Gmail by Google

Joseph Fuller <jay_fuller@abss.k12.nc.us>

FW: Invoice 1705 from A.L.I.S. Environmental, Inc.

1 message

Jim McManus <jmcmanus@alisenvironmental.com> Thu, Sep 19, 2019 at 12:27 PM
Reply-To: JMcManus@alisenvironmental.com
To: Jay fuller <jay_fuller@abss.k12.nc.us>

James P. McManus, VP

ALIS Environmental, Inc.

P.O. Box 6

Pinnacle, NC 27043

Off: 336.368.4500

Mobile: 336.575.2343

From: Debi McManus <Debi.McManus@ALISEnvironmental.com>
Sent: Wednesday, September 18, 2019 9:53 PM
To: jmcmanus@alisenvironmental.com
Subject: Invoice 1705 from A.L.I.S. Environmental, Inc.

A L I S Environmental Inc

Invoice *Due:09/18/2019*
1705

Amount Due: $725.00

Dear Jay :

Your invoice is attached. Please remit payment at your earliest convenience.

Thank you for your business - we appreciate it very much.

Sincerely,

Invoice

Environmental, Inc.
PO Box 6 Pinnacle, NC 27043

DATE	INVOICE #
9/18/2019	1705

BILL TO
Alamance-Burlington School System Jay Fuller 307 Prison Camp Road Graham, NC 27253

PROJECT ADDRESS	
2200 N. Mebane Rd Burlington, NC	
CLIENT PROJECT ID # / P.O.#	

PROJECT NAME	PROJECT #	TERMS	DUE DATE
Cummings - Fine Arts	201-1909-08	Due on receipt	9/18/2019

PROJECT DATE (S)	SERVICE (S)	DAYS/HOURS/EACH	RATE	AMOUNT
9/12/2019	Airborne Mold Sampling Auditorium / Band Room	1	425.00	425.00
9/12/2019	Lab Charges / Samples	6	50.00	300.00

A late charge of 1.5% (18% APR) will be added each month to all invoices 30 days past due.

Invoice Total $725.00

Thank you for your business !
Please Remit to: P.O. Box 6 Pinnacle, NC 27043

Customer Total Balance $725.00

Jim
A.L.I.S. Environmental, Inc.

Inv_1705_from_A.L.I.S._Environmental_Inc._11768.pdf
119K

Alamance-Burlington Schools
Date Created: 10/11/2019 8:03AM

Work Order ID:281594

Completion Date: 10/11/19

Description	Very concerned with the air quality in the classroom that is resulting in the teacher being sick multiple times during the school year. William Perry came over to meet with me for advice. He states the "return air vents" need to be cleaned out. Also, not sure who painted the ceiling black, but possible mold/mildew that can not be seen.		
Location	Graham High	**Building**	
Area	Classroom	**Priority**	Medium
Area Number	Fine arts #2 classroom	**Craft**	Indoor Air Quality
Custom Category		**Type**	
Status	Work In Progress	**Estimated Hour**	0.00
Assigned To	Fuller, Jay	**Requester**	Pamela Henline 3365706400
Estimated Start		**Request Date**	10/11/2019
Est. Completion Date		**Req. Completion Date**	10/11/19
Budget Code		**Purpose Code**	General Maintenance
Project Code	General Maintenance	**Project Description**	
Equip Item No.		**Equip Desc**	
Notes			

Purchases **To Date: $0.00**

Date	Inv/Ref	Description	Supplier	Pool	Qty	Cost Each

Labor **To Date:** **h**

Date	Name	Hours

J. Fuller — 10/11/19
Technician Name — Date — Confirmation — Date
www.schooldude.com MaintenanceDirect
Printed by Jay Fuller

Met Jim McManus (ALIS) on site 11:25 for testing of the Fine Arts #2 Classroom. Finished up & left at 12:15.

