



INDOOR AIR QUALITY
INVESTIGATIVE SERVICES

Commercial Indoor Air Assessment Report

For Flagler Sheriffs
901 E. Moody Blvd. Bunnell FL. 32110

Date: April 12, 2018



Note: This report is not a protocol report for remediation. A separate protocol report can be obtained on request once it is determined that it is required.

Board Certified Indoor Environmentalist Consultant, ACAC
Board Certified Master Inspector, Internachi
Certified Indoor Air Quality Specialist, ESA, IEAQC & Internachi
Certified Allergen Specialist, ESA
Certified FLIR Thermographer, Level 1
Certified Ventilation Inspector, NADCA
Mold Assessor, License No. MRSA-420, Florida Department of Business &
Professional Regulation
Licensed Home Inspector, HI-213



H2H INDOOR AIR SOLUTIONS, LLC

Date: April 12, 2018

Richard J Van Dort
President-H2H Indoor Air Solutions, LLC

Dear Mr. Dickson,

Thank you for placing your confidence in H2H Indoor Air Solutions. Please note your job number and the accompanying services we have provided in this report. This report is the result of a walk through, visual survey and an on-site measurement of the parameters described in this report. The results only apply to those rooms or spaces that were tested and that are specifically described during the course of this assessment. Information provided in this document is provided 'as is' without warranty of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

Facility Code:

- F1: Empty dwelling
- F2: Occupied commercial office dwelling
- F3: Occupied commercial hotel
- F4: Occupied commercial condominium
- F5: Occupied medical facility

Scope:

H2H Assurance Services, hereby called H2H, is pleased to submit this Indoor Air Assessment Report for the above referenced location. The objective was to determine if significant air contaminants were present at the property. Based on our visual observations, measurements conducted, test samples taken (if deemed necessary), and the report from an accredited lab this report (if taken) will identify the necessity for H2H to recommend remediation or equipment to neutralize any issues discovered.

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I. Site Observations

Weather at the time of inspection:

Temperature: < 70 F >70F >80F >90F

Humidity: <60% >60% >65% >70% >75% >80% >85%

Dew Point Temperature: <60F >60F >65F >70F >75F >80F

No visual issues at the time of inspection

Understanding Indoor Issues

- a. **Indoor Science:** The study of indoor air quality is a relatively new phenomenon. It has come to light as more is known about how outdoor air pollution affects the human condition. Indoor air actually can have a significant affect as most people spend more time indoors than outdoors. It is a complex study because of the numerous variables that enter into the equation. The World Health Organization estimated that more than 30 percent of commercial buildings have significant problems. Unfortunately there is not a tremendous amount of data available for indoor air issues. One of the best sources is the EPA.

Adverse conditions can cause not only health issues but it can impact productivity and building maintenance costs. Because everyone's immune system is different the indoor air quality can affect everyone in a unique way. It is difficult to assign standards or even guidelines to set acceptable versus unacceptable levels of pollutants in the house or workplace.

- b. **Odor Investigations:** Nuisance odors are a complex subjective issue. A person's perception of odor is related to the human olfactory system. To confuse the issue, there is a distinct lack of odor regulations, and those are very vague. The EPA defaults to the state level for nuisance odors, and most states defer to the country or local level.

Testing can consist of several different methods. Unfortunately there is not one definitive test that handles everything.

- c. **Testing done in this report:** (T.A.T means turnaround time from lab only, H2H reports normally 1-2 days after depending on complexity.)

Temperature, humidity and moisture: Tests onsite conditions that are conducive to mold problems.

Room Air Summary: Test indoor space for hourly and total air supply.

Air Particulate matter: Test indoor quality vs. outdoor air for particles,

on site testing performed.

II. Mold & VOC Testing:

Testing done in this report: Denotes testing performed; Testing is done in accordance of ASTM D7338-4; Standard Guide for Assessment of Fungal Growth in Buildings. In regards to water intrusion we follow ASTM E2128 Guide for evaluating water leakage of building walls.

Temperature, humidity and moisture: Tests onsite conditions that are conducive to mold problems.

Mold Testing: (T.A.T means turnaround time from lab only, H2H reports are normally 1-2 days after lab testing depending on complexity.)

Definition: Currently there are no generally accepted guidelines for fungi levels at the state or federal level. Therefore utilizing a comparison to the outdoor samples, the current condition of the affected area and previous experiences are used to draw an educated conclusion as to whether the area will be deemed necessary for remediation. Concentrations higher than the outdoors suggest a fungal excess exists indoors therefore is contributing to exacerbate the problem.

Below are various kinds of testing that can be performed. The checked box are/is the one performed in this report.

1. **None-viable Genus Testing:** Identifies general level of mold, air test performed. This test which does not identify whether the mold is alive or dead. 95% of the time non-viable testing is done. This identifies the genus of the mold not the species. Genus testing identifies the “general” level of many types of mold. It does not test whether the mold is living or not. In most cases this is all that is required unless an individual knows they are susceptible to a particular species of mold then finding the species may be an important element of the test. This testing can test up to 3 cubic meters of air which generally is one room. It normally takes 5-10 minutes to do each individual test. **T.A.T verbally next day as long as the next mailer has delivered the package.**

☒ Aerosol (Air) test: Bio-Aerosols samples are procured by the use a sampling pump and a slit impactor cassette (**Allergenco-D**) or a **VIA cassette** which contains a sticky material which traps the particulates in the air. We normally always take an Outside sample to use as a baseline against the possible contaminated room. When possible we also can take an inside non-contaminate room as a baseline as well. All samples are taken at 15 L of air for 5-30 minutes. They are immediately bagged and sent with a specific “chain of custody” for the lab to evaluate. The lab reads 100% of the slide. If spores counts on the slide are high the lab may have to estimate the spore count. Please read section IV, Interpreting Mold levels as a guide to understanding the spore counts in the lab result in Section VII. Air tests are used so a comparison clearance test can be taken to evaluate the success of the remediation. They are also used when there is no visual mold seen.

☒ VOC's (volatile organic compounds): This testing was done initially and found to be at acceptable be used to identify the chemical that is producing these odors. Experience then will identify what could be causing that overage in chemical which is producing the problem.

Specific gas testing:

- ☒ Carbon dioxide**, on site test.
- ☒ Formaldehyde testing**, on site testing. (Lab testing available)

Allergen Testing (Done on initial testing)

- ☒ General allergen group testing** (Cat, dog, cockroach, dust mites), normally 3 day T.A.T plus shipping.
- ☒ Indoor allergen, cat.** Normally 3 day T.A.T plus shipping
- ☒ Indoor allergen, dog.** Normally 3 day T.A.T plus shipping
- ☒ Indoor allergen, cockroach.** Normally 3 day T.A.T plus shipping

Indoor allergen, dust mites. Normally 3 day T.A.T plus shipping

Indoor allergen, rats. Normally 3 day T.A.T plus shipping

III. **Equipment Specifications and use on job:** (note: equipment can vary by +/- 5% per manufacturer)

- Thermal imaging camera. Flir T360 Thermal Imaging Infrared Camera High-Temperature (320 x 240 IR Resolution) with Thermal Fusion
- Extech MO297: Pinless Moisture Psychrometer with IR Thermometer and Bluetooth for moisture, humidity, dew point and temperature testing
- Zefon Bio Pump Plus w/ Allergenco-D Posi-Tack Full Slide for 100% collection efficiency for air spore trap testing.
- Kanomax Model 3887 Laser Particle Counter
- Tenma 72-10190 Particle Tester
- AQPro multi gas tester for VOC, carbon dioxide and formaldehyde testing

IV. **Air Particulate Matter**

Definition: Particulate matter affects more people than any other pollutant. It consists of a complex mixture of solid and liquid particles of organic and inorganic substances suspended in the air. The particles are often identified according to their aerodynamic diameter. Comparing indoor particle counts or particle mass concentration to outdoor concentration provides information regarding the effectiveness of filtration, as well as for the potential that there are indoor sources contributing to airborne particulate matter. Many investigators have developed experience with elevated particle counts in specific particle size ranges to provide additional clues towards determining the potential sources of these particles.

EPA Research on PM*

EPA accelerated its investigations of fine particulate matter (PM_{2.5}) in 1998 to improve understanding of the potential health effects of the small particles in the outside air and to find ways to reduce risks from the air pollutant. Studies at that time had provided compelling evidence that air pollution particles were responsible for thousands of deaths and hospitalizations, as well as substantial loss of work and school days.

Research has since confirmed the links between exposure to PM_{2.5} and increases in respiratory health problems, hospitalizations and premature death. EPA's PM research also has affirmed the need for air quality standards to reduce PM in the air to protect human health. However, many questions remain about particles and why they are associated with such significant health effects.

Human Health Effects*

Inhalable particles, particularly fine particles, have the greatest demonstrated impact on human health. Their small size allows them to get deep into the lungs and from there they can reach or trigger inflammation in the lung, blood vessels or the heart, and perhaps other organs. Studies have linked PM exposure to health problems such as:

- Irritation of the airways, coughing, and difficulty breathing
- Reduced lung function
- Aggravated asthma
- Chronic bronchitis
- Irregular heartbeat
- Nonfatal heart attacks
- Some cancers

Research has found that certain populations are more vulnerable to these health effects, such as people with pre-existing heart or lung diseases, children, and older adults.

Types of PM*

Although it can be categorized in a number of ways, PM has traditionally been classified by size. In general, the smaller the particle, the stronger its potential impact on human health because it can be more easily inhaled. For this reason, EPA monitors and regulates particles in two size categories depending on their predicted penetration into the lung. These categories are:

Coarse particles (PM₁₀)

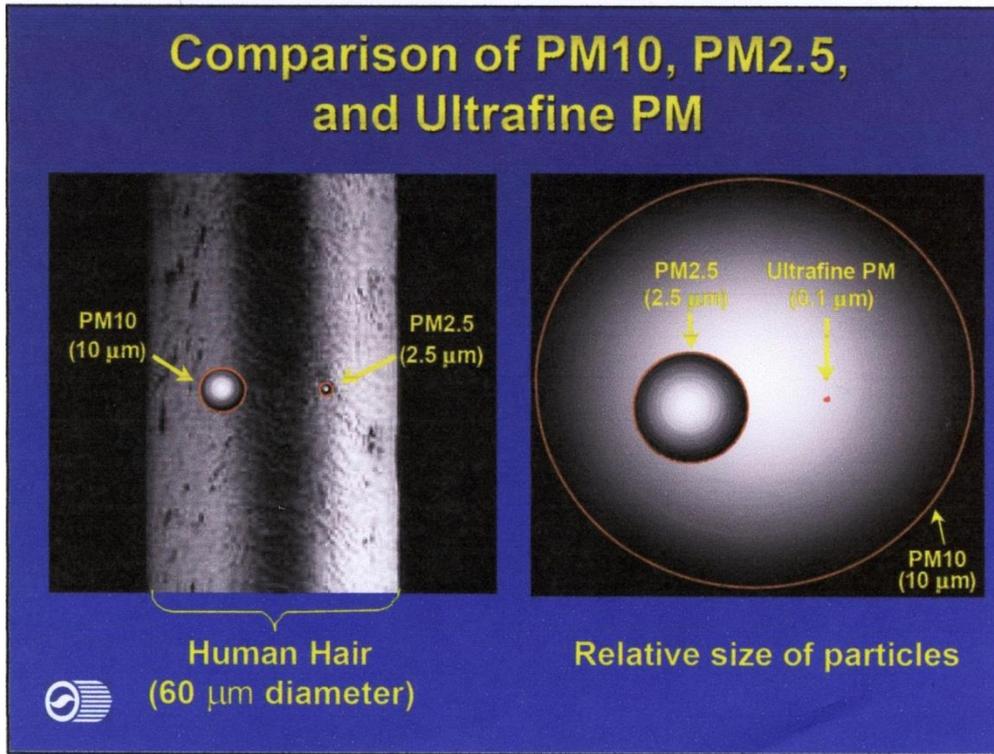
Inhalable particles less than 10 micrometers (μm) in diameter used as a nominal surrogate for particles between 2.5 and 10 μm in diameter; found near roadways and dusty industries. Your nose can filter out 10 μm or larger.

Fine particles (PM_{2.5})

Inhalable particles less than 2.5 μm in diameter; generally found in smoke and haze, emitted from natural sources like forest fires and industrial combustion sources, or

formed when gases react in the air. Ultrafine particles (PM0.1) are a subset of inhalable PM2.5 particles less than 0.1µm in diameter. They are not specifically regulated but have a strong link to combustion and therefore are garnering special attention.

*Excerpt from <http://www.epa.gov/airscience/air-particulatematter.htm>



Conclusion:

The inside air should be 75% less in fine particles inside the building vs. outside the building.

H2H tests the outside and the inside air using a laser particle counter. We test on the CNT to get a comparison of .03/.05/5 micron sizes.

