <1% 6455 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**Project :** McKamy Middle School Room 1120**Project # :** 01A1288173**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: MLQ - 0112 - Standard Profile**Lab Job No. :** 22F-11120**Report Date :** 10/04/2022**Sample Date:** 09/30/2022**Spore Trap Type:** Zefon - Air-O-Cell

Page 3 of 3

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Sample Number	Volume (liters)	Sample Description	Identification	Concentration spores/cubic meter
3	75	Room 1120	Aspergillus / Penicillium Hyphal / Spore Fragments - Dematiaceous Cladosporium Myxomycete / Periconia / Rust / Smut Drechslera / Bipolaris / Helminthosporium / Exserohilum group Curvularia Alternaria Basidiospores Ascospores Total:	440 42% 213 20% 213 20% 80 8% 27 3% 27 3% 27 3% 13 1% 13 1% 1053 100%

This report shall not be reproduced except in full, without approval of the laboratory. 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): Dylan Milholen

Lab Director : Heather Lopez

Lab Director : Bruce Crabb

Approved Signatory : _____

Approved Signatory : _____

Thank you for choosing Moody Labs

SMLMS v13.65

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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 :** McKamy Middle School Room 1120**Project # :** 01A1288173**Sample Type:** Spore Trap, Non-cultured**Test Method:** Mold: MLQ - 0112 - Standard Profile**Lab Job No. :** 22F-11120**Report Date :** 10/04/2022**Sample Date:** 09/30/2022**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:	1					2					3				
Location:	Exterior, Southeast					Exterior, Northeast					Room 1120				
Media Expires On:	Aug 2023					Aug 2023					Aug 2023				
Notes Included:	See Analytical Notes					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	10	13	133	2%	130	9	13	120	2%	120	2	13	27	3%	30
Ascospores	18	13	240	3%	240	19	13	253	4%	250	1	13	13	1%	10
Aspergillus / Penicillium	103	19	1962	28%	2000	108	17	1878	29%	1900	33	13	440	42%	440
Basidiospores	14	13	187	3%	190	16	13	213	3%	210	1	13	13	1%	10
Cercospora / Pseudocercospora	9	13	120	2%	120	26	13	347	5%	350					
Chaetomium	1	13	13	<1%	10										
Cladosporium	109	20	2180	31%	2200	111	21	2337	36%	2300	16	13	213	20%	210
Coprinus group						3	13	40	<1%	40					
Curvularia	13	13	173	2%	170	1	13	13	<1%	10	2	13	27	3%	30
Drechslera / Bipolaris / Helminthosp	14	13	187	3%	190						2	13	27	3%	30
Epicoccum	2	13	27	<1%	30	1	13	13	<1%	10					
Fusarium						2	13	27	<1%	30					
Ganoderma	2	13	27	<1%	30	2	13	27	<1%	30					
Hyphal / Spore Fragments - Dematia	43	13	573	8%	570	41	13	547	8%	550	16	13	213	20%	210
Hyphal / Spore Fragments - Hyaline	3	13	40	<1%	40	5	13	67	1%	70					
Myxomycete / Periconia / Rust / Sm	81	13	1080	15%	1100	38	13	507	8%	510	6	13	80	8%	80
Nigrospora	5	13	67	<1%	70	3	13	40	<1%	40					
Pestalotia / Pestalotiopsis	1	13	13	<1%	10										
Pithomyces	1	13	13	<1%	10	1	13	13	<1%	10					
Spegazzinia	1	13	13	<1%	10										
Stachybotrys															
Tetraploa	1	13	13	<1%	10										
Torula	2	13	27	<1%	30	1	13	13	<1%	10					
TOTALS	433		7088	100%	7100	387		6455	100%	6500	79		1053	100%	1100
Analyst	Dylan Milholen					Dylan Milholen					Dylan Milholen				
Analysis Date	10/4/2022					10/4/2022					10/4/2022				
Debris Rating	3					3					3				
Debris Composition															
Fibers	1/5					1/5					1/5				
Inorganic/Other	3/5					3/5					2/5				
Insect Parts	1/5					1/5					0/5				
Pollen	1/5					1/5					0/5				
Skin/Dander	1/5					1/5					3/5				