Alamance-Burlington Schools
Date Created: 10/11/2019 8:03AM

Work Order ID:281594

Completion Date:

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Purchases **To Date: $0.00**

Date	Inv/Ref	Description	Supplier	Pool	Qty	Cost Each

Labor **To Date:** **h**

Date	Name	Hours

J. Fuller 10/11/19
Technician Name Date Confirmation Date

Printed by Jay Fuller

Met Jim McManus (ALIS) at the school, he did testing in Room Fine Arts #2 Classroom. Finished inside i then did testing outside. He will send us a breakdown on what he found.

ALIS
Environmental Inc

Office: 336.368.4500
Mobile: 336.575.2343
jmcmanus@alisenvironmental.com

October 17, 2019

Jay Fuller
Director of Facilities and Maintenance

Alamance-Burlington School System
307 Prison Camp Road
Graham, North Carolina 27253

Subject: Report of Airborne Microbial Sampling
Graham High School – Chorus Room FA#2
903 Trollinger Road
Graham, North Carolina
Project No.: 201-1910-09

Dear Mr. Fuller:

ALIS has completed the airborne microbial sampling at Graham High School in Graham, North Carolina. On October 11, 2019, we conducted air sampling for the presence of airborne fungi at the subject property. The purpose of our sampling was to determine the presence and species of airborne fungi and the degree of concentration within the area of concern. One air sampling pump was calibrated and placed at the lower level of the chorus room and one sample was collected from outside the building as a reference (baseline) for comparison to the inside conditions. No other areas of the building were included in the scope of work.

Results

The laboratory results found a slightly higher level of Chaetomium on the indoor sample when compared to the outdoor sample. The detection of Chaetomium suggests possible water damage from previous or current moisture intrusion or poor ventilation. The presence of Curvularia and Pithomyces were detected in greater numbers indoors than outdoors also, however, these species typically originate outdoors (grass clippings, decomposing leaves etc.) and migrate indoors through ventilation systems and occupant ingress/egress activity. Although moisture damage on interior finishes was not observed during our visit, the heating, ventilation and air conditioning system (HVAC) should be inspected for condensation, poor drainage and general level of performance-efficiency. Sample results and additional information on fungal spores are attached to this report: "Spore Trap Analysis"

Report of Airborne Microbial Sampling
Graham High School – Chorus Room FA#2
Graham, North Carolina
ALIS Project #: 201-1910-09

October 17, 2019

Sampling Methodology

Non-viable samples were collected with a spore trap slide using Allergenco-D Cassettes mounted to a sampling pump. The cassettes contain glass slides that are coated with a sticky substance that captures airborne particulates that impinge on the slides. The air samples were collected at 15 liters per minute for 10 minutes. Calibration of sampling equipment was performed with a precision rotameter (a secondary calibration source). Rotameters are calibrated against a primary standard. Field calibration was performed before and after sampling. The air samples were sealed for transport to Hayes Microbial Consulting in Midlothian, Virginia for analysis. Hayes Microbial is a participant in the American Industrial Hygiene Association, Laboratory Accreditation Program (AIHA-LAP) for Environmental Microbiology.

Background Information on Mold in Buildings

Mold spores exist normally in outdoor and indoor air and can be measured in air and carpets of normal homes, office buildings, hospitals and schools. Naturally occurring sources of mold spores include soil, plants and other sources. The air concentration of these normally occurring mold spores is dependent on the season, environmental conditions and other factors. Elevated levels of mold in building materials may occur if chronic moist conditions from water leaks, floods, chronic high relative humidity, or malfunctioning heating, ventilation or air conditioning systems, allow moisture to remain for prolonged periods on organic matter in the presence of warm ambient temperatures. Under these conditions, low levels of fungal spores in air, plants or other sources, may proliferate on cellulose containing materials such as carpets, wallboard, wood, paper or dusty surfaces (which may serve as a food source), and result in mold contamination. Many fungal spores are allergenic to susceptible persons exposed, though individual susceptibility varies greatly. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.

ALIS appreciates the opportunity to be of service to you on this project. We would welcome the opportunity to discuss at your convenience, any of the results contained in this report. Please contact us if you have any questions or if we may be of further service.

Sincerely,
ALIS ENVIRONMENTAL, INC.