Particles/Co2/RH% at Site

Location: 129

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	18		x	
Relative Humidity	%	56.8	x		
Co2	ppm	898	x		

Location: Hallway outside Room 129

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	6	x		
Relative Humidity	%	58.5	x		
Co2	ppm	906	x		

Location: Human Resources

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	11	x		
Relative Humidity	%	59.6	x		
Co2	ppm	884	x		

Location: Commanders room, 152

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	9	x		
Relative Humidity	%	60.5	x		
Co2	ppm	900	x		

Location: Patrol Ready Room

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	1	x		
Relative Humidity	%	58.6	x		
Co2	ppm	905	x		

Location: Investigation Conf. Room

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	1	x		
Relative Humidity	%	62.8		x	
Co2	ppm	871	x		

Location: Hallway outside copy room

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	8	x		
Relative Humidity	%	62		x	
Co2	ppm	875	x		

Location: Victim Services room

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	3	x		
Relative Humidity	%	59.4	x		
Co2	ppm	916	x		

Location: Hallway outside IT

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	12	x		
Relative Humidity	%	51	x		
Co2	ppm	894	x		

Location: IT Room 150

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	6	x		
Relative Humidity	%	57.1	x		
Co2	ppm	960	x		

Location: Muster room-Room 146

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	1	x		
Relative Humidity	%	64		x	
Co2	ppm	856	x		

Location: Hallway outside men's room

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	6	x		
Relative Humidity	%	61.8		x	
Co2	ppm	956			

Location: Payroll, Room 157

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	4	x		
Relative Humidity	%	58.9	x		
Co2	ppm	815	x		

Location: Purchasing

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	7	x		
Relative Humidity	%	60.8	x		
Co2	ppm	921	x		

Location: Conference room, 179

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	3	x		
Relative Humidity	%	61.7	x		
Co2	ppm	824	x		

Location: Room 174, Chief Stobridge

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	3	x		
Relative Humidity	%	60.6	x		
Co2	ppm	866	x		

Location: Room 166, Commander Weber

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	6	x		
Relative Humidity	%	61.5	x		
Co2	ppm	879	x		

Location: Lobby

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	1	x		
Relative Humidity	%	61.6	x		
Co2	ppm	883	x		

Location: Records, Room 103

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	7	x		
Relative Humidity	%	60.2	x		
Co2	ppm	886	x		

Location: Evidence/Forensics

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	20		x	
Relative Humidity	%	60.4	x		
Co2	ppm	890	x		

Location: Investigations

Measurement	Unit measure	Readout	Low/Avg.	Med.	High
2.5 um particles	Microns	8	x		
Relative Humidity	%	60.4	x		
Co2	ppm	908	x		

Lab Report (Species test for IT for Chaetomium which was tested high on the last test. Conclusion is that last was a false positive as this test and the genus testing came back non-detected)

EMSL Analytical, Inc.

200 Route 130 N, Cinnaminson, NJ 08077, Tel: 800-220-3675, Fax: 856-786-0262
www.EMSL.com, Email: Dnalab2@EMSL.com



Client: H2H Indoor Air Solutions 123 Heron Drive Palm Coast, FL 32137	EMSL Reference: 611800609
Attn: Rich Van Dort	Date Received: 4/5/2018
Project: Sheriff's/OID-1805	Date Analyzed: 4/9/2018
Location: IT Room	Date Reported: 4/10/2018
Sample size: 0.12 m3 Air	

Rapid Detection of Molds by Quantitative PCR

EMSL Test: M100

Sample Name	Species Identification	Spores E. in Sample	Spores E./m3 Air
1	<i>Chaetomium globosum</i>	Not detected	Not Detected

EMSL maintains liability limited to cost of analysis. Interpretation of the data contained in this report is 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. The above test report relates only to the items tested. EMSL bears no responsibility for sample collection activities or analytical method limitations.

Sergey Balashov, Ph.D.
 PCR Laboratory Director

V. Lab Report (Mold Genus & Particle Testing)

ENVIRONMENTAL ANALYSIS ASSOCIATES, Inc. - 306 5th Street, Suite 400 - Bay City, MI 48706

AIRBORNE MOLD AND DUST ANALYSIS

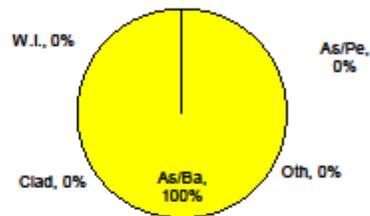
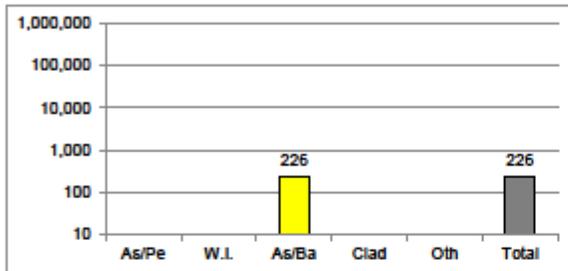


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriff's Off.
 EAA Project#: 18-0340
 Sample # : 210166

Project : Flagler Sheriff's Office 010-1805
 Date Collected : NA
 Description : Lobby

Graphical page 4 of 4

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

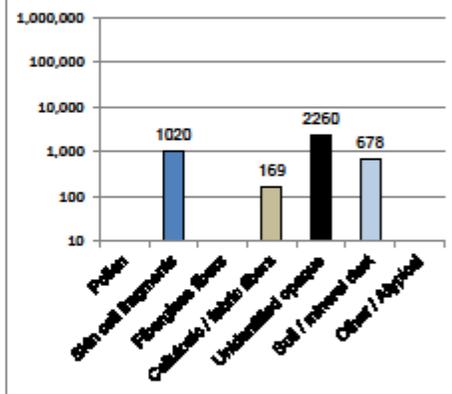


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating Fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungus	Typical - low	Outdoor distribution

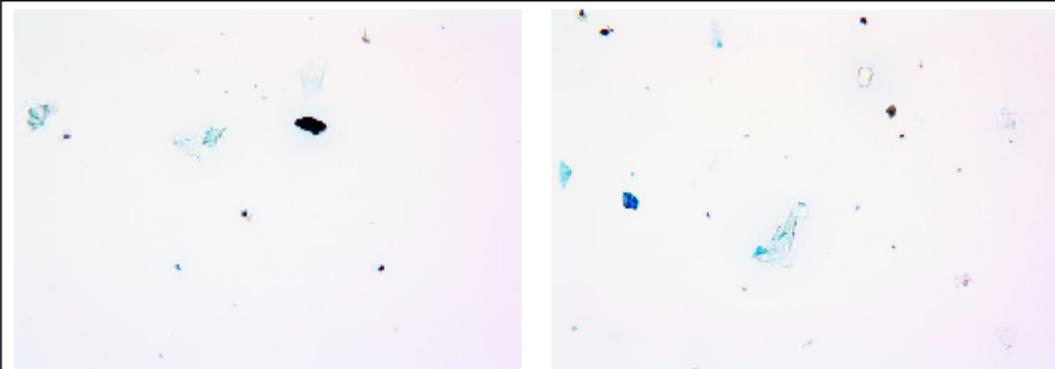
***Source** refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



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AIRBORNE MOLD AND DUST ANALYSIS

EAA Method #: DUST-A01



Client Name : H2H Indoor Air Solutions

Data Page 1 of 6

Client Project #: Flagler Sheriff's Off. Project description : Flagler Sheriff's Office 010-1805

Requested by : Rich Van Dort Date collected : NA

EAA Project#: 18-0340 Sample received : 4/5/18

Sample condition : Acceptable as received

Client Sample#	Sample Description / Location	General Comments				
210192	Outside Control	Low dust				
210196	Room 129	Low-moderate dust				
210203	Hallway 1 - outside Room 129	Moderate dust				
210197	Human Resources	Low dust				
210200	Commanders Room 152	Low-moderate dust				
AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis High mag. used 600X						
Category	Sample # ->	210192	210196	210203	210197	210200
Total Mold Spores (Cts/m ³)		4300	57	305	170	113
Alternaria		79				
Aspergillus/Penicillium					113	
Pigmented Asco & Basidio		226			57	
Mix tiny, hyal Asco & Basidio		2200	57	169		
Botrytis						
Chaetomium						
Cladosporium		1750		113		57
Curvularia						
Drechslera/Bipolaris		11				
Epicoccum		23		23		
Fusarium						
Nigrospora						
Oldum/Peronospora						
Pithomyces						
Rusts						
Smuts / Myxomycetes / Periconia						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Other Hyaline Fungi						
Other Fungi		11				57
Unidentified Fungi						
Hyphae fragments		57		57		
Algal / fern spores						
Insect parts						
POLLEN (Total cts/m ³)		67	not detected	not detected	13	13
Not specified		67				13
Pinus					13	
COMMON AEROSOLS (cts/m ³)						
Skin cell fragments		113	1240	2150	508	226
Fiberglass fibers				11		
Cellulosic / fabric fibers		57	11	339	113	57
Unidentified opaque		2820	5870	88100	2710	5480
Soil / mineral dust		1190	5420	8360	4120	10600
OTHER AEROSOLS (cts/m ³)		not detected	not detected	not detected	not detected	not detected
Statistical Parameters						
Vol. analyzed (m ³)-High mag - 600x:		0.018	0.018	0.018	0.018	0.018
Detect limit(Cts/m ³)-high magnification:		56.5	56.5	56.5	56.5	56.5
% sample analyzed-high magnification:		24%	24%	24%	24%	24%
Vol. analyzed(m ³)-entire spore 150-300x:		0.075	0.075	0.075	0.075	0.075
* Detection limit (Cts/m ³)-entire spore:		13.3	13.3	13.3	13.3	13.3
* Note: The "entire sample" detection limit applies to the "large" particle categories analyzed during the low magnification examination of the entire sample						
Sample flow rate (lpm):		15.0	15.0	15.0	15.0	15.0
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.340	0.340	0.340	0.340	0.340

Note: Sample results are only applicable to the items or locations listed

Raw/interpolated count data are given on a separate page. Authorized / data reviewed by :

John R. Henderson

Report date: 4/9/18

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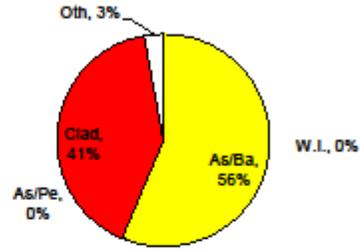
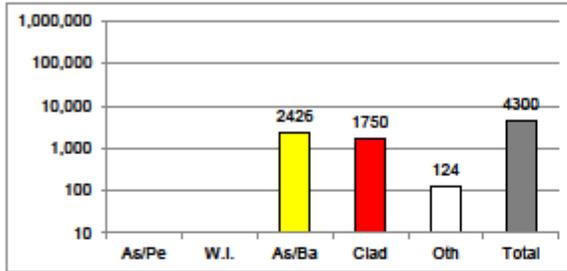
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210192**

Graphical page 1 of 1
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Outside Control**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

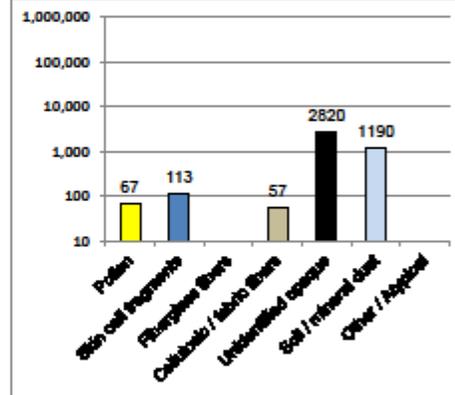


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low - moderate	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Moderate	Outdoor distribution

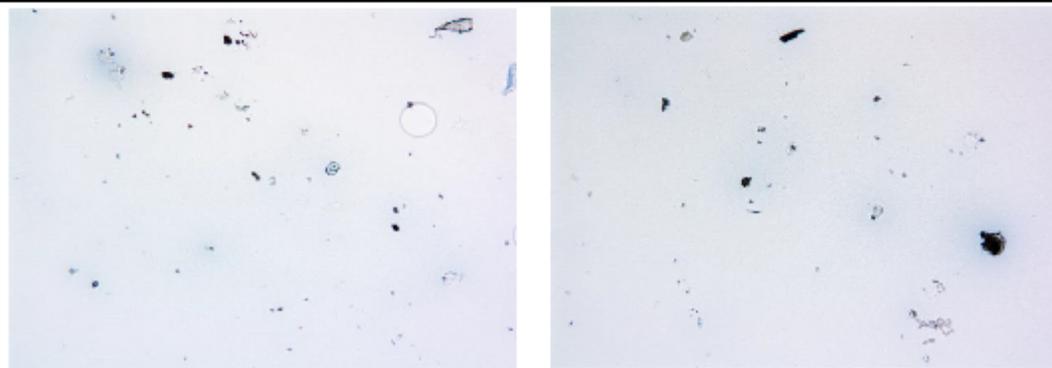
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Low-moderate
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3-10/18

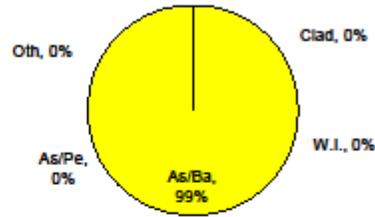
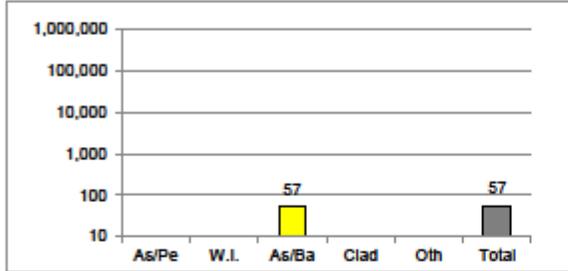
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210196

Graphical page 1 of 2
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : Room 129

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

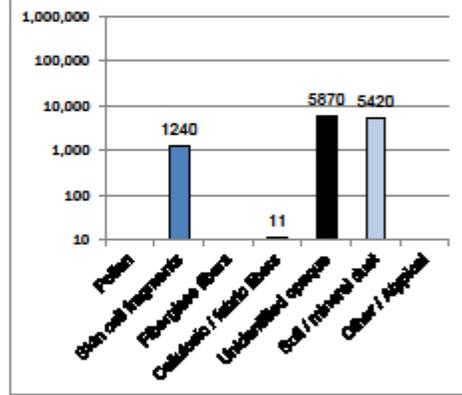


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Low	Outdoor distribution

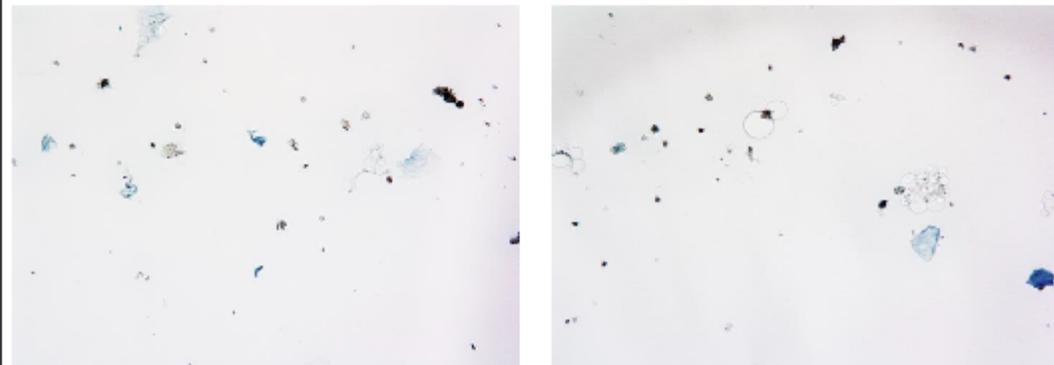
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/18

