

## CALOOSA ELEMENTARY SCHOOL

## **POST REMEDIATION ASSESSMENT**

Cape Coral, Florida
October 16, 2022
Project #021449

## **Post Remediation Assessment**

## Prepared By

Charles Connolly Senior Consultant

## **Reviewed By**

Jacob Fenske, CIH Director, Disaster Recovery

David Watts, CIH Senior Industrial Hygienist

Prepared on October 16, 2022



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#### 1.0 Background

On September 28, 2022, Hurricane Ian made landfall in Cayo Costa, FL with winds of 155 miles per hour, two miles per hour short of a Category 5 hurricane. Over the course of two days, Ian moved across Florida, exiting on September 30, 2022, but not before causing major flooding and tornado-like damage in areas across the state.

In response to Hurricane Ian, CTEH, LLC® (CTEH) was requested by Cotton Global Disaster Solutions (Cotton) to assess structures associated with Lee County School District awarded to them under RFQ No. 22-7431TA for potential water intrusion. On October 14, 2022, industrial hygienists from CTEH and Universal Engineering Sciences (Universal) conducted post remediation verification (PRV) bioaerosol sampling and visually assessed the Caloosa Elementary School at 620 S. Del Prado Blvd, Cape Coral, FL 33990. All samples were collected under the supervision of a licensed mold assessor from Universal. The assessments were requested by Cotton to assess the potential presence of airborne mold spores, and were conducted in both the impacted and non-impacted buildings.

Heating, ventilation, and air-conditioning (HVAC) for each room is provided by a HVAC system on the roof of the building.

At the time all rooms were sampled, there were no visible signs of mold in the rooms; however, there was one room that had visible moisture impact so sampling did not occur at that location. This room was located at:

Cafeteria

The airborne bioaerosol sampling in all other rooms confirmed mold spores were consistent with what would be found outdoors or in a typical building environment.

### 2.0 Exposure Standards and Guidelines

Currently, there are no generally accepted occupational or public health standards for interpreting airborne microbiological sample results. Individual susceptibility varies with genetic predisposition, age, state of health, concurrent exposures, and previous sensitization. Due to these challenges, it is not possible to determine an indoor spore concentration that can guarantee all individuals will be asymptomatic. Guidelines published by the American Industrial Hygiene Association (AIHA) recommend comparing the indoor and outdoor air sampling results. In general, the types of fungi and their airborne concentrations found indoors should be similar (in non-problem buildings) to outdoor air. [1] Differences in the airborne levels or types of fungi may indicate the presence of moisture sources and resultant fungal growth.



#### 3.0 Methods and Equipment

All collected samples were sent under chain-of-custody to EMSL Analytical, Inc., an AIHA-accredited laboratory.\* All monitoring equipment was factory calibrated at the manufacturers recommended interval or prior to sampling.

Bioaerosol samples were collected indoors and outdoors using Zefon Air-O-Cell sampling cassettes attached to an SKC QuickTake 30 air sampling pump. Prior to sampling, the pump was calibrated to a flowrate of approximately 15 L/min, as specified by the sampling media manufacturer, using a Bios Defender 510 DryCal. Each sample was collected for a five-minute duration resulting in a sampled air volume of approximately 75 Liters. Samples were analyzed by microscopic examination using method EMSL 05-TP-003/ASTM D7391 to determine mold spore genus and spore concentration. This method does not differentiate between viable and non-viable spore types.

#### 3.1 Visual Inspection

A visual inspection was conducted in accessible portions of the classrooms, school common areas, and above drop ceilings as necessary.

#### 3.2 Psychrometric Assessment

A psychrometric assessment was conducted utilizing a Protimeter Hygromaster L (Model #: POL7750L) Hygrometer in both the impacted and non-impacted buildings.

#### 4.0 Results

Laboratory reports for all samples are provided in **Appendix A**.