James P. McManus
Vice-President

Attachment: "Spore Trap Analysis"

HAYES
MICROBIAL CONSULTING

#19042620

Analysis Report prepared for

ALIS Environmental Inc.

1027 Koontz Haven Rd
Pinnacle, NC 27043

Phone: **(336) 368-4500**

201-1910-09
Graham H.S.
903 Trollinger Rd.
Graham, NC

Collected: **October 11, 2019**
Received: **October 15, 2019**
Reported: **October 15, 2019**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 3 samples by FedEx in good condition for this project on October 15th, 2019.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC..

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419

Lab ID: #188863

NVLAP Lab Code: 500096-0

DPH License: #PH-0198

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201-1910-09
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#19042620

Spore Trap, Spore Trap Blank
SOP - HMC#101

Sample Number	1	02232778		2	02268614		3	02332042	
Sample Name	I/S Chorus Rm FA #2			O/S Bldg			Blank		
Sample Volume	165.00 liter			150.00 liter			0.00 liter		
Reporting Limit	6 spores/m^3			7 spores/m^3			1 spore/m^3		
Background	2			2			NBD		
Fragments	12/m^3			27/m^3			ND		
Organism	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**
Alternaria				1	7	<1%			
Ascospores	6	36	20.0%	18	120	9.4%			
Aspergillus|Penicillium									
Basidiospores	1	6	3.3%	10	67	5.2%			
Bipolaris|Drechslera	1	6	3.3%	1	7	<1%			
Chaetomium	2	12	6.7%						
Cladosporium	1	6	3.3%	144	960	75.4%			
Curvularia	9	55	30.0%	1	7	<1%			
Epicoccum	1	6	3.3%	3	20	1.6%			
Fusarium									
Memnoniella									
Myxomycetes	3	18	10.0%	12	80	6.3%			
Pithomyces	6	36	20.0%	1	7	<1%			
Stachybotrys									
Stemphylium									
Torula									
Ulocladium									
Total	30	181	100%	191	1275	100%	ND	ND	

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Oct 11, 2019** Received: **Oct 15, 2019** Reported: **Oct 15, 2019**

Project Analyst: Connor Gailliot, BS Date: **10 - 15 - 2019**

Reviewed By: Steve Hayes, BSMT Date: **10 - 15 - 2019**

HAYES MICROBIAL CONSULTING
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Jim McManus
ALIS Environmental Inc.
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201-1910-09
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Spore Trap Information

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.
Blanks	Results have not been corrected for field or laboratory blanks.
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 5 and each level is determined as follows: **NBD:** No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD) **1 :** <5% of field occluded. No spores will be uncountable. **2 :** 5-25% of field occluded. **3 :** 25-75% of field occluded. **4 :** 75-90% of field occluded. **5 :** >90% of field occluded. Suggested recollection of sample.
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.
Control Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.
Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality	**Blue:** These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem. **Green:** Although all molds are potential allergens, these are the most common allergens that may be found indoors. **Orange:** The spore count is slightly higher than the outside count and may or may not indicate a source of contamination. **Red:** The spore count is significantly higher than the baseline count and probably indicates a source of contamination. **Violet:** The types of spores found indoors should be similar to the ones that were identified in the baseline sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.

