Liberty Elementary Limited Mold Assessment Rm 420

Treadway, David <treadwayd@lisd.net>

Thu 10/26/2023 9:15 AM

To:Rainey, Matthew <raineym@lisd.net>;Cox, Kimberly <coxk@lisd.net>
Cc:Gonzalez, Lening <gonzalezl@lisd.net>;Hughes, Jason <hughesjk@lisd.net>;Jones, Steven <jonessa@lisd.net>;Overacker, Michael <overackerm@lisd.net>;Cashman, Jinger <cashmans@lisd.net>

Mr. Rainey,

Good morning. This email is to follow up with the results of the limited mold assessment conducted in room 420 per a campus request. On 10/16/23, Ensolum LLC conducted a mold assessment at Liberty Elementary. It is typically assumed that indoor spore levels in an area with filtered or air-conditioned air, and activities 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 420 was 3%* of the outdoor levels. Utilizing this theory, the indoor concentration levels were well within the acceptable guidelines for areas with filtered or air-conditioned air. There was visible mold growth on the HVAC vents and several ceiling tiles around the vents. The vents have been cleaned and the ceiling tiles replaced. The final report will be available on the LISD website later today. Please let me know if you have any questions.

Sincerely, David Treadway

David Treadway LISD Environmental Coordinator Facility Services Department 469-446-0140



October 23, 2023

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

Re: Limited Mold Assessment Report

Liberty Elementary School - Room 420

4600 Quail Run Road

Flower Mound, Texas 75022

LISD: CP 2561-18

Ensolum Project No. 01A1288198

Ensolum, LLC (Ensolum) was retained to perform limited mold assessment services within Room 420 of Liberty Elementary School, 4600 Quail Run Road, Flower Mound, Texas 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

Color &

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 420 of Liberty Elementary School, 4600 Quail Run Road, Flower Mound, Texas 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 October 16, 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 420. Water damage was observed in the following locations:

	VISIBLE WATER DAMAGE				
LOCATION	DATE	EXPLANATION			
Room 420	10/16/2023	No visible water damage was observed during the assessment. Visible Fungal Growth on HVAC Supply Vents & ten Associated Ceiling Tiles. Recommend HVAC be inspected.			

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	10/16/2023	63 °F	33%	28%
Exterior, Southwest	10/16/2023	71 °F	26%	29%
Room 420	10/16/2023	68 °F	35%	35%

Area air samples were collected with Air-O-Cell 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, Southwest			
3	Room 420			

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 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. Ensolum observed visible less than 25 square feet mold growth on the HVAC supply vents and ten associated ceiling tiles. Ensolum recommends that the HVAC supply vents be cleaned, the associated ceiling tiles be replaced, and the HVAC system be inspected.

APPENDIX A ANALYTICAL DATA

APPENDIX B

DEFINITIONS AND LIMITATION

APPENDIX A ANALYTICAL DATA



Summary

2051 Valley View Lane

Client:

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

Ensolum, LLC

Project: Liberty ES Room 420

Project #: 01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No.: 23F-12539

Report Date: 10/18/2023

Sample Date: 10/16/2023

Spore Trap Type: Zefon - Air-O-Cell

Page 1 of 3

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

On 10/16/2023, three (3) 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.

-		Identification		Concentration spores/cubic meter	
75	Exterior, Southeast * See Analytical Notes report for further details	Basidiospores Cladosporium Ascospores Aspergillus / Penicillium Hyphal / Spore Fragments - Dematiaceous Myxomycete / Periconia / Rust / Smut Nigrospora Drechslera / Bipolaris / Helminthosporum / Exserohilum group	3200 1733 627 253 80 80 27 27	53% 29% 10% 4% 1% 1% <1%	
		Hyphal / Spore Fragments - Hyaline Coprinus group Epicoccum Alternaria	13 13 13 13	<1% <1% <1% <1%	
		Total:	6079	100%	
			further details Ascospores Aspergillus / Penicillium Hyphal / Spore Fragments - Dematiaceous Myxomycete / Periconia / Rust / Smut Nigrospora Drechslera / Bipolaris / Helminthosporum / Exserohilum group Hyphal / Spore Fragments - Hyaline Coprinus group Epicoccum Alternaria	further details Ascospores Aspergillus / Penicillium Hyphal / Spore Fragments - Dematiaceous Myxomycete / Periconia / Rust / Smut Nigrospora Drechslera / Bipolaris / Helminthosporum / Exserohilum group Hyphal / Spore Fragments - Hyaline Coprinus group Epicoccum Ascospores 627 253 27 27 27 28 27 28 29 20 21 21 22 23 24 25 27 27 27 28 29 20 20 21 21 21 22 23 24 25 26 27 27 27 28 29 20 20 21 21 21 22 23 24 25 26 27 27 27 28 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	