#### 5.0 Conclusions and Recommendations

The inspections and tests were performed on October 14, 2022, by industrial hygienists from CTEH and Universal. The results of the post-remediation inspection revealed no visible mold growth in the areas sampled, but did reveal one room that had visible moisture impact. Cotton was notified of this location and advised to investigate the potential source of this impact further, and that isolation of the room and additional remediation actions prior to permitting re-occupancy to this school location may be warranted. The post-remediation inspection also revealed psychrometric (i.e., atmospheric) readings above 55 Grains of Moisture per Pound of Air (GPP), as well as a single Chaetomium spore (Raw Count = 1; Count/M³ = 40) in room 01-101 but it was not present with Stachybotrys or levels of Aspergillus/Penicillium above



<sup>\*</sup> AIHA Laboratory Accreditation Program (AIHA-LAP) – Environmental Microbiology; AIHA Environmental Microbiology Proficiency Analytical Testing Program (AIHA-EMPAT) Participant; CDC Elite – Legionella

<sup>&</sup>lt;sup>†</sup> See laboratory reports in the appendix for exact flowrates and collected volumes.

background. However, these items may warrant further investigation / dehumidification techniques to inhibit microbial growth.

The results of the air testing in all other assessed rooms are considered normal and typical and do not indicate the presence of elevated airborne mold spores.

While some areas of the Caloosa Elementary School may be fit for re-occupancy at this time, the presence of impacted areas may warrant a more thorough investigation, and it is recommended that, at a minimum, the room that contained visible moisture impact is retested following further investigation and remediation activities prior to removing occupancy restrictions.

#### 6.0 References

[1] (AIHA), American Industrial Hygiene Association. *Facts About Mold*. Edited by American Industrial Hygiene Association (AIHA). Falls Church, Virginia: AIHA, 2011.



# Appendix A

# **Laboratory Reports**



5120 North Shore Drive

North Little Rock, AR 72118

5700 Memorial Highway, Suite 122 Tampa, FL 33615

CTEH Center for Toxicology & Env. Health

Tel/Fax: (813) 280-8752 / (813) 280-8753 http://www.EMSL.com / tampalab@emsl.com

Phone: (501) 801-8500

EMSL Order:

**Customer PO:** 

Customer ID:

Project ID:

932205768

CTEH99

Fax: (501) 614-2835

**Collected Date:** 10/14/2022 **Received Date:** 10/15/2022 **Analyzed Date:** 10/15/2022

**Project:** 021453

Attention: David Watts

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	Client Sample ID: CALES4680575BG001 Volume (L): 75				32205768-0002 CALES4680629 75 01-238		932205768-0003 CALES4680826 75 01-237			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	- '	-	-	-	-	-	-	-	-	
Ascospores	13	570	11.7	-	-	-	-	-	-	
Aspergillus/Penicillium	9	400	8.2	7	300	100	1	40	100	
Basidiospores	23	1000	20.5	-	-	-	-	-	-	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium++	-	-	-	-	-	-	-	-	-	
Cladosporium	61	2700	55.3	-	-	-	-	-	-	
Curvularia	2	90	1.8	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	3	100	2	-	-	-	-	-	-	
Corynespora	1*	10*	0.2	-	-	-	-	-	-	
Nigrospora	1*	10*	0.2	-	-	-	-	-	-	
Pestalotia++	-	-	-	-	-	-	-	-	-	
Spegazzinia	-	-	-	-	-	-	-	-	-	
Total Fungi	113	4880	100	7	300	100	1	40	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	-	1	-	_	1	_	_	1	_	

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Ilmo

Gerald Iannuzzi, Laboratory Manager or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. \*\*\*Denotes particles found at 300X. \*\*.\*\*Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Tampa, FL



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Attention: David Watts

CTEH Center for Toxicology & Env. Health

5120 North Shore Drive North Little Rock, AR 72118 **EMSL Order:** 932205768 Customer ID: CTEH99

**Customer PO:** Project ID:

Phone: (501) 801-8500

(501) 614-2835 **Collected Date:** 10/14/2022 **Received Date:** 10/15/2022 **Analyzed Date:** 10/15/2022

Fax:

**Project: 021453** 

Test Report: Aller Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	CALES4680599 75			9	32205768-0005 CALES4680613 75 01-217	<u> </u>	932205768-0006 CALES4680562 75 HALL 01-226			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	-	-	<u> </u>	-	-	-	-	-	· -	
Ascospores	-	-	-	1	40	26.7	-	-	-	
Aspergillus/Penicillium	2	90	90	-	-	-	-	-	-	
Basidiospores	-	-	-	-	-	-	-	-	-	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium++	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	1	40	26.7	2	90	40.9	
Curvularia	1*	10*	10	2*	30*	20	2	90	40.9	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	1	40	26.7	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	-	-	-	-	-	-	-	-	-	
Corynespora	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	-	
Pestalotia++	-	-	-	-	-	-	1	40	18.2	
Spegazzinia	-	-	-	-	-	-	-	-	-	
Total Fungi	3	100	100	5	150	100	5	220	100	
Hyphal Fragment	-	-	-	1	40	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	-	1	-	-	2	-	-	1	-	

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific

No discernable field blank was submitted with this group of samples.