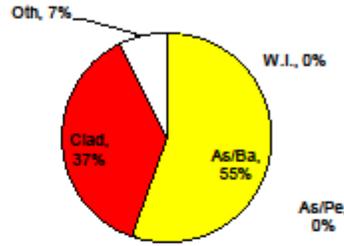
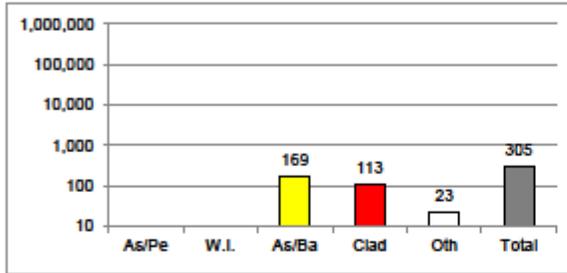
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210203

Graphical page 1 of 3
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Hallway 1 - outside Room 129**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

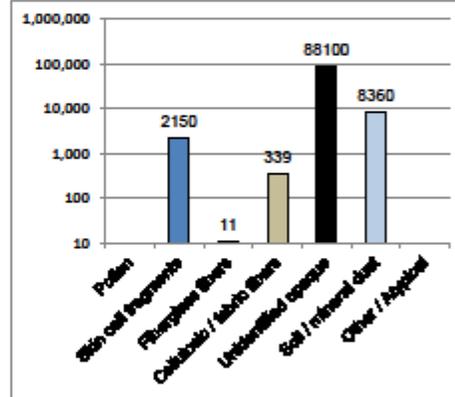


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Typical - low	Outdoor distribution

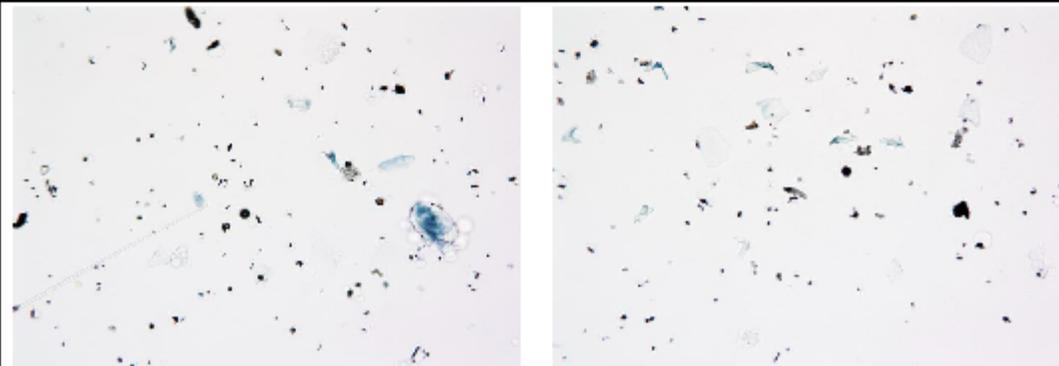
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Typical / low
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	High
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : **Moderate dust**

Representative photos : 300x



doc.rev.3-10/1/18

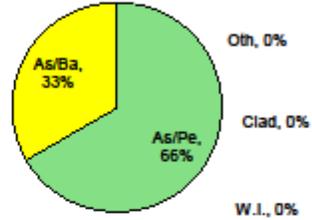
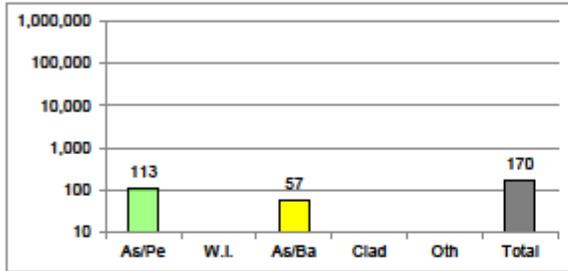
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210197**

Graphical page 1 of 4
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Human Resources**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

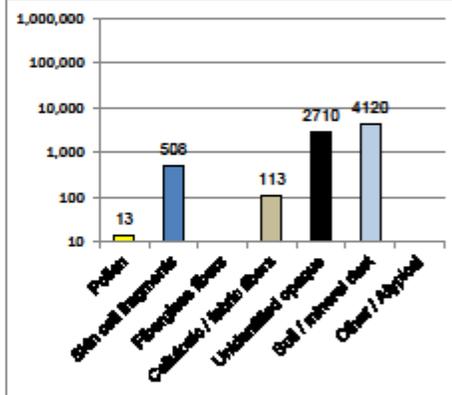


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Low	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Low	Low Infiltration

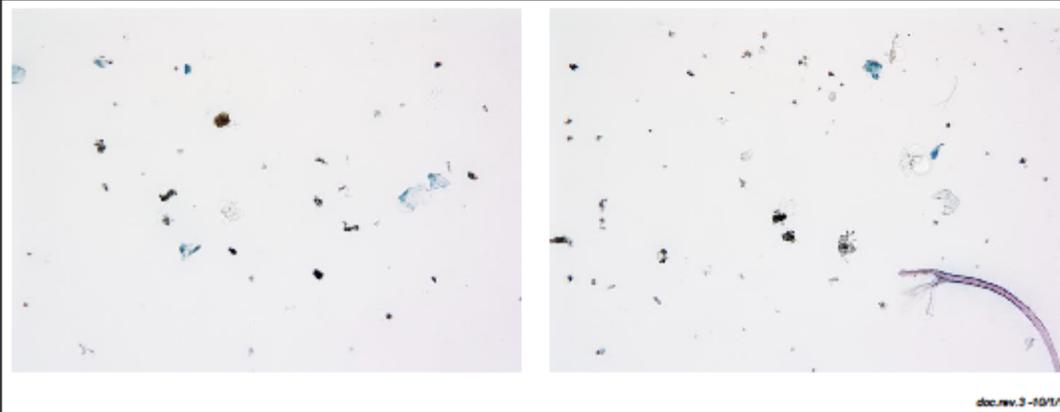
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Low - moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



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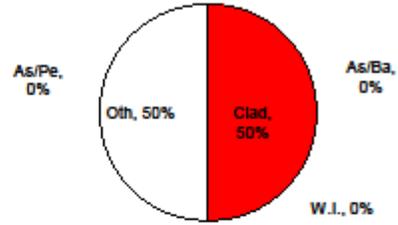
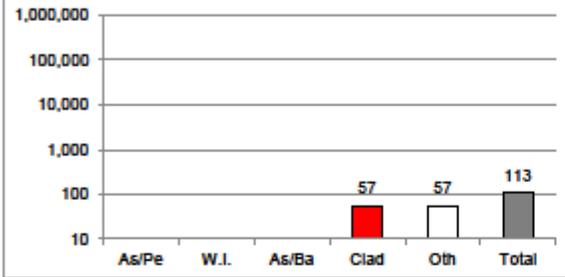
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210200**

Graphical page 1 of 6
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Commanders Room 152**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

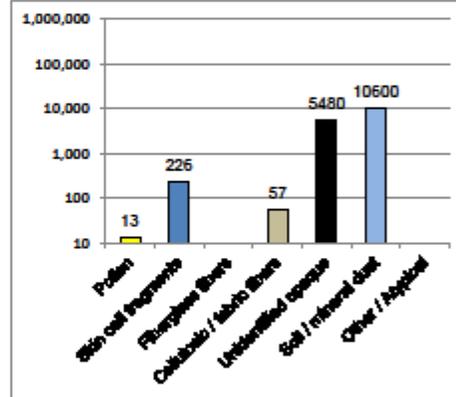


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Low	Outdoor distribution

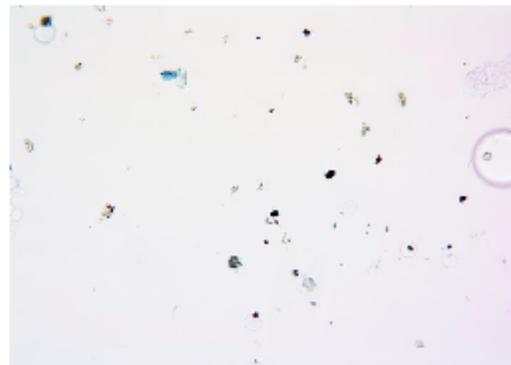
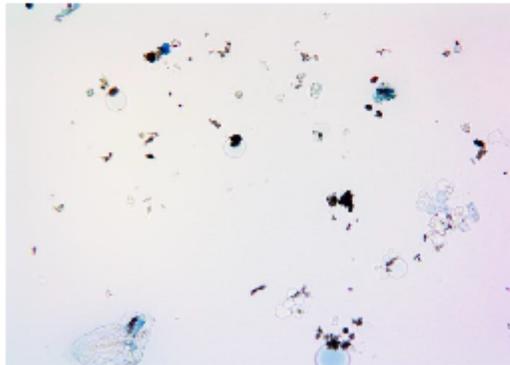
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Moderate
Soil / mineral dust	Low - moderate
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



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AIRBORNE MOLD AND DUST ANALYSIS

EAA Method #: DUST-A01

Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off. Project description : Flagler Sheriffs Office 010-1805
 Requested by : Rich Van Dort Date collected : NA
 EAA Project#: 18-0340 Sample received : 4/5/18 Sample condition : Acceptable as received

Data Page 2 of 6

Client Sample#	Sample Description / Location	General Comments				
210190	Patrol Ready Room	Low dust				
210185	Investigation Conf. Room	Low dust				
210199	Hallway 2, outside Copy Room	Low-moderate dust				
210191	Victim Services Room	Low dust				
210198	Hallway outside IT	Low-moderate dust				
AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis						
Category	Sample # -->	210190	210185	210199	210191	High mag. used 600x 210198
Total Mold Spores (Cts/m ³)		575	113	294	170	576
Ascomycota						
Aspergillus/Penicillium		57				
Pigmented Asco & Basidio		169				
Mix tiny, hyal Asco & Basidio					113	57
Zygomycota						
Chaetomium						57
Cladosporium		282	113	226	57	339
Curvularia						
Drechslera/Bipolaris						
Epicoccum		11		11		
Fusarium						
Nigrospora						
Oidium/Peronospora						
Phthomyces						68
Basidiomycota						
Rusts						
Smuts / Myxomycetes / Periconia						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Other Hyaline Fungi						
Other Fungi		57		57		57
Unidentified Fungi						
Other						
Hyphae fragments				57		57
Algal / fern spores						
Insect parts						
POLLEN (Total cts/m³)						
Not specified		not detected	not detected	not detected	not detected	not detected
Pinus						
COMMON AEROSOLS (cts/m³)						
Skin cell fragments		339	452	1750	508	3330
Fiberglass fibers						
Cellulosic / fabric fibers		113	57	169	113	226
Unidentified opaque		3050	3900	5360	2320	6440
Soil / mineral dust		452	3560	4970	2650	5820
OTHER AEROSOLS (cts/m³)						
		not detected	not detected	not detected	not detected	not detected
Statistical Parameters						
Vol. analyzed (m ³)-high mag - 600x:		0.018	0.018	0.018	0.018	0.018
Detect limit(Cts/m ³)-high magnification:		56.5	56.5	56.5	56.5	56.5
% sample analyzed-high magnification:		24%	24%	24%	24%	24%
Vol. analyzed(m ³)-entire sptr 150-300x:		0.075	0.075	0.075	0.075	0.075
* Detection limit (Cts/m ³)-entire sptr:		13.3	13.3	13.3	13.3	13.3
* Note: The "entire sample" detection limit applies to the "large" particle categories analyzed during the low magnification examination of the entire sample						
Sample flow rate (lpm):		15.0	15.0	15.0	15.0	15.0
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.340	0.340	0.340	0.340	0.340

Note: Sample results are only applicable to the items or locations tested

Raw/stratoplated count data are given on a separate page. Authorized / data reviewed by :

Joe R. Henderson

Report date: 4/9/18

doc.rev.3-10/1/18

AIRBORNE MOLD AND DUST ANALYSIS

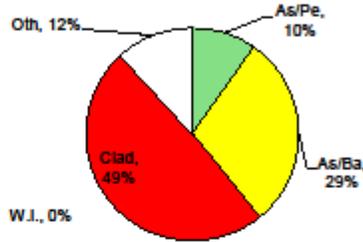
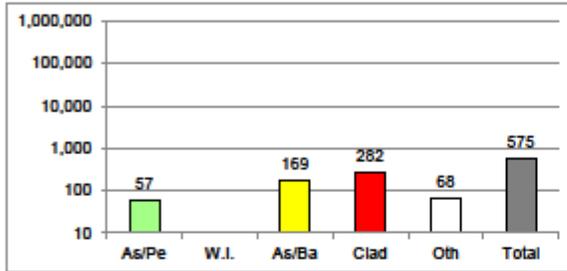


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210190**

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Patrol Ready Room**

Graphical page 2 of 1

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

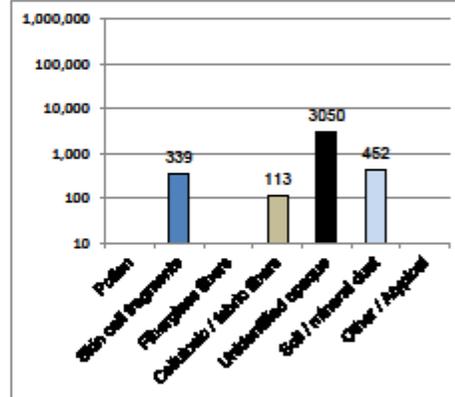


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Typical - low	Not applicable
Aspergillus/Penicillium	Low	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Low-moderate	Outdoor distribution