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:

Liberty ES Room 420

Project #:

01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No.: 23F-12539

Report Date: 10/18/2023

Sample Date: 10/16/2023

Spore Trap Type: Zefon - Air-O-Cell

Page 2 of 3

On 10/16/2023, three (3) 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 Sample Description Identification (liters)		Identification	Concentration spores/cubic meter		
2	75	Exterior, Southwest * See Analytical Notes report for further details	Basidiospores Cladosporium Aspergillus / Penicillium Ascospores Hyphal / Spore Fragments - Dematiaceous Alternaria Myxomycete / Periconia / Rust / Smut Hyphal / Spore Fragments - Hyaline Drechslera / Bipolaris / Helminthosporum / Exserohilum group Nigrospora Coprinus group Cercospora / Pseudocercospora Ganoderma	2773 2447 507 320 147 120 53 40 40 27 27 13	42% 37% 8% 5% 2% <1% <1% <1% <1% <1% <1% <1% <1% <1% <1
			Fusarium Epicoccum Total:	13 13	<1% <1% <1%
3	75	Room 420	Hyphal / Spore Fragments - Dematiaceous Cladosporium Basidiospores Aspergillus / Penicillium Ascospores	67 40 40 40 13	34% 20% 20% 20% 6%
			Total:	200	100%



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:

Liberty ES Room 420

Project #:

01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No.: 23F-12539

Report Date: 10/18/2023

Sample Date: 10/16/2023

Spore Trap Type: Zefon - Air-O-Cell

Page 3 of 3

On 10/16/2023, three (3) 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
w.				

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):

Elham Mohammadian

Lab Director: Heather Lopez

End of Summary section (23F-12539)

Lab Director: Bruce Crabb

Approved Signatory: Bene Coll

Thank you for choosing Moody Labs

SMLMS v13.84

This Page Left Intentionally Blank



Data Detail

2051 Valley View Lane

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

Client:

Project:

Liberty ES Room 420

Project #:

01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Ensolum, LLC

Lab Job No.: 23F-12539

Report Date: 10/18/2023

Sample Date: 10/16/2023

Page 1 of 1

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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: 2 3 Location: Exterior, Southeast Exterior, Southwest Room 420 Media Expires On: Mar 2024 Mar 2024 Mar 2024 Notes Included: See Analytical Notes See Analytical Notes Volume: 75 75 Raw Ct spores/m³ SF Raw Ct spores/m³ SF RL spores/m³ %Total RL spores/m³ %Total RL spores/m³ spores/m3 SF Raw Ct %Total Alternaria 13 13 <1% 10 13 1 9 120 2% 120 Ascospores 47 13 627 10% 630 24 13 320 5% 320 13 13 6% 10 1 Aspergillus / Penicillium 19 13 253 4% 250 38 13 507 8% 510 3 13 40 20% 40 Basidiospores 112 29 3200 53% 3200 27 2773 42% 2800 13 40 104 3 20% 40 Cercospora / Pseudocercospora 13 1 13 <1% 10 Chaetomium Cladosporium 104 17 1733 29% 1700 104 24 2447 37% 2400 3 13 40 20% 40 Coprinus group 13 13 <1% 10 2 13 27 <1% 30 Drechslera / Bipolaris / Helminthosporum / 2 13 27 <1% 30 3 13 40 <1% 40 Epicoccum 1 13 13 <1% 10 13 13 <1% 10 Fusarium 1 13 13 <1% 10 Ganoderma 13 10 13 <1% 1 Hyphal / Spore Fragments - Dematiaceous 6 13 80 1% 80 11 13 147 2% 150 5 13 67 34% 70 Hyphal / Spore Fragments - Hyaline 13 1 13 <1% 10 3 13 40 <1% 40 Myxomycete / Periconia / Rust / Smut 6 13 80 1% 80 4 13 50 53 <1% Nigrospora 2 13 27 <1% 30 2 13 27 <1% 30 Stachybotrys TOTALS 302 6079 100% 6100 308 6553 100% 6600 15 200 100% 200 Analyst Elham Mohammadian Elham Mohammadian Elham Mohammadian Analysis Date 10/18/2023 10/18/2023 10/18/2023 Debris Rating 3 3 3 Debris Composition Fibers 1/5 1/5 1/5 Inorganic/Other 3/5 3/5 2/5 Insect Parts 0/5 0/5 0/5 Pollen 1/5 1/5 0/5