End of Data Detail section

22F-11120

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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 : McKamy Middle School Room 1120

Project # : 01A1288173

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 22F-11120

Report Date : 10/04/2022

Sample Date : 09/30/2022

Spore Trap Type: Zefon - Air-O-Cell

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: 1 : Exterior, Southeast

Notes: Please note: the minimum reporting limit for Cladosporium is 20 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Please note: the minimum reporting limit for Aspergillus / Penicillium is 19 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Sample No: 2 : Exterior, Northeast

Notes: Please note: the minimum reporting limit for Cladosporium is 21 spores / cubic meter. When comparing results to other samples, use calculated results, not raw numbers.

Please note: the minimum reporting limit for Aspergillus / Penicillium is 17 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

Lab Job No. : 22F-11120

Project : McKamy Middle School Room 1120

Report Date : 10/04/2022

Project # : 01A1288173

Sample Date : 09/30/2022

Sample Type: Spore Trap, Non-cultured

Spore Trap Type: Zefon - Air-O-Cell

Test Method: Mold: MLQ - 0112 - Standard Profile

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: 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, 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 : McKamy Middle School Room 1120

Project # : 01A1288173

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No. : 22F-11120

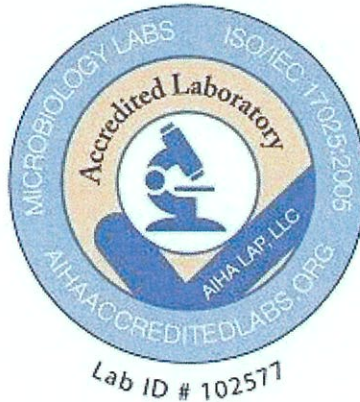
Report Date : 10/04/2022

Sample Date : 09/30/2022

Spore Trap Type: Zefon - Air-O-Cell

Page 3 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.



TEXAS DEPARTMENT OF TRANSPORTATION
Small Business Enterprise Program



End of Analytical Notes section
22F-11120

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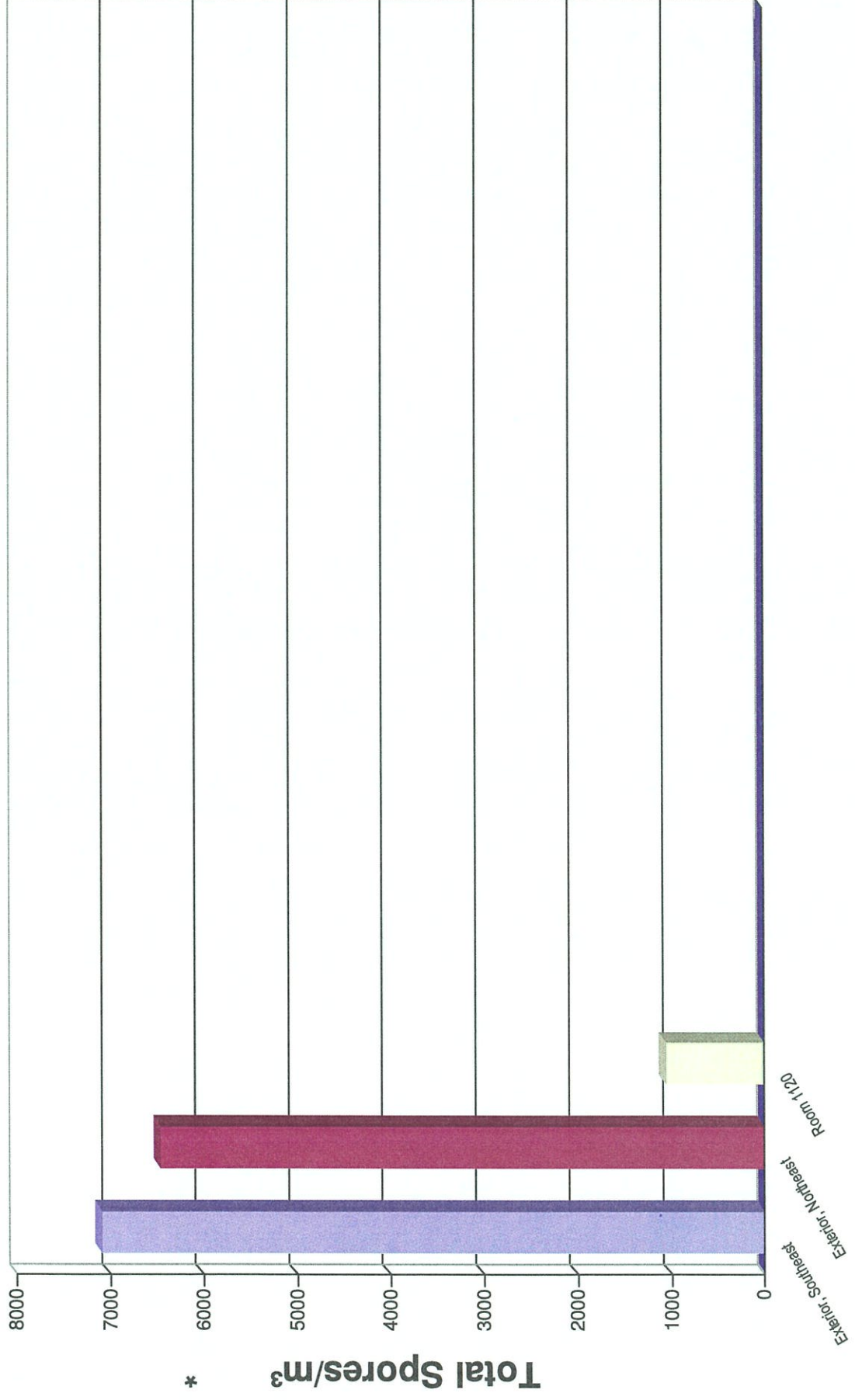
IAQ Mold Report