Gerald Iannuzzi, Laboratory Manager or other Approved Signatory

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Received Date: 10/15/2022
Analyzed Date: 10/15/2022

**Project: 021453** 

Test Report: Aller Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	9	32205768-0007 CALES4680539 75 HALL 01-208		9	32205768-0008 CALES4680591 75 01-101	,	932205768-0009 CALES4680559 75 HALL 121/122			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	· -	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	1	40	40	2	90	40.9	7	300	83.3	
Basidiospores	-	-	-	-	-	-	1*	10*	2.8	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium++	-	-	-	1	40	18.2	-	-	-	
Cladosporium	-	-	-	-	-	-	1	40	11.1	
Curvularia	1*	10*	10	2	90	40.9	1*	10*	2.8	
Epicoccum	1*	10*	10	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	1	40	40	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	-	-	-	-	-	-	-	-	_	
Corynespora	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	_	
Pestalotia++	-	-	-	-	-	-	-	-	-	
Spegazzinia	-	-	-	-	-	-	-	-	-	
Total Fungi	4	100	100	5	220	100	10	360	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	_	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	_	1	-	_	1	_	_	1	_	

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Shim

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Attention: David Watts

CTEH Center for Toxicology & Env. Health

5120 North Shore Drive North Little Rock, AR 72118 EMSL Order: 932205768
Customer ID: CTEH99

Customer PO: Project ID:

**Phone:** (501) 801-8500

Fax: (501) 614-2835
Collected Date: 10/14/2022
Received Date: 10/15/2022
Analyzed Date: 10/15/2022

**Project:** 021453

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:		932205768-0010 CALES4680541 75 HALL 151			32205768-0011 CALES4680581 75 01-109		932205768-0012 CALES4680631 75 MEDIA			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	-	-	<u> </u>	- '	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	10	440	95.7	2	90	69.2	5	200	100	
Basidiospores	-	-	-	-	-	-	-	-	-	
Bipolaris++	1*	10*	2.2	-	-	-	-	-	-	
Chaetomium++	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	1	40	30.8	-	-	-	
Curvularia	1*	10*	2.2	-	-	-	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	-	-	-	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	-	-	-	-	-	-	-	-	-	
Corynespora	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	-	
Pestalotia++	-	-	-	-	-	-	-	-	-	
Spegazzinia	-	-	-	-	-	-	-	-	-	
Total Fungi	12	460	100	3	130	100	5	200	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	1	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	-	2	-	-	1	_	_	1	_	

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Ilmo

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Fax:

**Project: 021453** 

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:		32205768-0014 CALES4680654 75 04-011			32205768-0015 CALES4680621 75 04-002			732205768-0016 CALES4680619 75 04-201	
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	- '	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	1	40	19
Aspergillus/Penicillium	3	100	71.4	-	-	-	-	-	-
Basidiospores	-	-	-	-	-	-	1	40	19
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	1	40	50	-	-	-
Curvularia	1	40	28.6	1	40	50	2	90	42.9
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	1	40	19
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Cercospora++	-	-	-	-	-	-	-	-	-
Corynespora	-	-	-	-	-	-	-	-	-
Nigrospora	-	-	-	-	-	-	-	-	-
Pestalotia++	-	-	-	-	-	-	-	-	-
Spegazzinia	-	-	-	-	-	-	-	-	-
Total Fungi	4	140	100	2	80	100	5	210	100
Hyphal Fragment	-	-	-	1	40	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	_	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	_	-	1	-
Background (1-5)	-	1		_	2	_	_	2	_

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific

No discernable field blank was submitted with this group of samples.