1/5

1/5

End of Data Detail section 23F-12539

Skin/Dander

SMLMS v13.84

3/5

This Page Left Intentionally Blank



Analytical Notes

2051 Valley View Lane

Client:

Project:

Project #:

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

Liberty ES Room 420

Test Method: Mold: MLQ - 0112 - Standard Profile

Ensolum, LLC

01A 1288198

Sample Type: Spore Trap, Non-cultured

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

Page 1 of 3

Lab Job No.: 23F-12539 Report Date: 10/18/2023 Sample Date: 10/16/2023

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.

Samples Analyzed

Sample No 1: Exterior, Southeast

Notes: Please note: the minimum reporting limit for Basidiospores is 29 spores / cubic meter. When comparing

results to other samples, use calculated results, not raw numbers.

Please note: the minimum reporting limit for Cladosporium is 17 spores / cubic meter. When comparing

results to other samples, use calculated results, not raw numbers.

Sample No 2: Exterior, Southwest

Notes: Please note: the minimum reporting limit for Basidiospores is 27 spores / cubic meter. When comparing

results to other samples, use calculated results, not raw numbers.

Please note: the minimum reporting limit for Cladosporium is 24 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.



Analytical Notes

2051 Valley View Lane

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

Client: Ensolum, LLC

Project: Liberty ES Room 420

Project #: 01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Sample Date: 10/16/2023 Spore Trap Type: Zefon - Air-O-Cell

Lab Job No.: 23F-12539

Report Date: 10/18/2023

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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 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.

SMLMS v13.8



Analytical Notes

2051 Valley View Lane

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

Client: Ensolum, LLC

Project: Liberty ES Room 420

Project #: 01A 1288198

Sample Type: Spore Trap, Non-cultured

Test Method: Mold: MLQ - 0112 - Standard Profile

Lab Job No.: 23F-12539 Report Date: 10/18/2023 Sample Date: 10/16/2023

Spore Trap Type: Zefon - Air-O-Cell

Page 3 of 3

TDLR License No.: LAB0117

AIHA EMPAT ID: 102577

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.