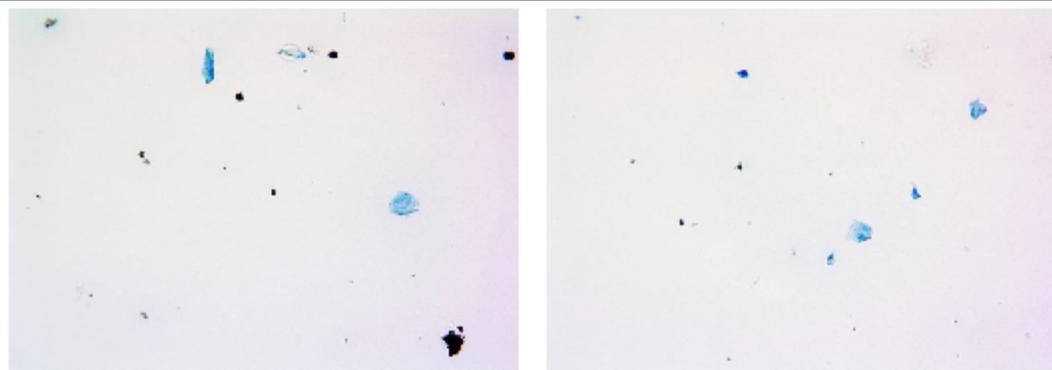
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3 -10/1/18

AIRBORNE MOLD AND DUST ANALYSIS

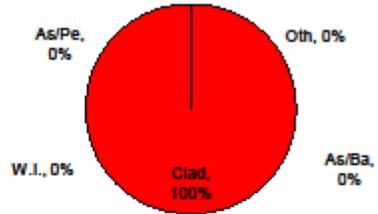
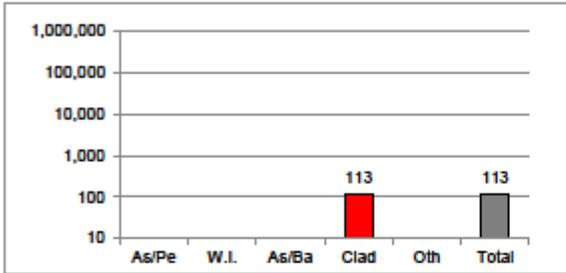


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210185**

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Investigation Conf. Room**

Graphical page 2 of 2

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

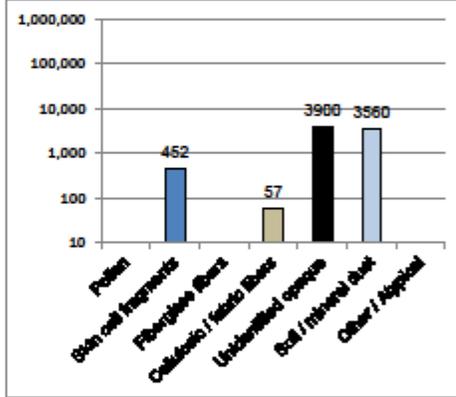


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Low	Outdoor distribution

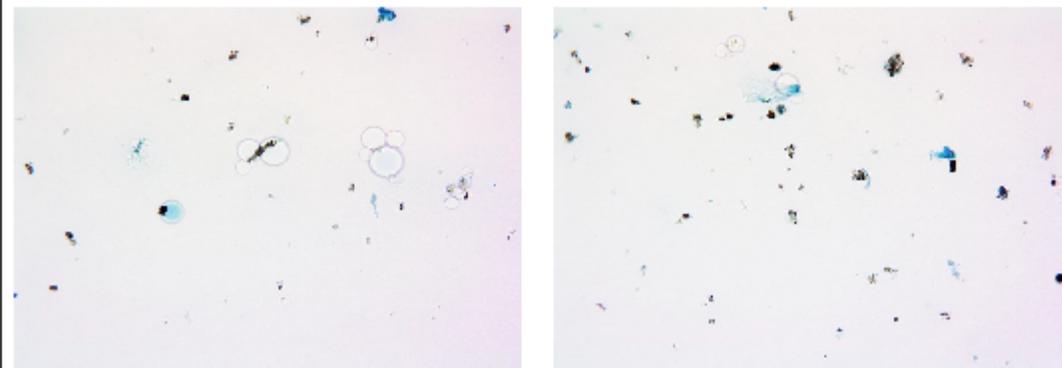
***Source* refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



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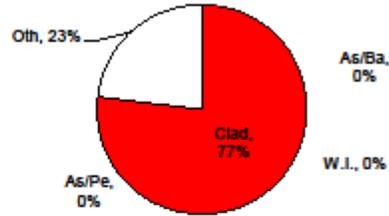
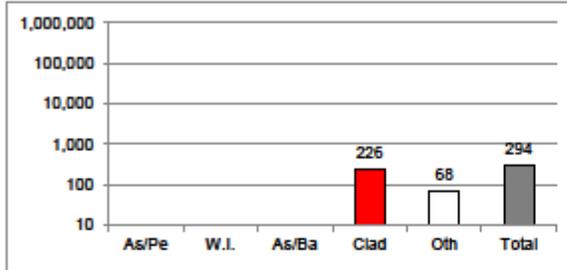
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210199

Graphical page 2 of 3
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Hallway 2, outside Copy Room**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

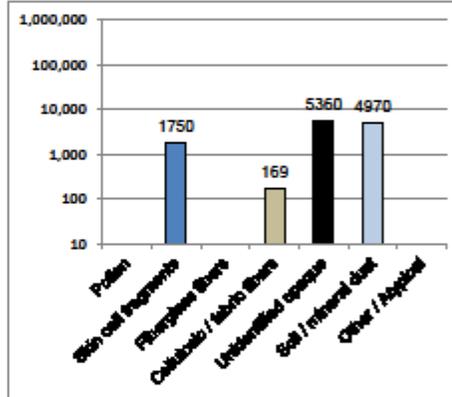


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Typical - low	Outdoor distribution

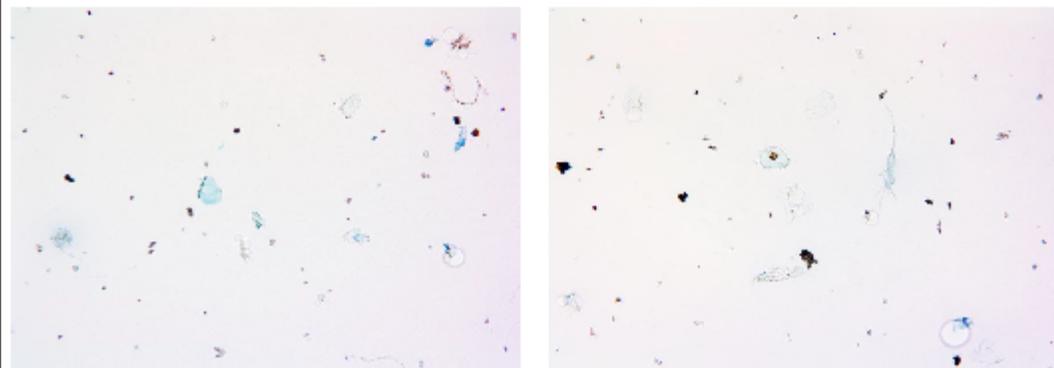
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



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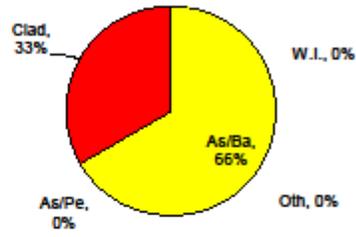
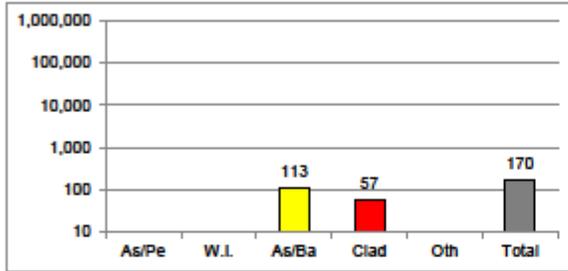


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriff's Off.
 EAA Project# : 18-0340
 Sample # : **210191**

Project : Flagler Sheriff's Office 010-1805
 Date Collected : NA
 Description : **Victim Services Room**

Graphical page 2 of 4

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges, historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

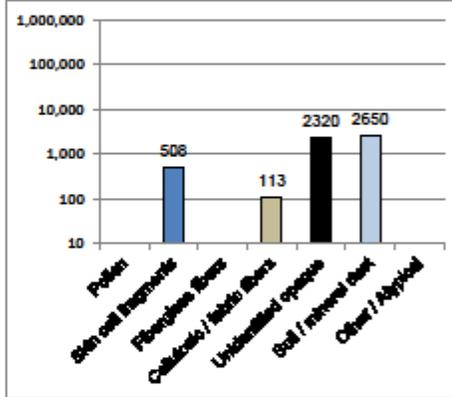


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungus	Low	Outdoor distribution

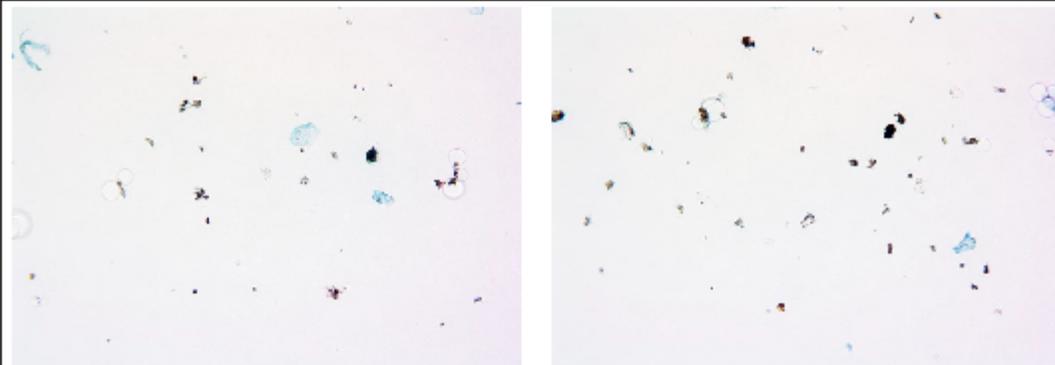
***Source** refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3-10/1/16

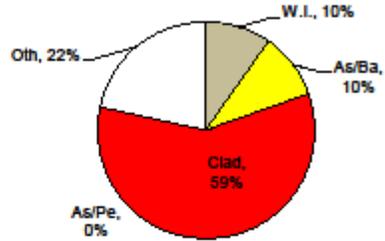
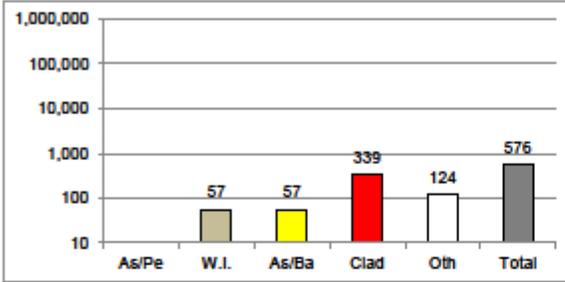
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210198

Graphical page 2 of 6
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Halfway outside IT**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

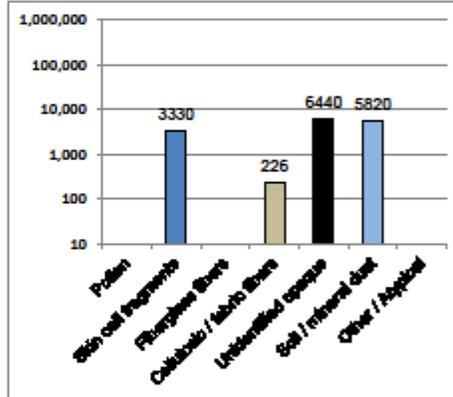


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Typical - low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Typical - low	Detected / background
Typical Outdoor Fungi	Typical - low	Outdoor distribution

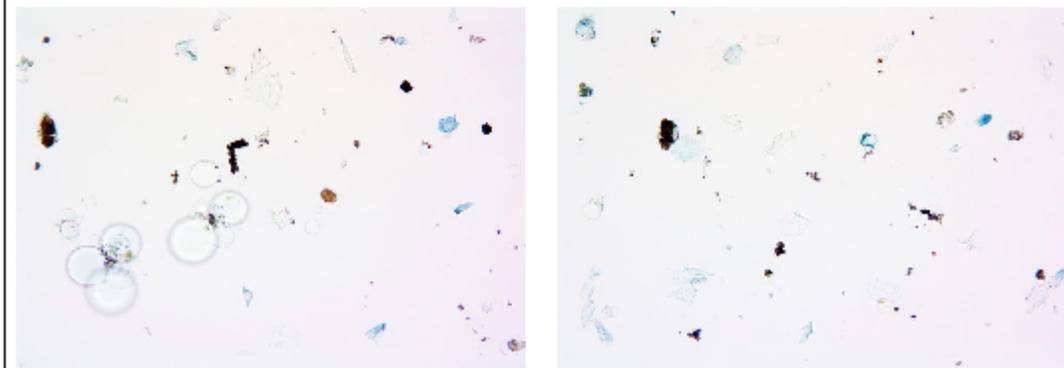
"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/18

AIRBORNE MOLD AND DUST ANALYSIS

EAA Method #: DUST-A01



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off. Project description : Flagler Sheriffs Office 010-1805
 Requested by : Rich Van Dort Date collected : NA
 EAA Project# : 18-0340 Sample received : 4/5/18 Sample condition : Acceptable as received