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201-1910-09
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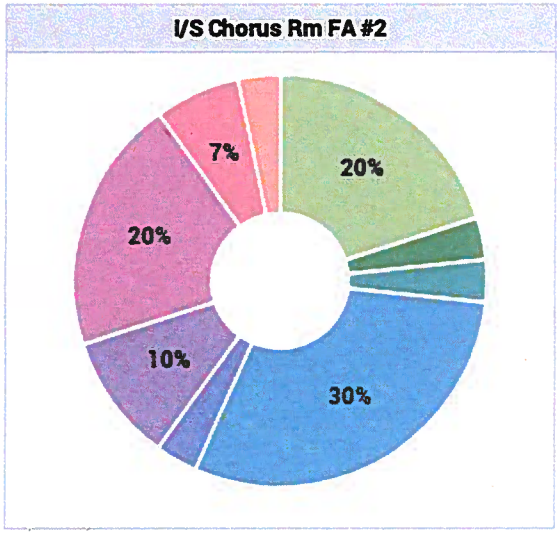
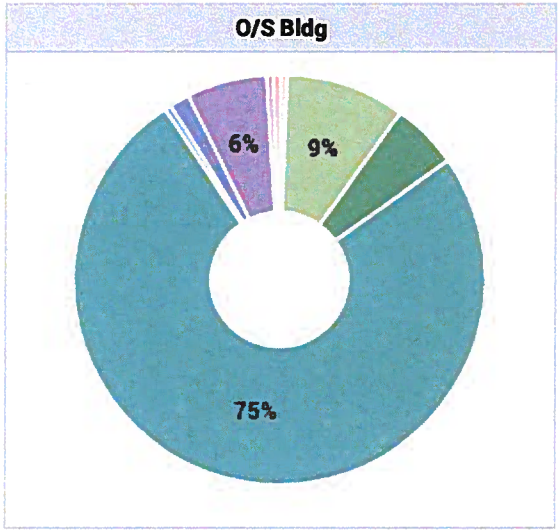
Spore Counts - Pie Charts





Ascospores	Basidiospores	Cladosporium	Curvularia	Epicoccum
Myxomycetes	Pithomyces	Chaetomium	Bipolaris|Drechslera	Alternaria

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Graham, NC

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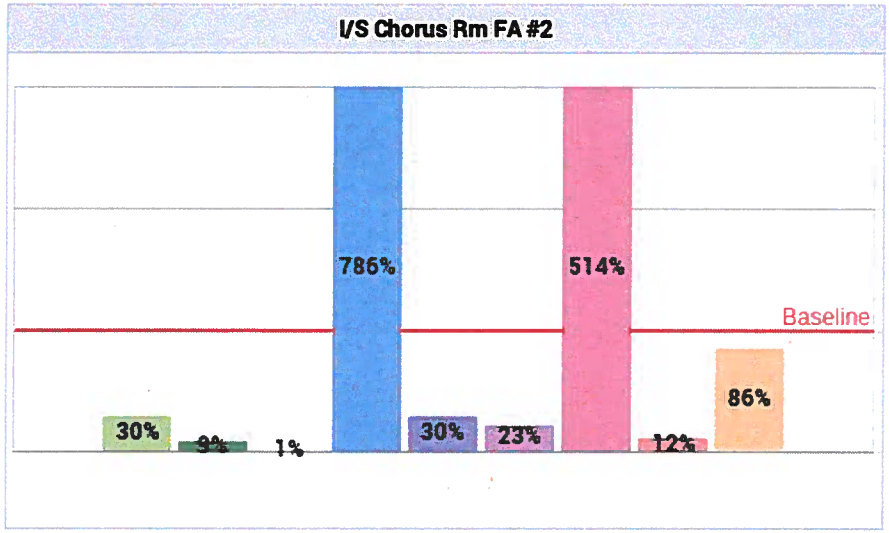
Spore Counts - Bar Graphs



Ascospores	Basidiospores	Cladosporium	Curvularia	Epicoccum
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Organism Descriptions

Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Effects: Health affects are poorly studied, but many are likely to be allergenic.

Basidiospores

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

Bipolaris|Drechslera

Habitat: They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.

Effects: They may be allergenic and are very commonly involved in allergic fungal sinusitis. They are opportunistic pathogens but occasionally infect healthy individuals, causing keratitis, sinusitis and osteomyelitis.

Chaetomium

Habitat: Ascomycete fungus, commonly isolated from soil and decaying plant materials. It is cellulolytic and grows well indoors on damp sheetrock and other paper substrates. It is often found growing with Stachybotrys.

Effects: It is reported to be allergenic and may produce toxins.

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

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Organism Descriptions

Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.

Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Effects: It is a common allergen. No cases of infection have been reported in humans.

Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Effects: Allergenic properties are poorly studied. No cases of infection in humans.