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 : McKamy Middle School Room 1120
Project # : 01A1288173
Lab Job No. 22F-11120
Report Date 10/04/2022
Sample Date : 09/30/2022





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

Client : Ensolum, LLC

Project : McKamy Middle School Room 1120

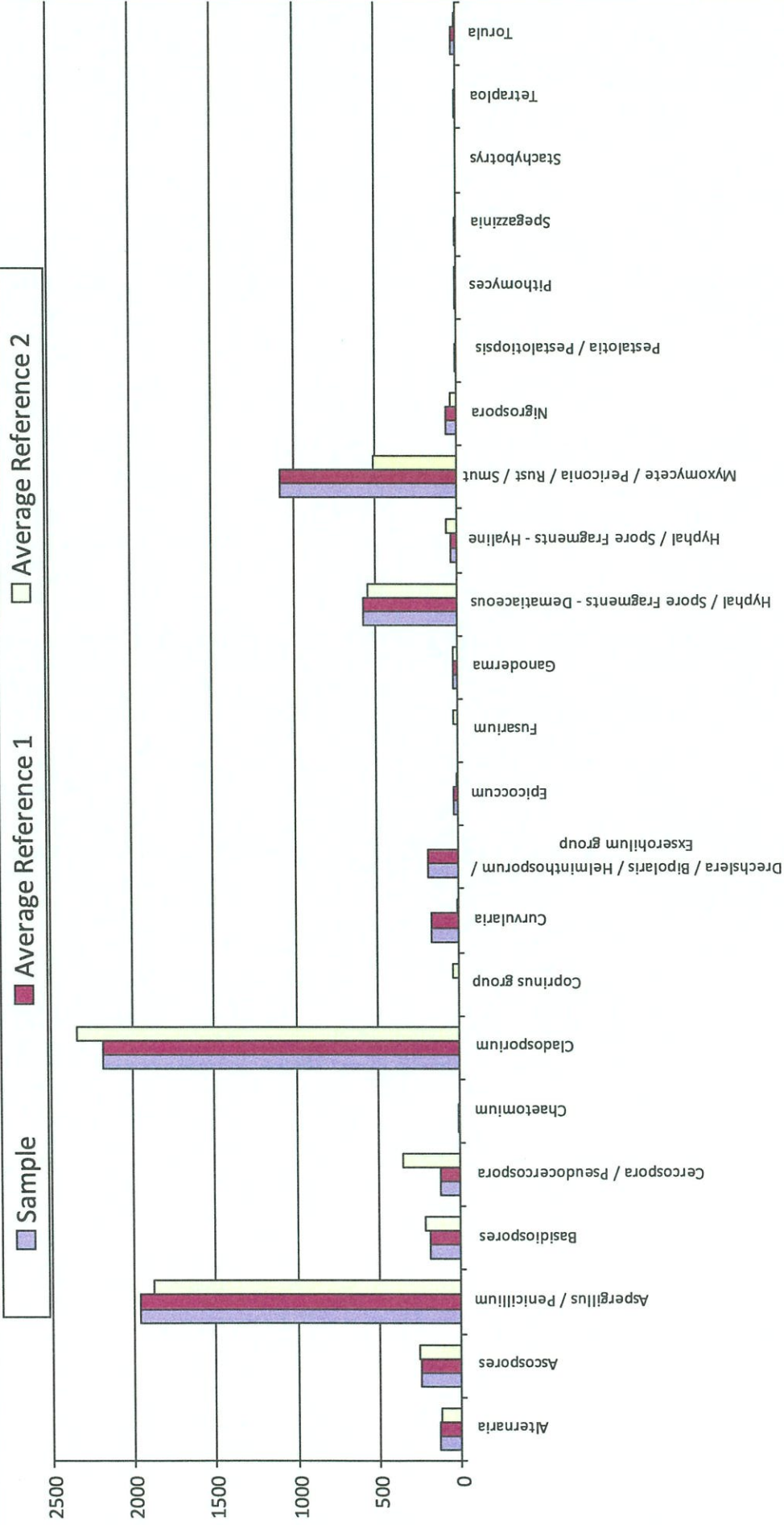
Project # : 01A1288173

IAQ Mold Report Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Lab Job No. 22F-11120