Data Page 3 of 5

Client Sample#	Sample Description / Location	General Comments				
210189	Room 150 IT	Low dust				
210168	Room 146 Musler Training	Low-moderate dust				
210163	Halfway outside Mens Room	Low-moderate dust				
210158	Room 157, Payroll	Low-moderate dust				
210157	Purchasing Room	Low-moderate dust				
AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis High mag. used 600x						
Category	Sample # -->	210189	210168	210163	210158	210157
Total Mold Spores (Cts/m ³)		282	1130	282	not detected	508
Alternaria						
Aspergillus/Pericillium						
Pigmented Asco & Basidio						
Mix tiny, hyal Asco & Basidio		113	395	113		282
Botrytis						
Chaetomium						
Cladosporium		169	734	169		226
Curvularia						
Drechslera/Elipolaris						
Epicoccum						
Fusarium						
Nigrospora						
Oidium/Peronospora						
Pithomyces						
Rusts						
Smuts / Myxomycetes / Periconia						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Other Hyaline Fungi						
Other Fungi						
Unidentified Fungi						
Hyphae fragments			113			113
Algal / fern spores						
Insect parts						
POLLEN (Total cts/m ³)		not detected	not detected	not detected	27	27
Not specified					27	27
Pinus						
COMMON AEROSOLS (cts/m ³)						
Skin cell fragments		1240	1410	2940	1190	1980
Fiberglass fibers						
Cellulosic / fabric fibers		57	57	339	113	57
Unidentified opaque		4180	10600	5820	6890	7850
Soil / mineral dust		3330	2030	2480	2150	4880
OTHER AEROSOLS (cts/m ³)		not detected	not detected	not detected	not detected	not detected
Statistical Parameters						
Vol. analyzed (m ³)-high mag - 600x:		0.018	0.018	0.018	0.018	0.018
Detect limit(Cts/m ³)-high magnification:		56.5	56.5	56.5	56.5	56.5
% sample analyzed-high magnification:		24%	24%	24%	24%	24%
Vol. analyzed(m ³)-entire spie 150-300x:		0.075	0.075	0.075	0.075	0.075
* Detection limit (Cts/m ³)-entire spie:		13.3	13.3	13.3	13.3	13.3
* Note: The "entire sample" detection limit applies to the "large" particle categories analyzed during the low magnification examination of the entire sample						
Sample flow rate (lpm):		15.0	15.0	15.0	15.0	15.0
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.340	0.340	0.340	0.340	0.340

Note: Sample results are only applicable to the items or locations tested

Raw/extrapolated count data are given on a separate page. Authorized / data reviewed by :

Joe R. Henderson

Report date: 4/9/18

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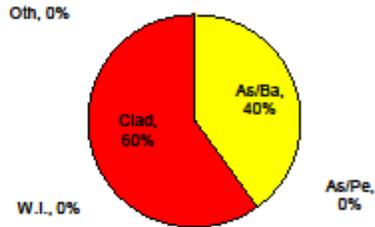
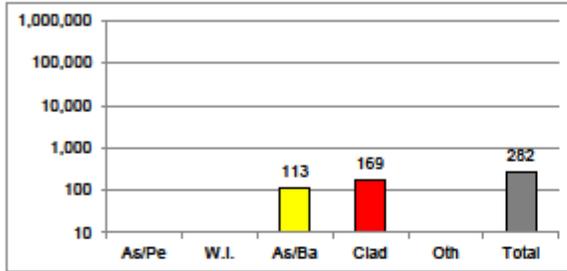


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriff's Off.
 EAA Project# : 18-0340
 Sample # : **210189**

Project : Flagler Sheriff's Office 010-1805
 Date Collected : NA
 Description : **Room 150 IT**

Graphical page 3 of 1

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges, historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

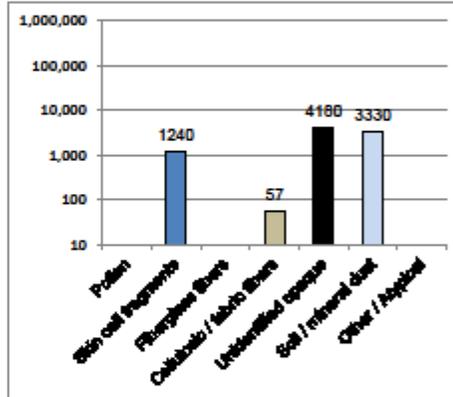


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungus	Typical - low	Outdoor distribution

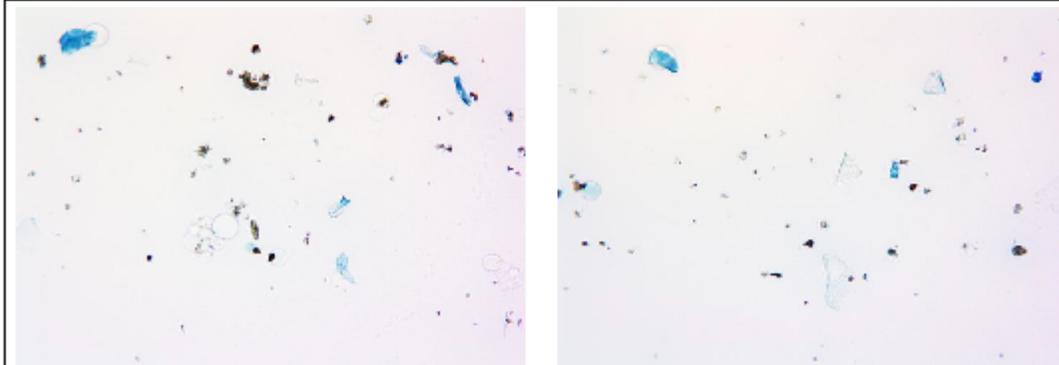
**"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3-10/1/16

AIRBORNE MOLD AND DUST ANALYSIS

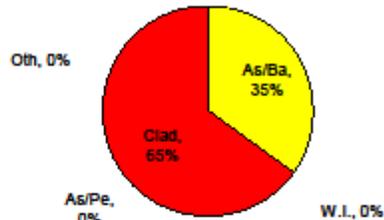
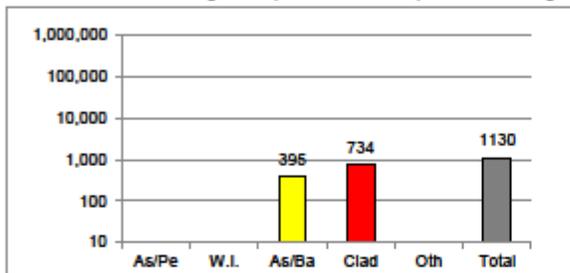


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210168**

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Room 146 Muster Training**

Graphical page 3 of 2

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

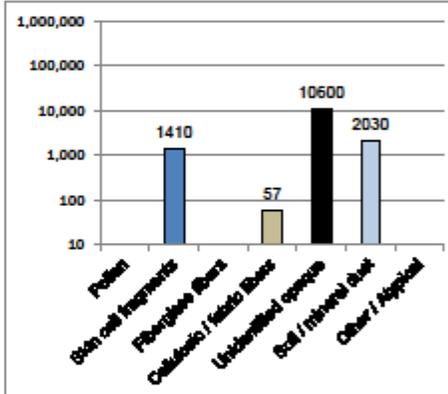


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low - moderate	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Moderate	Outdoor distribution

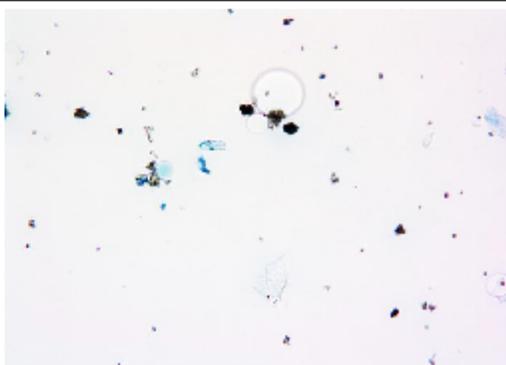
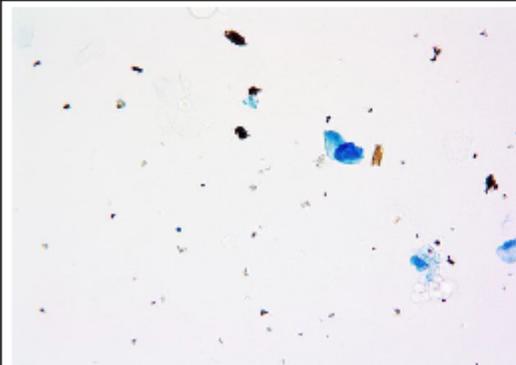
""Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	High
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/1/18

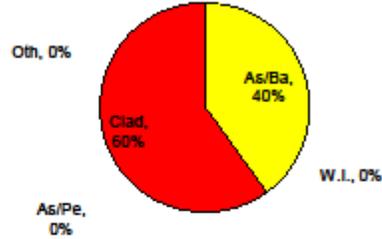
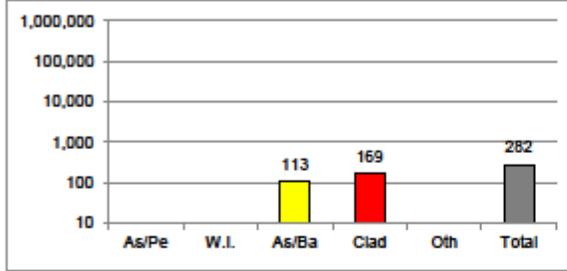
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210163**

Graphical page 3 of 3
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Hallway outside Mens Room**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

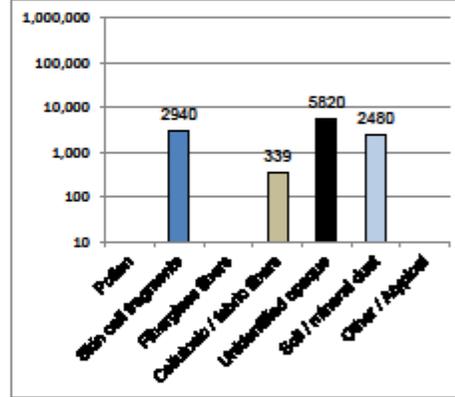


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Typical - low	Outdoor distribution

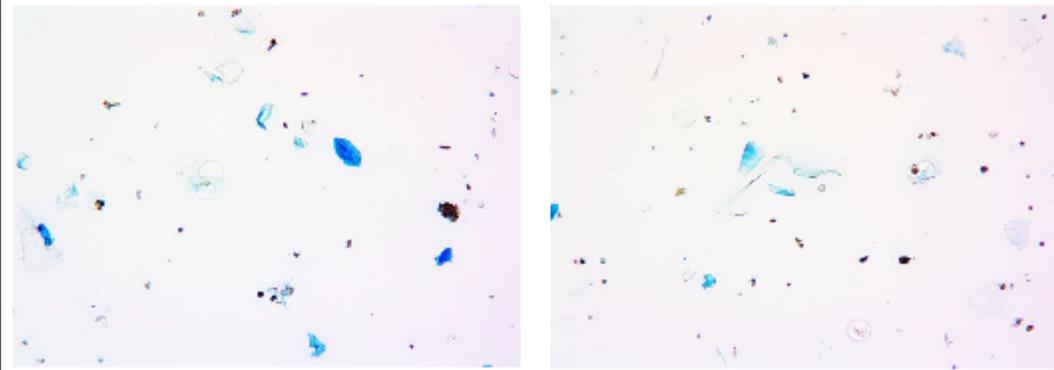
***Source* refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



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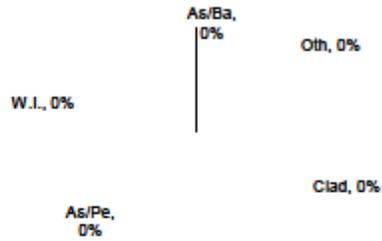
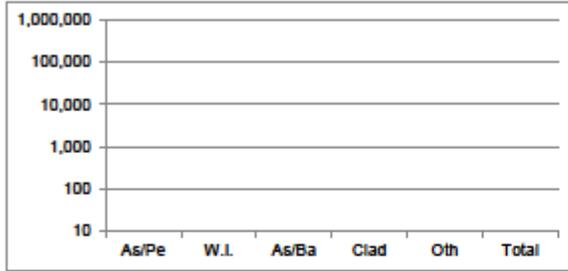
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210158

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : Room 157, Payroll
 Graphical page 3 of 4

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

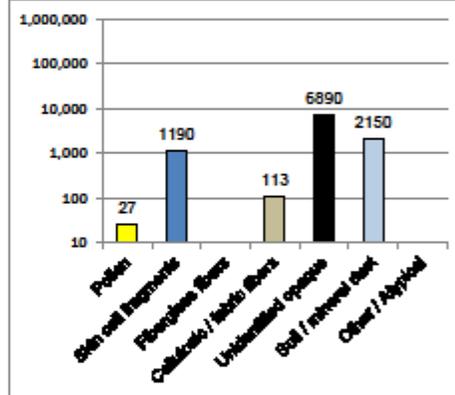


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Not detected	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungus	Not detected	Not detected

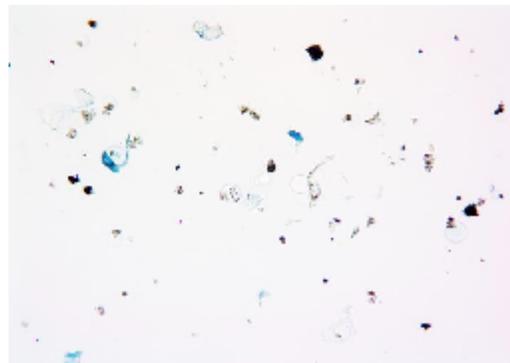
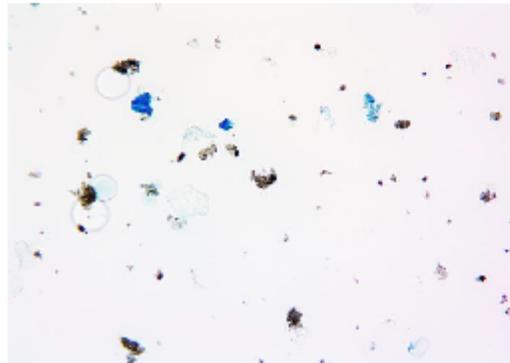
***Source** refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