Gerald Iannuzzi, Laboratory Manager or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Tampa, FL



5700 Memorial Highway, Suite 122 Tampa, FL 33615

Tel/Fax: (813) 280-8752 / (813) 280-8753 http://www.EMSL.com / tampalab@emsl.com

Attention: David Watts

CTEH Center for Toxicology & Env. Health

5120 North Shore Drive North Little Rock, AR 72118 **EMSL Order:** 932205768 Customer ID: CTEH99

**Customer PO:** Project ID:

Phone: (501) 801-8500

(501) 614-2835 **Collected Date:** 10/14/2022 **Received Date:** 10/15/2022 **Analyzed Date:** 10/15/2022

Fax:

**Project: 021453** 

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	932205768-0017 CALES4680549 75 04-202				32205768-0018 CALES4680587 75 04-203		932205768-0019 CALES4680573 75 04-204			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	- '	-	-	-	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	-	-	-	
Aspergillus/Penicillium	-	-	-	-	-	-	-	-	-	
Basidiospores	1	40	100	-	-	-	-	-	-	
Bipolaris++	-	-	-	1*	10*	5.6	-	-	-	
Chaetomium++	-	-	-	-	-	-	-	-	-	
Cladosporium	-	-	-	2	90	50	3	100	100	
Curvularia	-	-	-	1	40	22.2	-	-	-	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	-	-	-	-	-	-	-	-	-	
Myxomycetes++	-	-	-	1	40	22.2	-	-	-	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	-	-	-	-	-	-	-	-	-	
Corynespora	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	-	
Pestalotia++	-	-	-	-	-	-	-	-	-	
Spegazzinia	-	-	-	-	-	-	-	-	-	
Total Fungi	1	40	100	5	180	100	3	100	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	-	-	-	-	-	-	
Pollen	-	-	-	-	-	-	-	-	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-	
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-	
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-	
Background (1-5)	-	1	-	-	2	_	_	1	_	

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific

No discernable field blank was submitted with this group of samples.

Gerald Iannuzzi, Laboratory Manager or other Approved Signatory

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5120 North Shore Drive North Little Rock, AR 72118 EMSL Order: 932205768
Customer ID: CTEH99

Customer PO: Project ID:

**Phone:** (501) 801-8500

Fax: (501) 614-2835 Collected Date: 10/14/2022

Received Date: 10/15/2022
Analyzed Date: 10/15/2022

**Project: 021453** 

Lab Sample Number: Client Sample ID: Volume (L): Sample Location:	CALES4680561 75			9	32205768-0021 CALES4680584 75 04-212	<u>(                                    </u>	932205768-0022 CALES4734738002 75 Outdoor			
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	
Alternaria (Ulocladium)	- '	-	<b>'</b>	-	-	-	-	-	-	
Ascospores	-	-	-	-	-	-	3	100	2.2	
Aspergillus/Penicillium	1	40	25	1	40	50	4	200	4.4	
Basidiospores	-	-	-	-	-	-	23	1000	22.2	
Bipolaris++	-	-	-	-	-	-	-	-	-	
Chaetomium++	-	-	-	-	-	-	-	-	-	
Cladosporium	3	100	62.5	1	40	50	54	2400	53.3	
Curvularia	-	-	-	-	-	-	14	620	13.8	
Epicoccum	-	-	-	-	-	-	-	-	-	
Fusarium++	-	-	-	-	-	-	-	-	-	
Ganoderma	1*	10*	6.3	-	-	-	1	40	0.9	
Myxomycetes++	-	-	-	-	-	-	3	100	2.2	
Pithomyces++	-	-	-	-	-	-	-	-	-	
Rust	-	-	-	-	-	-	-	-	-	
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-	
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-	
Cercospora++	-	-	-	-	-	-	1	40	0.9	
Corynespora	-	-	-	-	-	-	-	-	-	
Nigrospora	-	-	-	-	-	-	-	-	-	
Pestalotia++	-	-	-	-	-	-	-	-	-	
Spegazzinia	1*	10*	6.3	-	-	-	-	-	-	
Total Fungi	6	160	100	2	80	100	103	4500	100	
Hyphal Fragment	-	-	-	-	-	-	-	-	-	
Insect Fragment	-	-	-	1*	10*	-	-	-	-	
Pollen	-	-	-	-	-	-	2	90	-	
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-	
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	_	
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-	
Fibrous Particulate (1-4)	-	1	-	-	1	_	-	1	-	
Background (1-5)	-	1	_	_	1	_	_	1		

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Ilmo

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