Report Date 10/04/2022
Sample Date : 09/30/2022

Exterior, Southeast



Average Reference 1 = Exterior, Southeast

Average Reference 2 = Exterior, Northeast



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

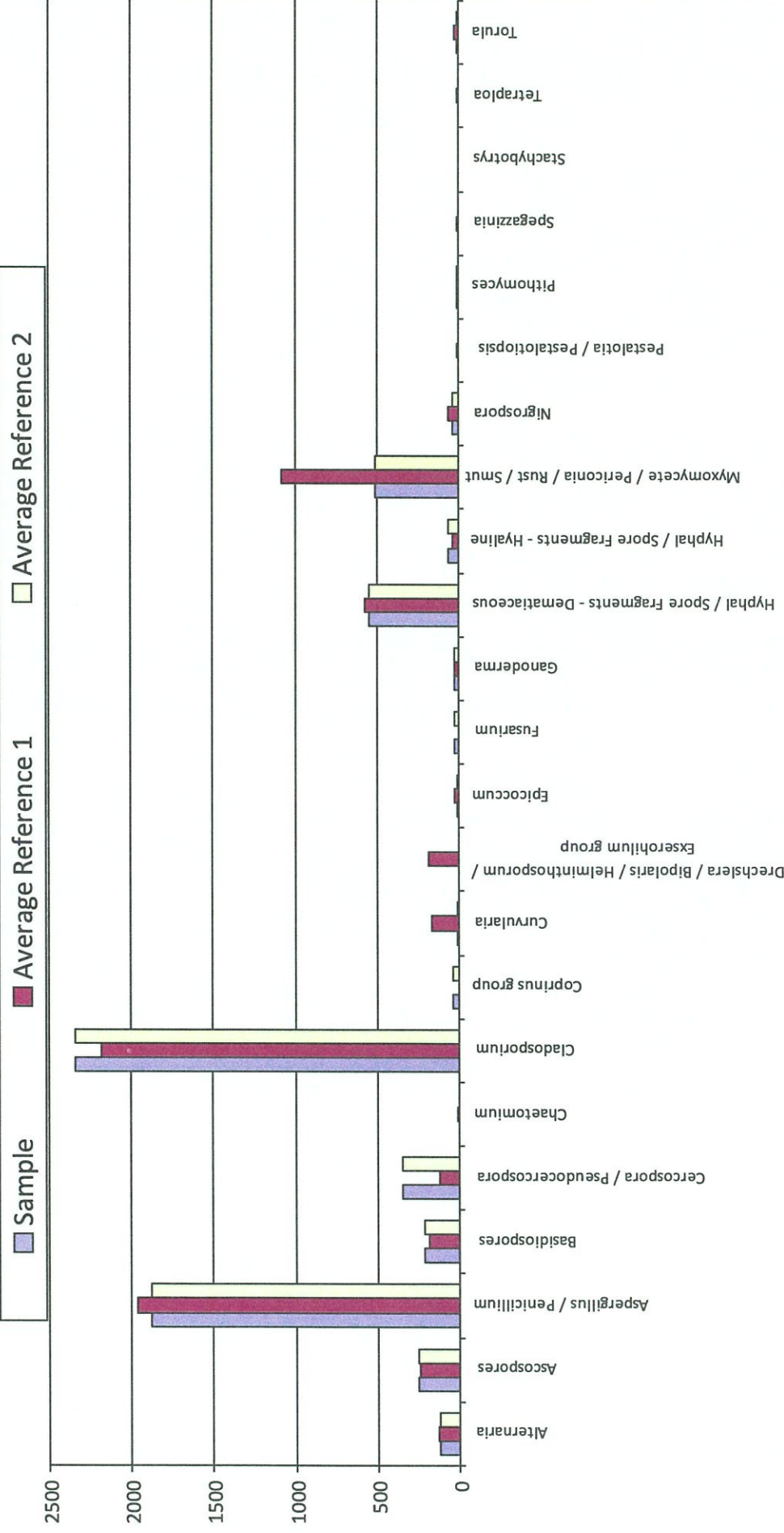
IAQ Mold Report Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client : Ensolum, LLC
Project : McKamy Middle School Room 1120
Project # : 01A1288173