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AIRBORNE MOLD AND DUST ANALYSIS

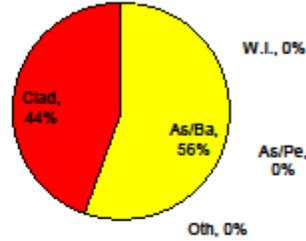
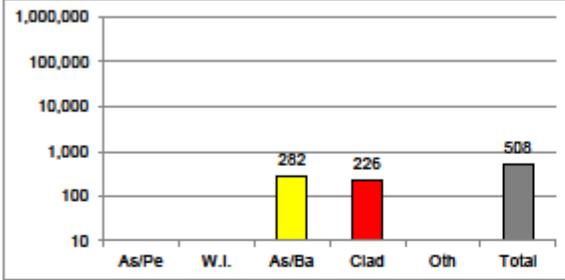


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : 210157

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Purhasing Room**

Graphical page 3 of 6

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

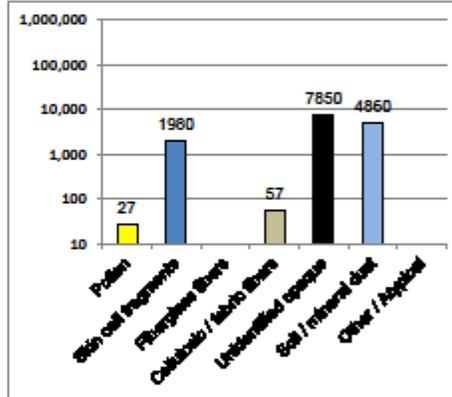


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Typical - low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Typical - low	Outdoor distribution

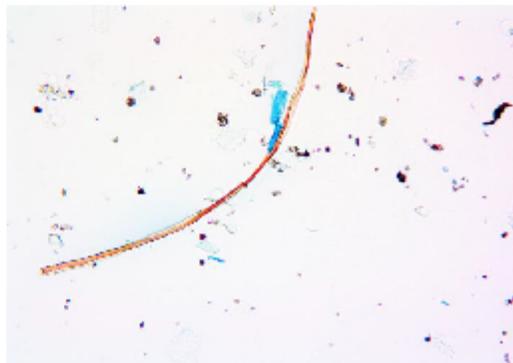
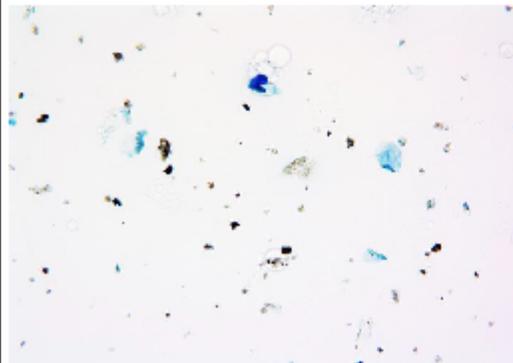
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/18

AIRBORNE MOLD AND DUST ANALYSIS

EAA Method #: DUST-A01



Client Name : H2H Indoor Air Solutions

Data Page 4 of 6

Client Project #: Flagler Sheriff's Off. Project description : Flagler Sheriff's Office 010-1805

Requested by : Rich Van Dort Date collected : NA

EAA Project#: 18-0340 Sample received : 4/5/18

Sample condition : Acceptable as received

Client Sample#	Sample Description / Location	General Comments			
210162	Room 179, Conference Room	Low dust			
210156	Room 174, Chief Strobridge	Low-moderate dust			
210161	Room 166, Commander Weber	Low-moderate dust			
210166	Lobby	Low dust			
210167	Room 103, Records	Low dust			

Category	Sample # ->	AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis				
		210162	210156	210161	210166	210167
Total Mold Spores (Cts./m ³)		237	294	339	226	621
Altemaria						
Aspergillus/Pericillium						
Pigmented Asco & Basidio				57	57	169
Mix tiny, hyal Asco & Basidio	169	226	169	169	226	
Botrytis						
Chaetomium						
Cladosporium				113		169
Curvularia	68	11				
Drechslera/Bipolaris						
Epicoccum						
Fusarium						
Nigrospora						
Oidium/Peronospora						
Pithomyces						
Rusts						
Smuts / Myxomycetes / Periconia						
Stachybotrys						
Stemphylium						
Torula						
Ulodadium						
Other Hyaline Fungi						
Other Fungi			57			57
Unidentified Fungi						
Hyphae fragments						
Algal / fern spores						
Insect parts						
POLLEN (Total cts./m ³)		not detected	not detected	13	not detected	not detected
Not specified						
Pinus				13		
COMMON AEROSOLS (cts./m ³)						
Skin cell fragments		1190	678	1130	1020	960
Fiberglass fibers						
Cellulosic / fabric fibers		113	57	57	169	57
Unidentified opaque		3950	12200	5590	2260	2600
Soil / mineral dust		2600	2990	3330	678	3110
OTHER AEROSOLS (cts./m ³)						
not detected						
not detected						
not detected						
not detected						
not detected						
Statistical Parameters						
Vol. analyzed (m ³)-High mag - 600x:		0.018	0.018	0.018	0.018	0.018
Detect limit(Cts/m ³)-high magnification:		56.5	56.5	56.5	56.5	56.5
% sample analyzed-high magnification:		24%	24%	24%	24%	24%
Vol. analyzed(m ³)-entire spore 150-300x:		0.075	0.075	0.075	0.075	0.075
* Detection limit (Cts/m ³)-entire spore:		13.3	13.3	13.3	13.3	13.3
* Note: The "entire sample" detection limit applies to the "large" particle categories analyzed during the low magnification examination of the entire sample						
Sample flow rate (lpm):		15.0	15.0	15.0	15.0	15.0
Sample trace length (mm):		14.40	14.40	14.40	14.40	14.40
Microscope field diameter (mm):		0.340	0.340	0.340	0.340	0.340

Note: Sample results are only applicable to the items or locations tested

Raw/extrapolated count data are given on a separate page. Authorized / data reviewed by :

Joe R. Hamilton

Report date: 4/9/18

doc.nw.3-10/1/18

AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions

Graphical page 4 of 1

Client Project # : Flagler Sheriffs Off.

Project : Flagler Sheriffs Office 010-1805

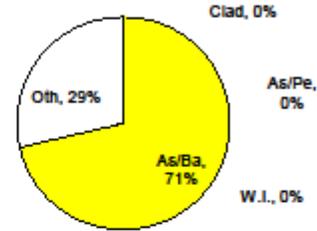
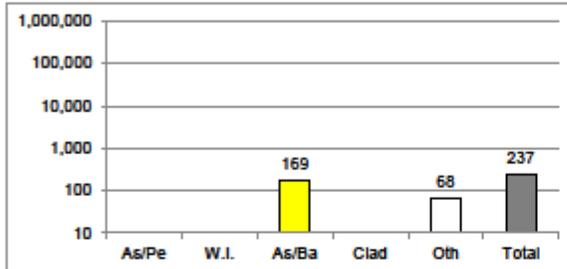
EAA Project# : 18-0340

Date Collected : NA

Sample # : 210162

Description : Room 179, Conference Room

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

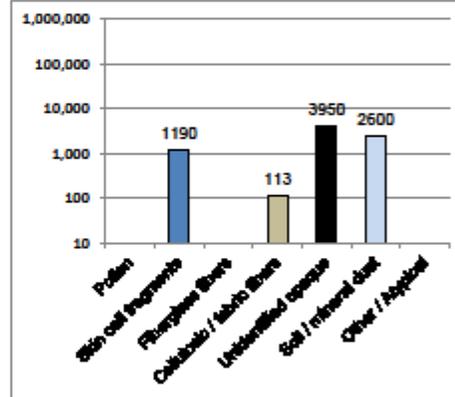


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Typical - low	Outdoor distribution

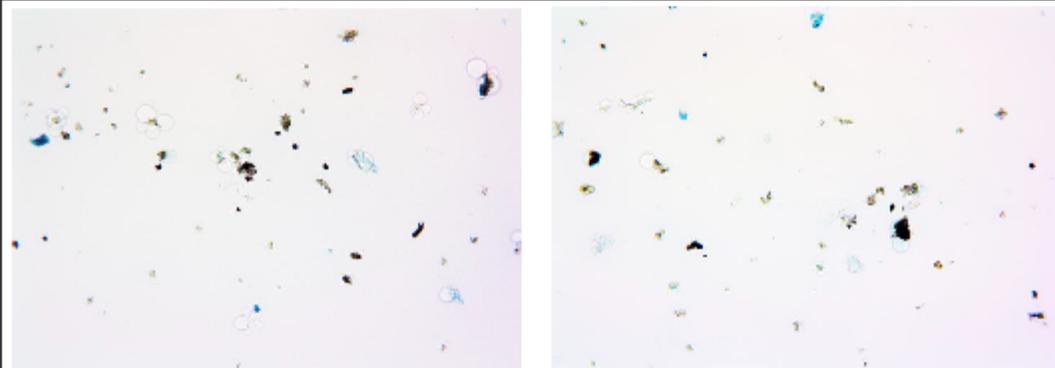
***"Source" refers to the possible presence of a local mold growth source
All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3-10/18

AIRBORNE MOLD AND DUST ANALYSIS

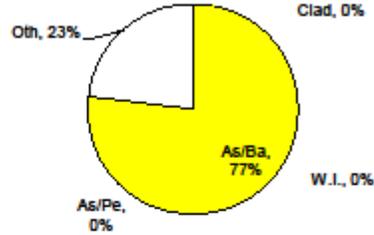
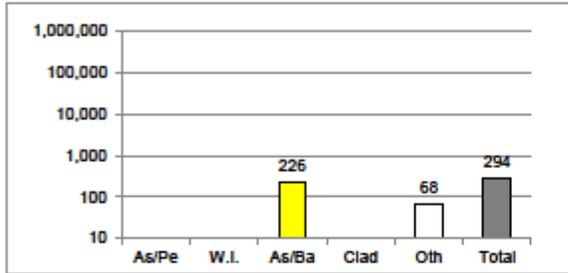


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210156**

Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Room 174, Chief Strobridge**

Graphical page 4 of 2

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

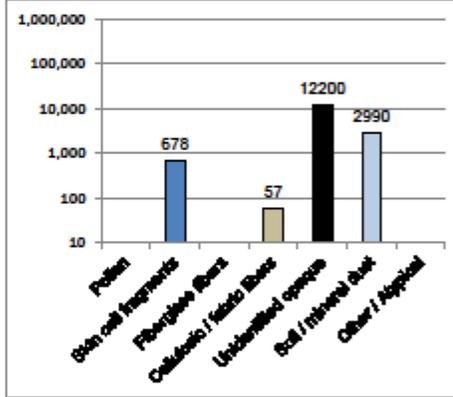


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Typical - low	Outdoor distribution

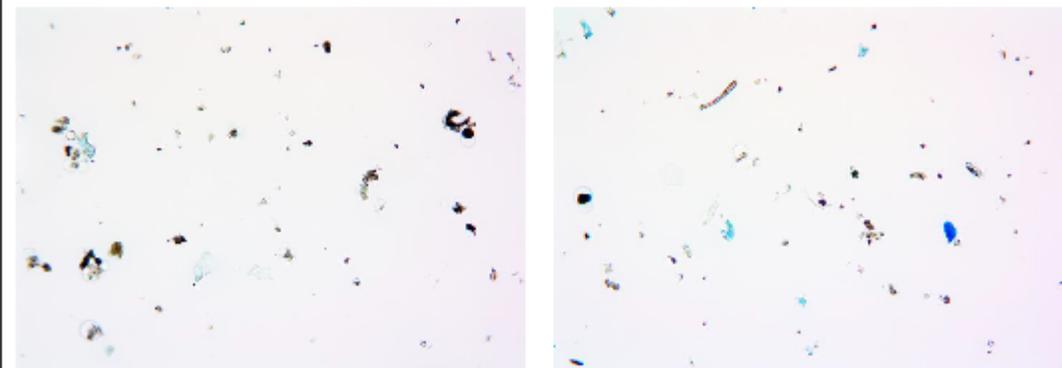
***Source** refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	High
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



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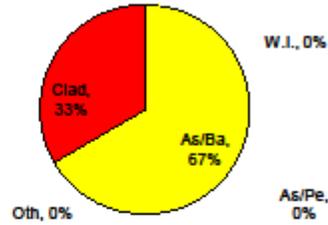
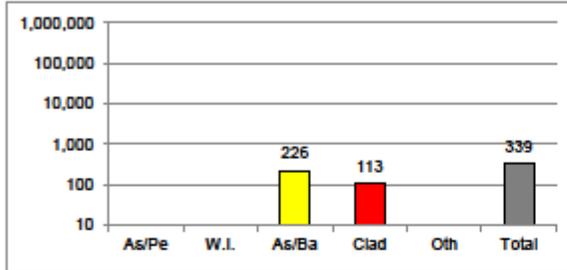
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210161**

Graphical page 4 of 3
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Room 166, Commander Weber**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

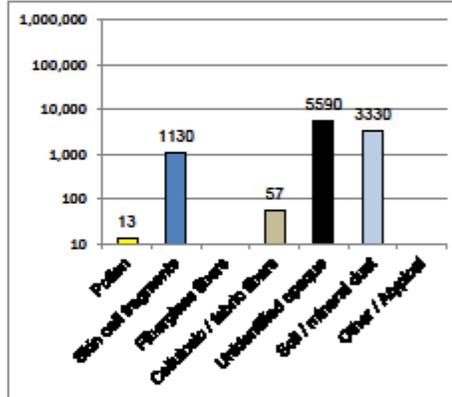


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Typical - low	Outdoor distribution

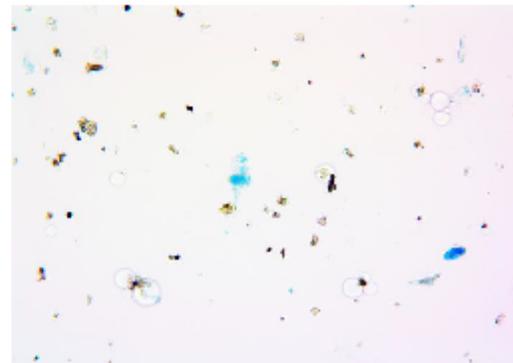
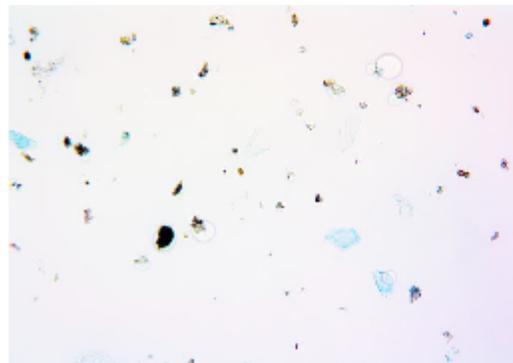
"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/18

AIRBORNE MOLD AND DUST ANALYSIS

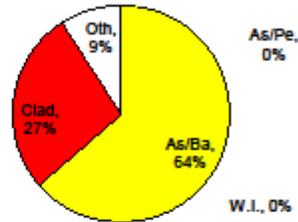
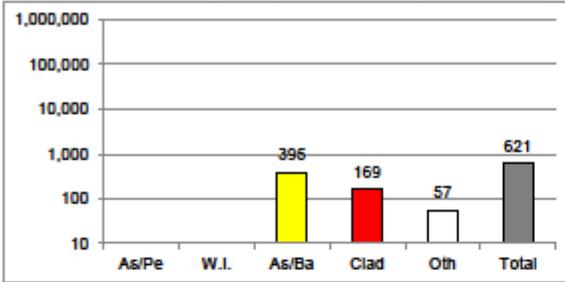


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriff's Off.
 EAA Project# : 18-0340
 Sample # : **210167**

Project : Flagler Sheriff's Office 010-1805
 Date Collected : NA
 Description : **Room 103, Records**

Graphical page 4 of 6

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.