HAYES
MICROBIAL CONSULTING

Chain
3005 East Bou
Midlott
Ph. 804.562.34

N

SHIP: FEDEX - PAK 50
DATE: 10-15-2019

8054 8522 9115

MOLD
19042620

ALIS Environmental, Inc. 1027 Koontz Haven Rd Pinnacle, NC 27043		Job Number: 201-1910-04 Job Name: GRAHAM HS 903 TROLLINGER RD GRAHAM, NC	Date Collected: 10-11-19 Collected by: J.McManus Email: jmcmanus@alisenvironmental.com
Ph.: 336.575.2343	Fax:		

AD

Sample #	Sample Name	Analysis Type	Volume	Turn Around Time	Start / Stop Time
C223 2758	J/S CHORUS RM. ~~LOWER~~ UPPER FA #2	S	165 LTR	24HRS	11:39 / 11:50
C226 9614	J/S BLDG	S	150 LTR	24 HRS	11:54 / 12:09
C233 2042	BLANK	S	—	24HRS	— —

Analysis Type		Description	Turn Around Time	Acceptable Samples Types
Spore Trap	S	Identification & Enumeration of Fungal Spores	24 hours	Spore Trap cassettes, Impact slides
	S+	I & E of Fungal Spores + total dander, fiber and pollen count	24 hours	Spore Trap cassettes, Impact slides
Direct ID	D	ID and Semi-quantitative enumeration of spores and mycelium	24 hours	Tape, Bio-tape, swab, bulk, agar plate for ID only
	D+	ID and Enumeration with spore count	24 hours	Tape. Bio-tape, swab, bulk, agar plate for ID only
Culture	C1	Identification & Enumeration of Mold only	7 days	Anderson Air Plate, Swab, Bulk
	C2	Identification & Enumeration of Bacteria only	4 days	Anderson Air Plate, Swab, Bulk
	C3	Identification & Enumeration of Mold and Bacteria	7 days	Anderson Air Plate, Swab, Bulk
Dust Mite	A1	Semi-quantitive analysis of dust mite allergen	24 hours	Bulk Dust

Notes:					
Relinquished By:		Date:	Rcvd. By: TM	Date: 10.15.19	Time:

Gmail by Google

Joseph Fuller <jay_fuller@abss.k12.nc.us>

Report: Graham HS Airborne Fungal Sampling

1 message

Jim McManus <jmcmanus@alisenvironmental.com>
To: Todd Thorpe <todd_thorpe@abss.k12.nc.us>
Cc: Joseph Fuller <jay_fuller@abss.k12.nc.us>

Thu, Oct 17, 2019 at 11:24 AM

Gentleman,

Please call me if you have any questions.

As always, thank you for your business.

James P. McManus, VP

ALIS Environmental, Inc

Office: 336.368.4500

Mobile: 336.575.2343

jmcmanus@alisenvironmental.com

201-1910-09 final.pdf
731K

ALIS
Environmental Inc

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Mobile: 336.575.2343
jmcmanus@alisenvironmental.com

October 17, 2019

Jay Fuller
Director of Facilities and Maintenance

Alamance-Burlington School System
307 Prison Camp Road
Graham, North Carolina 27253

Subject: Report of Airborne Microbial Sampling
Graham High School – Chorus Room FA#2
903 Trollinger Road
Graham, North Carolina
Project No.: 201-1910-09

Dear Mr. Fuller:

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Report of Airborne Microbial Sampling
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Graham, North Carolina
ALIS Project #: 201-1910-09

October 17, 2019

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Sincerely,
ALIS ENVIRONMENTAL, INC.

James P. McManus
Vice-President

Attachment: "Spore Trap Analysis"

HAYES
MICROBIAL CONSULTING

#19042620

Analysis Report prepared for

ALIS Environmental Inc.