Lab ID # 102577







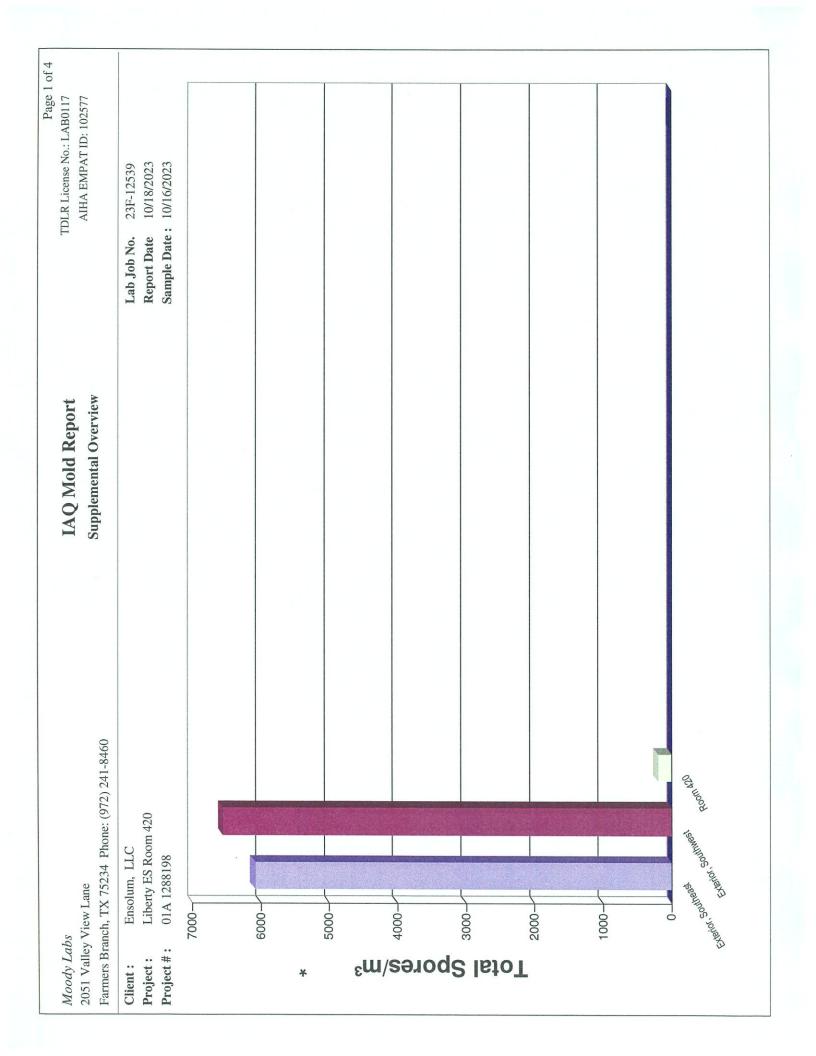




End of Analytical Notes section 23F-12539



This Page Left Intentionally Blank



Page 2 of 4 TDLR License No.: LAB0117 AIHA EMPAT ID: 102577 10/18/2023 Sample Date: 10/16/2023 23F-12539 Lab Job No. Report Date ☐ Average Reference 2 Stachybotrys Average Reference 2 = Exterior, Southwest Nigrospora Myxomycete / Periconia / Rust / Smut Supplemental Overview IAQ Mold Report Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Exterior, Southeast Ganoderma Average Reference 1 Fusarium Epicoccum Exserohilum group Drechslera / Bipolaris / Helminthosporum / Coprinus group Cladosporium Farmers Branch, TX 75234 Phone: (972) 241-8460 Chaetomium Sample Cercospora / Pseudocercospora Average Reference 1 = Exterior, Southeast Liberty ES Room 420 Basidiospores Ensolum, LLC 01A 1288198 Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project # Project: Client: 3500 3000 2500 2000 1500 1000 500

Page 3 of 4 TDLR License No.: LAB0117 AIHA EMPAT ID: 102577 10/18/2023 Sample Date: 10/16/2023 23F-12539 Report Date Lab Job No. ☐ Average Reference 2 Stachybotrys Average Reference 2 = Exterior, Southwest Nigrospora Myxomycete / Periconia / Rust / Smut Supplemental Overview IAQ Mold Report Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Exterior, Southwest Ganoderma Average Reference 1 Fusarium Epicoccum Exserohilum group Drechslera / Bipolaris / Helminthosporum / Coprinus group Cladosporium Farmers Branch, TX 75234 Phone: (972) 241-8460 Chaetomium Sample Sample Cercospora / Pseudocercospora Average Reference 1 = Exterior, Southeast Liberty ES Room 420 Basidiospores Ensolum, LLC 01A 1288198 Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project #: Project: + Client: 3500 3000 1000 200 2500 2000 1500