Lab Job No. 22F-11120
Report Date 10/04/2022
Sample Date : 09/30/2022

Exterior, Northeast



Average Reference 1 = Exterior, Southeast

Average Reference 2 = Exterior, Northeast



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

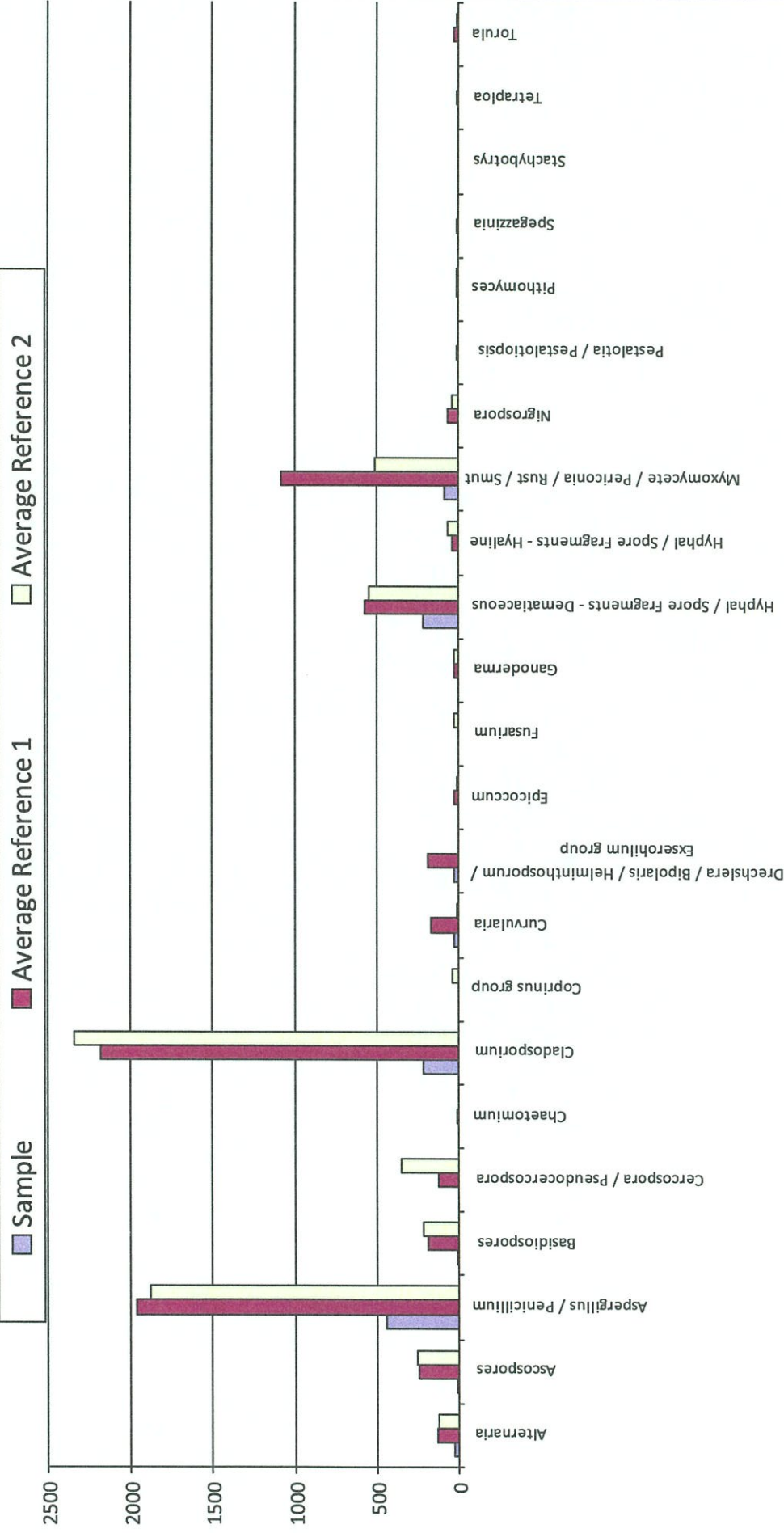
IAQ Mold Report Supplemental Overview

TDLR License No.: LAB0117
AIHA EMPAT ID: 102577

Client: Ensolum, LLC
Project: McKamy Middle School Room 1120
Project #: 01A1288173

Lab Job No. 22F-11120
Report Date 10/04/2022
Sample Date: 09/30/2022

Room 1120



Average Reference 1 = Exterior, Southeast

Average Reference 2 = Exterior, Northeast



Chain of Custody

Lab Job # 22F-1120 SH
 Lab Job # 3AOC
 Lab Job # _____

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

Page 1 of 1

ASBESTOS PLM

Bulk ☐ Immediate ☐ 1 day ☐ 2 day ☐ 3 day ☐ 5 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
 Culture** ☐ 10-14 days
 TPC w/ Yeast & Mold (TYMC)** ☐ 5 day

Analyze Blanks ☐ Yes ☐ No

BACTERIA**

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

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