1027 Koontz Haven Rd
Pinnacle, NC 27043

Phone: **(336) 368-4500**

201-1910-09
Graham H.S.
903 Trollinger Rd.
Graham, NC

Collected: **October 11, 2019**
Received: **October 15, 2019**
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Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419 | Lab ID: #188863 | NVLAP Lab Code: 500096-0 | DPH License: #PH-0198

Jim McManus
ALIS Environmental Inc.
1027 Koontz Haven Rd
Pinnacle, NC 27043
(336) 368-4500

201-1910-09
Graham H.S.
903 Trollinger Rd.
Graham, NC

#19042620

Spore Trap, Spore Trap Blank
SOP - HMC#101

Sample Number	1	02232778		2	02268614		3	02332042	
Sample Name	I/S Chorus Rm FA #2			O/S Bldg			Blank		
Sample Volume	165.00 liter			150.00 liter			0.00 liter		
Reporting Limit	6 spores/m³			7 spores/m³			1 spore/m³		
Background	2			2			NBD		
Fragments	12/m³			27/m³			ND		
Organism	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**	**Raw Count**	**Count / m³**	**% of Total**
Alternaria				1	7	<1%			
Ascospores	6	36	20.0%	18	120	9.4%			
Aspergillus|Penicillium									
Basidiospores	1	6	3.3%	10	67	5.2%			
Bipolaris|Drechslera	1	6	3.3%	1	7	<1%			
Chaetomium	2	12	6.7%						
Cladosporium	1	6	3.3%	144	960	75.4%			
Curvularia	9	55	30.0%	1	7	<1%			
Epicoccum	1	6	3.3%	3	20	1.6%			
Fusarium									
Memnoniella									
Myxomycetes	3	18	10.0%	12	80	6.3%			
Pithomyces	6	36	20.0%	1	7	<1%			
Stachybotrys									
Stemphylium									
Torula									
Ulocladium									
Total	30	181	100%	191	1275	100%	ND	ND	

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Oct 11, 2019** Received: **Oct 15, 2019** Reported: **Oct 15, 2019**

Project Analyst: Connor Gailliot, BS — Date: **10 - 15 - 2019**

Reviewed By: Steve Hayes, BSMT — Date: **10 - 15 - 2019**

HAYES MICROBIAL CONSULTING
3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

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Spore Trap Information

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.
Blanks	Results have not been corrected for field or laboratory blanks.
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 5 and each level is determined as follows: **NBD:** No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD) **1** : <5% of field occluded. No spores will be uncountable. **2** : 5-25% of field occluded. **3** : 25-75% of field occluded. **4** : 75-90% of field occluded. **5** : >90% of field occluded. Suggested recollection of sample.
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.
Control Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.
Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality	**Blue:** These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem. **Green:** Although all molds are potential allergens, these are the most common allergens that may be found indoors. **Orange:** The spore count is slightly higher than the outside count and may or may not indicate a source of contamination. **Red:** The spore count is significantly higher than the baseline count and probably indicates a source of contamination. **Violet:** The types of spores found indoors should be similar to the ones that were identified in the baseline sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.

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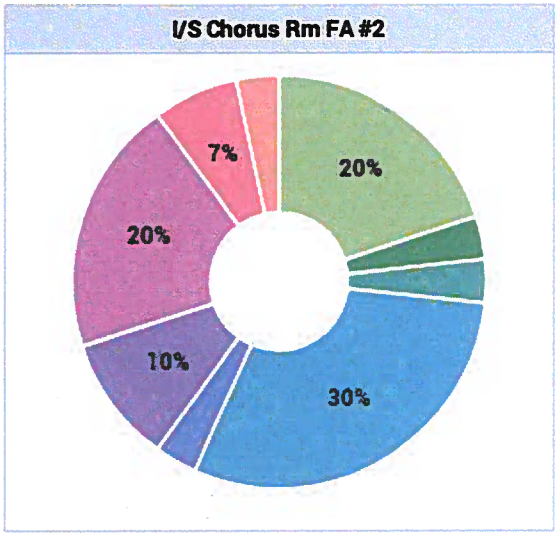
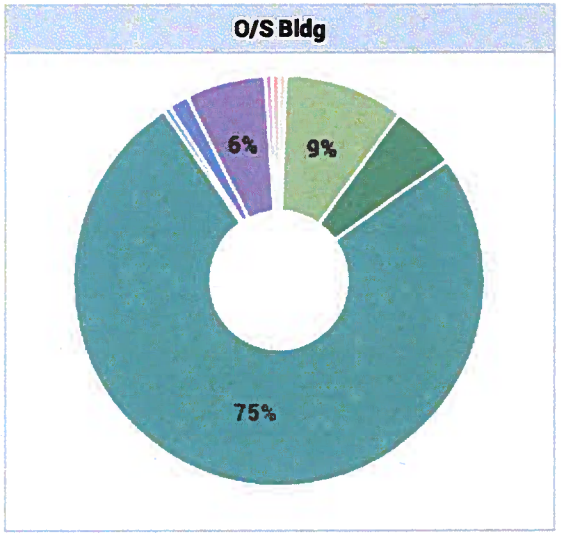
Spore Counts - Pie Charts