Page 4 of 4 TDLR License No.: LAB0117 AIHA EMPAT ID: 102577 10/18/2023 Sample Date: 10/16/2023 23F-12539 Report Date Lab Job No. ☐ Average Reference 2 Stachybotrys Average Reference 2 = Exterior, Southwest Nigrospora Myxomycete / Periconia / Rust / Smut Supplemental Overview IAQ Mold Report Hyphal / Spore Fragments - Hyaline Hyphal / Spore Fragments - Dematiaceous Room 420 Ganoderma Average Reference 1 Fusarium Epicoccum Exserohilum group Drechslera / Bipolaris / Helminthosporum / Coprinus group Cladosporium Farmers Branch, TX 75234 Phone: (972) 241-8460 Chaetomium Sample Sample Cercospora / Pseudocercospora Average Reference 1 = Exterior, Southeast Liberty ES Room 420 Basidiospores End of Supplemental Overview section (23F-12539) Ensolum, LLC 01A 1288198 Aspergillus / Penicillium 2051 Valley View Lane Ascospores Alternaria Project # Project: Client: 3500 3000 500 2500 2000 1500 1000



Chain of Custody

Lab Job #	13F2	125	39	
Lab Job #		(Chol	1 16	<u>5</u> .3
Lab Job #		U.S.]

AFTE	R HOURS / WEEKEND WORK: NO all in advance for after hours / immediate pricing & availability*		Page of
ASBESTOS P	rw	MOLD	,
PCM Air (74		Standard A Expanded A	ir
Analy	1 day	Culture**	st & Mold (TYMC)**
Bulk Water/Wipe/ Analyze Bla *Late night ar	lethod Late Night* 6 hr 12 hr 20 2 day 3 day 1 day 2 day 3 day 5 4 day 2 day 3 day 5 4 day 2 day 3 day 5 4 day 4 day 5 6 hr 12 hr 20 2 day 3 day 5 7 day 10 day	Total Plate Coliform & Coliform & Enterococc day OTHER:	Count (TAMC)
	perty Es Room t20		# of Samples: 3 Sample Date:
E-mail Results Invoice Addre	ss:		Phone #: Mobile #: (972) 989 -1031 P.O. #: Property and samples or excessive administrative requests may incur additional fees.
Sample #	Sample Description	Vol. / Area (if applicable)	Location / Notes
1	Exterior Southeest	75	T=630H=33 % SH=28 %
2_	Exterior, Southwest	75	T= 71 0 4= 26 1. SH= 29 1
_3	Room 420	75	T= 68 ° H = 35 '1. 54 = 35 '/.
			Visible Mole Growth on HVAC Supply Vents T 10 Associant Ceiling Tiles. HVAC Unit needs to be Ballamed.
Released By	A Date / Hiller	Received By:	12.3°
Released By	Date / Time:	Received By:	Date / Time:

APPENDIX B

DEFINITIONS AND LIMITATION



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

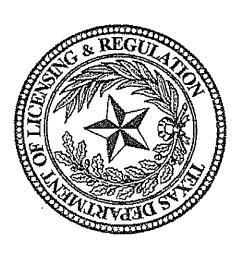
The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: February 07, 2024

Luis E. Tuming

Brian E. Francis Executive Director

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 Analysis Laboratory

MOODY LABS LLC 2051 VALLEY VIEW LN FARMERS BRANCH

License Number: LAB0117

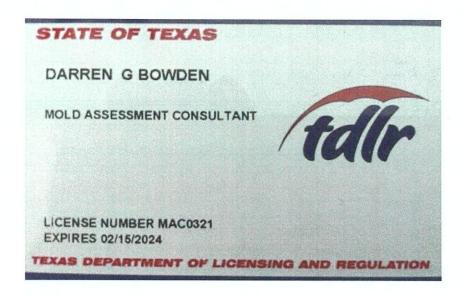
The entity named above is licensed by the Texas Department of Licensing and Regulation.

License Expires: March 01, 2024

Mike Arismendez, Jr. Executive Director



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







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.

NOTE: Issuance of the wallet card is in a separate mailing.

10255393-MAC1444

CLINT JECH 8330 LBJ FWY STE 830 DALLAS TX 75243-1390

> Rick Figueroa Chair

Thomas F. Butler Vice Chair



Gerald R. Callas, M.D., F.A.S.A.

Nora Castañeda

Sujeeth Draksharam

Lori High, R.N., N.P., Retired

Gary F. Wesson, D.D.S., M.S.

Mold Assessment Consultant CLINTON S JECH

License Number: MAC1444

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

License Expires: October 09, 2025

CATAL

Mike Arismendez, Jr. Executive Director