OTHER:

Billing Company / City: Ensolum, LLC Dallas

of Samples: 3 Sample Date: 9/30/2022

Project: McKamey Middle School Room 1120

Project #: 01A1283173

Contact Information: Name: Clint Tech

Phone #: _____

E-mail Results to: Clint/Darren / Ton: Martin

Mobile #: (972) 989-1081

Invoice Address: tmartin@ensolum.com

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

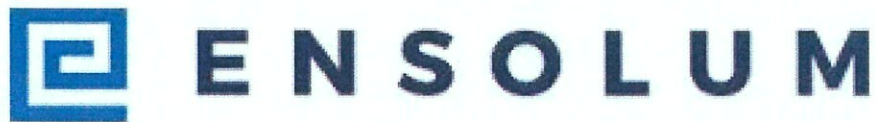
Notes: _____

Sample #	Sample Description	Vol. / Area (if applicable)	Location / Notes
1	Exterior, Southeast	75	T=77° H=27% SH=37%
2	Exterior, Northwest	75	T=75° H=25% SH=32%
3	Room 1120	75	T=77° H=36% SH=49% RH=11-13% Ceilings = Ceiling Tiles Walls = Sheetrock Floors = Floor Tile Note: Small Amounts of Rust on HVAC Supply Units

Released By: <u>[Signature]</u>	Date / Time: <u>9/30/2022 14:50</u>	Received By: <u>[Signature]</u>	Date / Time: <u>9/30/2022 3:00 p</u>
Released By: _____	Date / Time: _____	Received By: _____	Date / Time: _____

APPENDIX B

DEFINITIONS AND LIMITATIONS



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.