Ascospores	Basidiospores	Cladosporium	Curvularia	Epicoccum
Myxomycetes	Pithomyces	Chaetomium	Bipolaris|Drechslera	Alternaria

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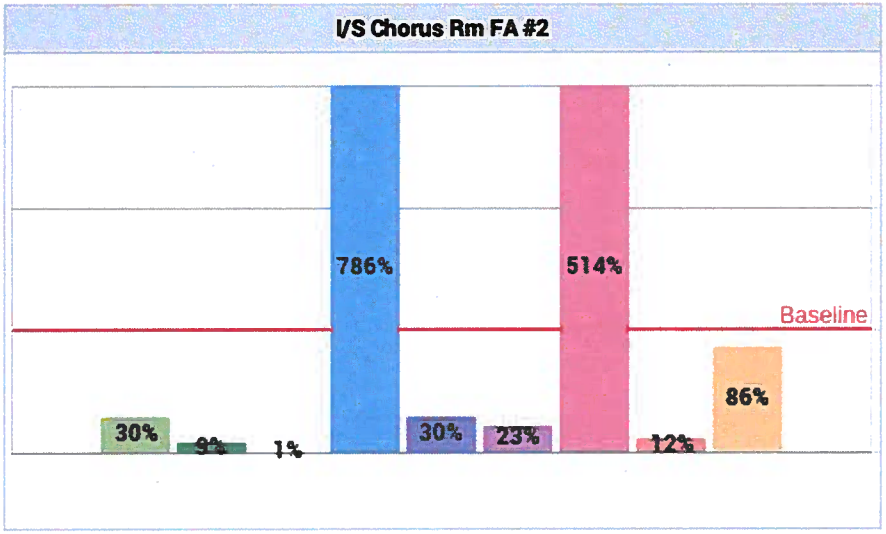
Spore Counts - Bar Graphs



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Organism Descriptions

Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Effects: Health affects are poorly studied, but many are likely to be allergenic.

Basidiospores

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

Bipolaris|Drechslera

Habitat: They are found in soil and as plant pathogens. Can grow indoors on a variety of substrates.

Effects: They may be allergenic and are very commonly involved in allergic fungal sinusitis. They are opportunistic pathogens but occasionally infect healthy individuals, causing keratitis, sinusitis and osteomyelitis.

Chaetomium

Habitat: Ascomycete fungus, commonly isolated from soil and decaying plant materials. It is cellulolytic and grows well indoors on damp sheetrock and other paper substrates. It is often found growing with Stachybotrys.

Effects: It is reported to be allergenic and may produce toxins.

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

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Organism Descriptions

Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.

Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Effects: It is a common allergen. No cases of infection have been reported in humans.

Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Effects: Allergenic properties are poorly studied. No cases of infection in humans.