As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiospores, Clad = Cladosporium, Oth = Other

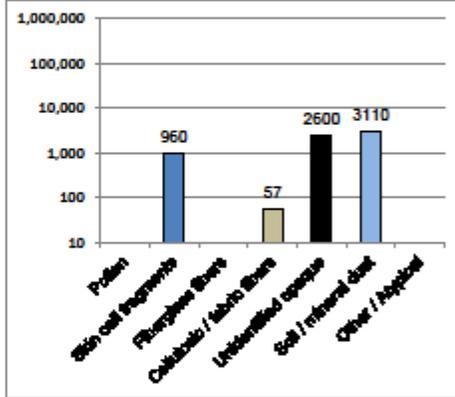
GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Typical - low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fung	Typical - low	Outdoor distribution

***Source** refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

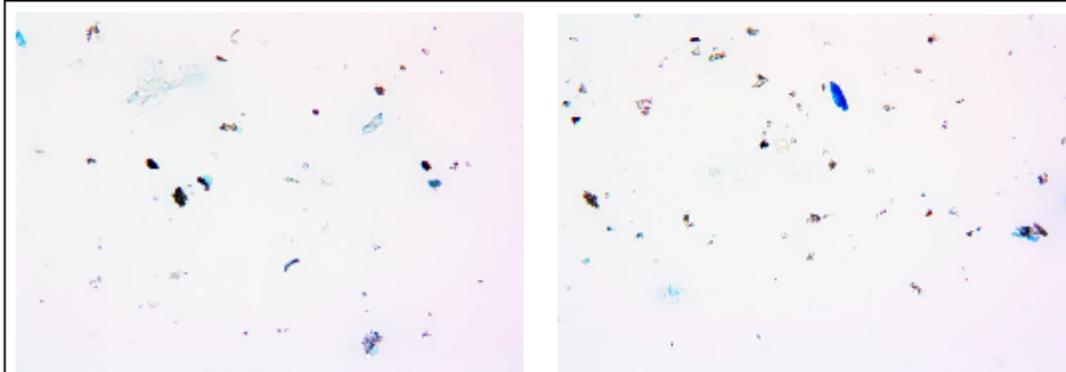
OTHER AEROSOLS INTERPRETATION GUIDELINES

Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Very low
Unidentified opaque	Low - moderate
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : **Low dust**

Representative photos : 300x



doc.rev.3-10/1/16

AIRBORNE MOLD AND DUST ANALYSIS

EAA Method #: DUST-A01



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off. Project description : Flagler Sheriffs Office 010-1805
 Requested by : Rich Van Dort Date collected : NA
 EAA Project# : 18-0340 Sample received : 4/5/18 Sample condition : Acceptable as received

Data Page 5 of 5

(end of data report)

Client Sample#	Sample Description / Location	General Comments	
210160	Evidence / Forensics	Low-moderate dust	
210173	Room 111, Investigations	Low dust	
AIRBORNE MOLD SPORE CONCENTRATIONS (Cts./m ³) - Spore Trap Sample Analysis High mag. used 600x			
Category	Sample # -->	210160	210173
Total Mold Spores (Cts/m ³)		588	395
Alternaria		11	
Aspergillus/Penicillium			
Pigmented Asco & Basidio			
Mix tiny, hyal Asco & Basidio		452	282
Botrytis			
Chaetomium			
Cladosporium		113	113
Curvularia			
Drechslera/Bipolaris			
Epicoccum			
Fusarium			
Nigrospora			
Oidium/Peronospora			
Pithomyces			
Rusts			
Smuts / Myxomycetes / Periconia		11	
Stachybotrys			
Stemphylium			
Torula			
Ulocladium			
Other Hyaline Fungi			
Other Fungi			
Unidentified Fungi			
Hyphae fragments			
Algal / fern spores			
Insect parts			
POLLEN (Total cts/m ³)		13	not detected
Not specified		13	
Pinus			
COMMON AEROSOLS (cts/m ³)			
Skin cell fragments		4010	226
Fiberglass fibers			
Cellulosic / fabric fibers		226	113
Unidentified opaque		9320	1410
Soil / mineral dust		4800	960
OTHER AEROSOLS (cts/m ³)		not detected	not detected
Statistical Parameters			
Vol. analyzed (m ³)-high mag - 600x:		0.018	0.018
Detect limit(Cts/m ³)-high magnification:		56.5	56.5
% sample analyzed-high magnification:		24%	24%
Vol. analyzed(m ³)-entire spile 150-300x:		0.075	0.075
* Detection limit (Cts/m ³)-entire spile:		13.3	13.3
* Note: The "entire sample" detection limit applies to the "large" particle categories analyzed during the low magnification examination of the entire sample			
Sample flow rate (lpm):		15.0	15.0
Sample trace length (mm):		14.40	14.40
Microscope field diameter (mm):		0.340	0.340

Note: Sample results are only applicable to the items or locations tested

Raw/stratoplated count data are given on a separate page. Authorized / data reviewed by :

Joe R. Henderson

Report date: 4/9/18

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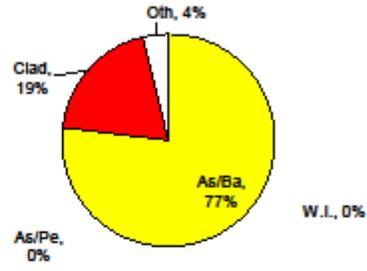
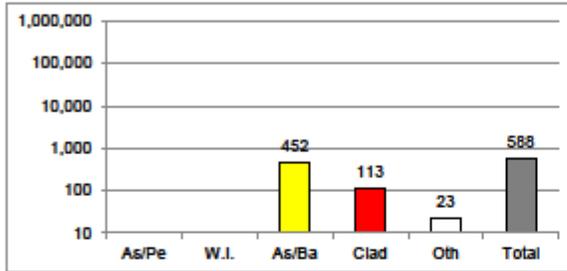
AIRBORNE MOLD AND DUST ANALYSIS



Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriffs Off.
 EAA Project# : 18-0340
 Sample # : **210160**

Graphical page 6 of 1
 Project : Flagler Sheriffs Office 010-1805
 Date Collected : NA
 Description : **Evidence / Forensics**

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

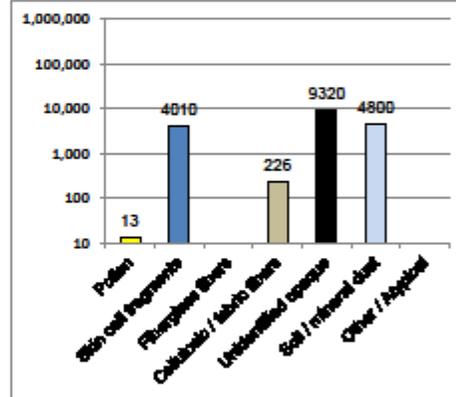


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidi spores, Clad = Cladosporium, Oth = Other

GENERAL AIRBORNE MOLD SPORE INTERPRETATION GUIDELINES		
Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Typical - low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungi	Low-moderate	Outdoor distribution

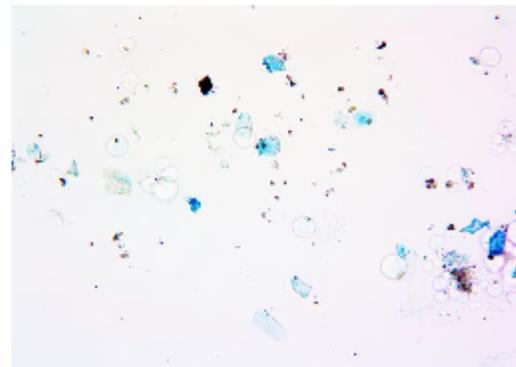
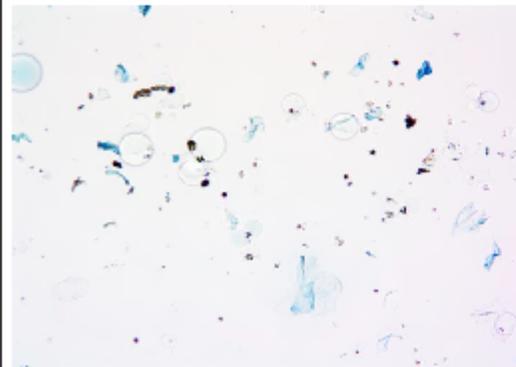
***"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

OTHER AEROSOLS INTERPRETATION GUIDELINES	
Particle Category	Concen. range
Pollen	Detected
Skin cell fragments	Typical / low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Moderate
Soil / mineral dust	Typical / low
Other / Atypical	Not detected



Specific Comments : Low-moderate dust

Representative photos : 300x



doc.rev.3-10/18

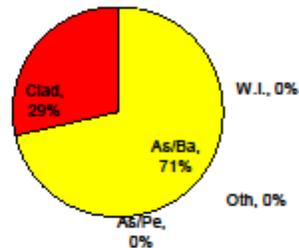
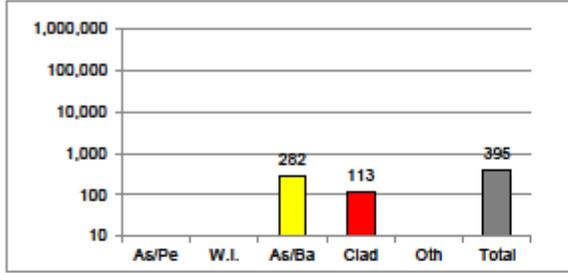


Client Name : H2H Indoor Air Solutions
 Client Project # : Flagler Sheriff's Off.
 EAA Project# : 18-0340
 Sample # : **210173**

Project : Flagler Sheriff's Office 010-1805
 Date Collected : NA
 Description : **Room 111, Investigations**

Graphical page 5 of 2

The following interpretation guidelines are based on the average mold spore and aerosol concentration ranges, historically measured in indoor office, commercial, and "clean" residential environments. Residential environments experience higher variation and concentrations of certain bioaerosols. The ranges are based on publications by EAA, and 25 years experience providing analysis throughout the country from "clean" and "contaminated" residential and commercial buildings. An explanation for the interpretation of data is given in the accompanying information sheet.

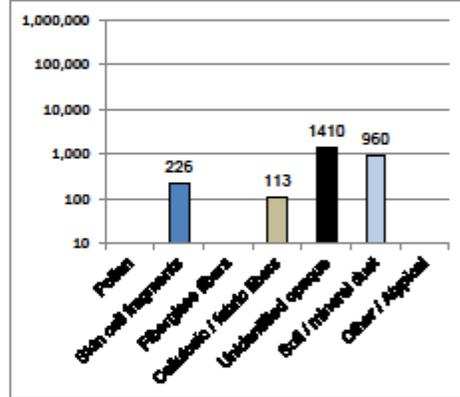


As/Pe = Aspergillus/Penicillium, W.I. = Water Indicating fungi (Stachybotrys, Chaetomium, Ulocladium), As/Ba = Asco/Basidiomycetes, Clad = Cladosporium, Oth = Other

Mold Spore Category	Concen. Range	Distribution Type
Total Spores	Low	Not applicable
Aspergillus/Penicillium	Not detected	Normal / typical
Chronic Water Indicating Fungi	Not detected	Not detected
Typical Outdoor Fungus	Typical - low	Outdoor distribution

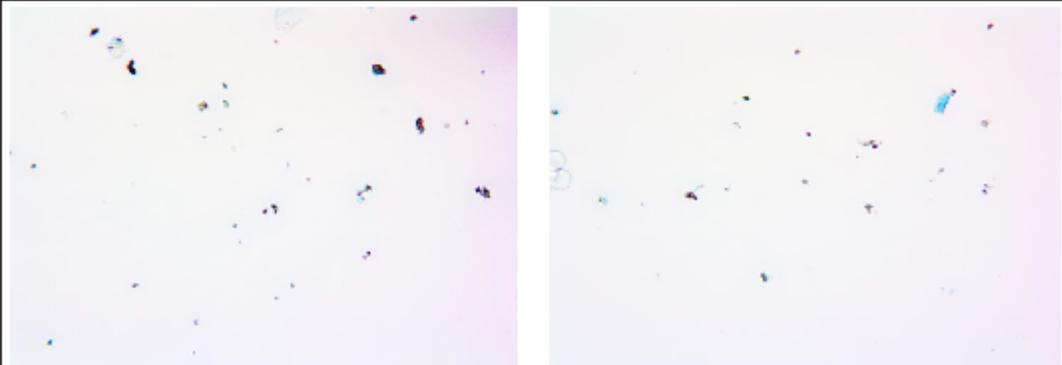
**"Source" refers to the possible presence of a local mold growth source
 All concentrations in particle counts per cubic meter of air (cts/m³)

Particle Category	Concen. range
Pollen	Not detected
Skin cell fragments	Very low
Fiberglass fibers	Not detected
Cellulosic / fabric fibers	Typical / low
Unidentified opaque	Typical / low
Soil / mineral dust	Very low
Other / Atypical	Not detected



Specific Comments : Low dust

Representative photos : 300x



doc.rev.3-10/1/16

a. Interpreting Genus Mold Levels:

***ACTION BY STATE AND FEDERAL AGENCIES**

There are no mandated actions specific to molds and indoor air quality required by any state or federal agencies. The U.S. EPA Indoor Air Quality website states, "Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants."