HAYES MICROBIAL CONSULTING

Chain of Custody

3005 East Bou
Midlott
Ph. 804.562.34

N

SHIP: FEDEX - PAK SO
DATE: 10-15-2019

8054 0522 9115

MOLD

19042620

ALIS Environmental, Inc. 1027 Koontz Haven Rd Pinnacle, NC 27043	Job Number: 201-1910-05 Job Name: GRAHAM HS 903 TROLLINGER RD GRAHAM, NC	Date Collected: 10-11-19 Collected by: J.McManus Email: jmcmanus@alisenvironmental.com
Ph.: 336.575.2343 Fax:		

AD

Sample #	Sample Name	Analysis Type	Volume	Turn Around Time	Start / Stop Time
0223 2758	J/S CHORUS RM. ~~(Lower)~~ FA #2	S	165 LPM	24HR	11:39 / 11:50
0226 9614	J/S BLDG	S	150 LPM	24 HRS	11:54 / 12:09
0233 2052	BLANK	S	—	24HRS	— —

Analysis Type		Description	Turn Around Time	Acceptable Samples Types
Spore Trap	S	Identification & Enumeration of Fungal Spores	24 hours	Spore Trap cassettes, Impact slides
	S+	I & E of Fungal Spores + total dander, fiber and pollen count	24 hours	Spore Trap cassettes, Impact slides
Direct ID	D	ID and Semi-quantitative enumeration of spores and mycelium	24 hours	Tape, Bio-tape, swab, bulk, agar plate for ID only
	D+	ID and Enumeration with spore count	24 hours	Tape, Bio-tape, swab, bulk, agar plate for ID only
Culture	C1	Identification & Enumeration of Mold only	7 days	Anderson Air Plate, Swab, Bulk
	C2	Identification & Enumeration of Bacteria only	4 days	Anderson Air Plate, Swab, Bulk
	C3	Identification & Enumeration of Mold and Bacteria	7 days	Anderson Air Plate, Swab, Bulk
Dust Mite	A1	Semi-quantitive analysis of dust mite allergen	24 hours	Bulk Dust

Notes:					
Relinquished By:		Date:	Rcvd. By: TM	Date: 10.15.19	Time:

Gmail by Google

Joseph Fuller <jay_fuller@abss.k12.nc.us>

Fwd: Invoice 1716 from A.L.I.S. Environmental, Inc.

1 message

jmcmanus@alisenvironmental.com <jmcmanus@alisenvironmental.com> Mon, Oct 21, 2019 at 10:30 PM
To: Jay Fuller <jay_fuller@abss.k12.nc.us>

James P. McManus
Vice President
ALIS Environmental, Inc.
336.575.2343 (m)

----- Original Message -----
From: "Debi McManus" <Debi.McManus@ALISEnvironmental.com>
To: jmcmanus@alisenvironmental.com
Sent: Mon, 21 Oct 2019 18:35:44 -0400
Subject: Invoice 1716 from A.L.I.S. Environmental, Inc.

A.L.I.S. Environmental, Inc.

Invoice *Due:10/21/2019*
1716

Amount Due: $575.00

Dear Jay :

Your invoice is attached. Please remit payment at your earliest convenience.

Thank you for your business - we appreciate it very much.

Sincerely,

Jim
A.L.I.S. Environmental, Inc.

Inv_1716_from_A.L.I.S._Environmental_Inc._5568.pdf
119K

Invoice

Environmental, Inc.
PO Box 6 Pinnacle, NC 27043

DATE	INVOICE #
10/21/2019	1716

BILL TO
Alamance-Burlington School System Jay Fuller 307 Prison Camp Road Graham, NC 27253

PROJECT ADDRESS	
Graham H.S. 903 Trollinger Road Graham, NC	
CLIENT PROJECT ID # / P.O.#	

PROJECT NAME	PROJECT #	TERMS	DUE DATE
Airborne Mold Sampling	201-1910-09	Due on receipt	10/21/2019

PROJECT DATE (S)	SERVICE (S)	DAYS/HOURS/EACH	RATE	AMOUNT
10/11/2019	Airborne Mold Sampling - Chorus Room	1	425.00	425.00
10/11/2019	Lab Services	3	50.00	150.00

A late charge of 1.5% (18% APR) will be added each month to all invoices 30 days past due.

Invoice Total $575.00

Thank you for your business !
Please Remit to: P.O. Box 6 Pinnacle, NC 27043

Customer Total Balance $575.00