However, some environmental companies, industrial hygienists, and other IAQ professionals use the following arbitrary numbers for guidance in interpreting microbial survey results.

The final mold interpretation should not be based solely on numbers! Information gathered from the walk-through investigation of the area is very significant, including sources of moisture or high humidity, and signs of visible mold growth.

In air samples, it is important to consider the type and concentration of fungi indoors, as compared to outdoors or a non-complaint area. One should consider the indoor: outdoor fungal count ratio, the presence/absence of certain fungi indoors versus outdoors, the genus/species of predominant fungi indoors versus outdoors, and whether the fungi detected indoors are allergenic and/or toxigenic.

Examples of such Companies or States and their interpretation of "acceptable levels"

➤ ***EMSL Laboratory (Accredited Florida Laboratory)***

Bioaerosol (air sample)

<250 CFU/m³ Low/Normal
250-1,000 CFU/m³ Moderate/Borderline
>1,000 CFU/m³ Active Growth/Sporulation
>5,000 CFU/m³ Very Active Growth/Sporulation

Swab/Wipe

<100 CFU/in² No Growth/Background
<10,000 CFU/in² Low/Normal Growth
>10,000-100,000 CFU/in² Moderate Growth
>100,000-1,000,000 CFU/in² Active Growth/Sporulation

>1,000,000 CFU/in² Very Active Growth/Sporulation

Definitions

CFU = Colony Forming Units

Colony = A group of hyphae with or without spores, generally of one species and potentially from one spore, cell, or propagule.

➤ **Texas Department of Health**

Acceptable total spores: < 2,000 spores per cubic meter: If “the area has been adequately remediated, provided 1/3 of the spores are Cladosporium spores, 1/3 are Aspergillus/Penicillium and 1/3 are other spores.

➤ **Regional** Comparison of Mold Spore Concentrations Outdoors and Inside “Clean” and Mold Contaminated” Southern California Buildings. Daniel Baxter, Jimmy Perkins, Charles McGhee and James Seltzer; journal of Occupational and Environmental Hygiene.

<u>Building Type</u>	<u>Total Spores</u>		<u>Aspergillus/Penicillium</u>	
	<u>Clean</u>	<u>Moldy</u>	<u>Clean</u>	<u>Moldy</u>
Residential	<1200	>1300	<750	>900
Commercial	<900	>1000	<750	>900

➤ **Hayes Microbial Lab**

Spore Estimate

Rare	Less than 10 spores
Light	10-99 spores
Moderate	100-999 spores
Heavy	1,000-9,999 spores
Very Heavy	10,000 or greater

➤ At a recent IAQ conference, Orlando 2/28/2013, Dr Joe Spurgeon PhD, past EPA Residential Initiative on Indoor Air Quality and consultant for the US Public Health Service, states that after extensive research by him, Rimkus consulting and Baxter that it appears after 1,000 spores per cubic meter mold distribution changes. Observations made were with Asp-Pen and with visual vs. no visual mold events. He also stated that the condition of the occupant needs to be factored in.

VI. Testing Definitions & Onsite Measurement Results:

a. Temperature/Humidity (See table for onsite specific readings)

- i. Definition: Humidity levels are recommended to be below 60% on the inside of the facility. Per the EPA the maximum humidity should be no more 60%. The Grams per pound (how dew Point is measured) should be no more than 90.
- ii. Dew Point: The dew point temperature is the temperature at which the air can no longer hold all of its water vapor, and some of the water vapor must condense into liquid water. The dew point is always lower than (or equal to) the air temperature. If the air temperature cools to the dew point, or if the dew point rises to equal the air temperature, then dew, fog or clouds begin to form. At this point where the dew point temperature equals the air temperature, the relative humidity is 100%. If there is then further cooling of the air, more water vapor must condense out as even more dew, fog, or cloud, so that the dew point temperature then falls along with the air temperature.

While relative humidity is (as its name suggests) a *relative* measure of how humid the air is, the dew point temperature is an *absolute* measure of how much water vapor is in the air. In very warm, humid conditions, the dew point temperature often reaches 75 to 77 degrees F, and sometimes exceeds 80 degrees. No matter how hot the temperature gets, a dew point temperature of (say) 75 deg. F always represents the same amount of water vapor in the air.

Per the EPA the maximum humidity should be no more 60%. The Grams per pound (how Dew Point is measured) should be no more than 90.

- VII. **Conclusion:** The conclusion is based on visual conditions at the time of the inspection, lab testing, customer health and other variable's.

There wasn't any evidence of visual mold or odor and the lab report levels did not support the presence of mold at the time of the inspection. This does not mean however, that mold may be actually present in the building. It may be hidden and not sporulating at the time of the inspection. **No further testing or remediation is suggested at this time.**

This means that the level of spores at the time of this inspection were at an acceptable level below the outside and at previous testing. Levels may vary when testing is performed at a different time and or location. **There are no mandated actions specific to molds and indoor air quality required by any state or federal agencies. The U.S. EPA Indoor Air Quality website states, "Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants."**

The indoor air quality at the time of the inspection is well within the normal parameters set forth by the EPA.

- **A. Investigation:** The investigate procedures are limited both to a specific time frame and to considering the conditions apparent while the investigation is going on. Since fungi are growing, living organisms that go through growth cycles, the findings of an investigation may not detect or locate all sites of microbial growth. Rather, the purpose of the investigation is to develop picture of the situation and the conditions within the building with regard to moisture control, moisture content of the materials and the potential for fungal growth to develop, while simultaneously identify any growth that has already developed." (Fungal Contamination, by Hollace S. Bailey, PE,CIAQP,CIE,CMR, ©2005)
- **B. Limitations:** This assessment was conducted following standard practices and guidelines. Regardless of the thoroughness, it is possible that some areas containing mold growth, water damage, and/or elevated moisture content or other indicators of poor indoor air quality we inaccessible or not evident during the assessment. The findings and recommendations included represent conditions evident at the time of the assessment. Building conditions related to indoor air quality, microbial growth and moisture intrusion may be subject to change on a daily basis, particularly after water event. Therefore, the conditions observed and reported herein may not be evident in the future.
- **C. Immediacy & Occupancy of Property:** If the box for remediation has been filled in then H2H recommends that the affected areas be remediated as soon as possible. If health problems are being experienced, a medical doctor should be consulted concerning occupancy of the premises. **During and after remediation, until testing confirms complete remediation, the impacted areas should not be occupied or entered by anyone, except the remediation firm's representatives. This includes cleaning staff and others who may periodically enter the**

impacted areas. After remediation is completed and testing shows the impacted areas are safe these areas may be entered and occupied.

IX: Inspection Agreement

By receipt of services the following agreement is in force if the services have been performed and paid for.

H2H Assurance services evaluation and test results do not guarantee that the indoor environment is free of contaminants, gases organisms or any analytes sampled for. The customer understands that there are limitations associated with the instrumentation used associated with accuracy, precision and uncertainty. Additionally, further limitations are present as a result of sampling and measurement methods/procedures utilized in testing and measuring as well as any or all factors such as environmental and climatic conditions. The customer is aware that no destructive testing was performed and that the evaluation can only assess for conditions that are visible at the time of the evaluation.

H2H's opinions as noted in the report are based on the findings and upon our professional experience with no warranty or guarantee implied. H2H accepts no responsibility for interpretations or actions based on this report by others. The findings, results and conclusions as part of our assessment are only representative of conditions at the time of the H2H visit and do not represent conditions at other times. This report is intended for your use and your assigned representatives. Its data and content shall not be used or relied upon by other parties without prior written authorization of H2H and the client.

Notice of Claims. You understand and agree that any claim(s) or complaint(s) arising out of or related to any alleged act or omission in connection with the Inspection shall be reported to us, in writing, within ten (10) business days of discovery. Unless there is an emergency condition, you agree to allow us a reasonable period of time to investigate the claim(s) or complaint(s) by, among other things, re-inspection before you, or anyone acting on your behalf, repairs, replaces, alters or modifies the system or component that is the subject matter of the claim. You understand and agree that any failure to timely notify us and allow adequate time to investigate as stated above shall constitute a complete bar and waiver of any and all claims you may have against us related to the alleged act or omission unless otherwise prohibited by law.

Arbitration: Any dispute concerning the interpretation of this Agreement or arising from the Inspection and Report (unless based on payment of fee) shall be resolved by binding, non-appealable arbitration conducted in accordance with the rules of the American Arbitration Association, except that the parties shall mutually agree upon an Arbitrator who is familiar with the home inspection industry.

Limitations Period.

Any legal action arising from this Agreement or from the Inspection and Report, including (but not limited to) the arbitration proceeding more specifically described above, must be commenced within six (2) months from the date of the Inspection. Failure to bring such an action within this time period shall be a complete bar to any such action and a full and complete waiver of any rights or claims based thereon. This time limitation period may be shorter than provided by state law.

UNCONDITIONAL RELEASE AND LIMITATION OF LIABILITY. IT IS UNDERSTOOD AND AGREED THAT WE AND THE LAB ARE NOT INSURERS AND, THAT THE INSPECTION AND REPORT TO BE PROVIDED UNDER THIS AGREEMENT SHALL NOT BE CONSTRUED AS A GUARANTEE OR WARRANTY OF THE ADEQUACY, PERFORMANCE OR CONDITION OF ANY STRUCTURE, ITEM, OR SYSTEM AT THE SUBJECT PROPERTY. YOU HEREBY RELEASE AND EXEMPT US, THE LAB AND OUR RESPECTIVE AGENTS AND EMPLOYEES OF AND FROM ALL LIABILITY AND RESPONSIBILITY FOR THE COST OF REPAIRING OR REPLACING ANY UNREPORTED DEFECT OR DEFICIENCY AND FOR ANY CONSEQUENTIAL DAMAGE, PROPERTY DAMAGE OR PERSONAL INJURY OF ANY NATURE. IN THE EVENT THAT WE, THE LAB OR OUR RESPECTIVE AGENTS OR EMPLOYEES ARE FOUND LIABLE DUE TO BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENT MISREPRESENTATION, NEGLIGENT HIRING OR ANY OTHER THEORY OF LIABILITY, THEN THE CUMULATIVE AGGREGATE TOTAL LIABILITY OF US, THE LAB AND OUR RESPECTIVE AGENTS AND EMPLOYEES SHALL BE LIMITED TO A SUM EQUAL TO THE AMOUNT OF THE FEE PAID BY YOU FOR THE INSPECTION AND REPORT.

Confidentiality: You understand that the Inspection is being performed (and the Report is being prepared) for your sole, confidential and exclusive benefit and use. The Report, or any portion thereof, is not intended to benefit any person not a party to this Agreement, including (but not limited to) the seller or the real estate agent(s) involved in the real estate transaction ("third party"). If you directly or indirectly allow or cause the Report or any portion thereof to be disclosed or distributed to any third party, you

agree to indemnify, defend, and hold us harmless for any claims or actions based on the Inspection or the Report brought by the third party.

The Client(s), acknowledge that Client(s) have been advised and encouraged to have the subject property tested for allergens, and that client(s) understand that the presence of certain types of allergens prevalent in construction can pose health hazards. Client(s) decline that the Inspector conducts the services recommended above. Client(s) agree to hold harmless the Inspector for any damages or responsibility for building conditions which remain undiscovered regarding the discovery of allergens and allergen agents. Also, clients understand that cleaning specifications cannot be produced unless the above mentioned samples are collected and analyzed.

THIS INSPECTION, INSPECTION AGREEMENT AND REPORT DO NOT CONSTITUTE A WARRANTY, AN INSURANCE POLICY, OR A GUARANTEE OF ANY KIND; NOR DOES THEY SUBSTITUTE FOR ANY DISCLOSURE STATEMENT AS MAY BE REQUIRED BY LAW. By signing below, You acknowledge that You have read, understand, and agree to the terms and conditions of this agreement, including (but not limited to) the limitation of liability, arbitration clause and limitation period, and agree to pay the fee listed in the shaded box above. In addition, You acknowledge and agree that the Inspector may notify the homeowner or occupants of the Subject Property (if other than You), as well as any appropriate public agency, of any condition(s) discovered that may pose a safety or health concern.

“The investigate procedures are limited both to a specific time frame and to considering the conditions apparent while the investigation is going on. Since fungi are growing, living organisms that go through growth cycles, the findings of an investigation may not detect or locate all sites of microbial growth. Rather, the purpose of the investigation is to develop picture of the situation and the conditions within the building with regard to moisture control, moisture content of the materials and the potential for fungal growth to develop, while simultaneously identify any growth that has already developed.”
(Fungal Contamination, by Hollace S. Bailey, PE, CIAQP, CIE, CMR, ©2005)

Inspection Performed by:

Richard J. Van Dort

Tod Rheinholtz, I.E.P.

Inspection reviewed by:
Richard J. Van Dort
CIEC, CMI, CAS, CTI, CVI
H2H Indoor Air Solutions, LLC

Richard J. Van Dort

