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# **Confidential Partial Water Intrusion & Limited Microbial Assessment with Remediation Protocols**

**for the:**  
**MiraLago Estates Clubhouse**

ERR PROJECT NO. 20-0349-01

Site Address:  
8955 MiraLago Way,  
Parkland, FL 33076



## **Prepared for:**

MiraLago Estates Clubhouse  
8955 MiraLago Way,  
Parkland, FL 33076  
Attn: Jeff Goldstein, President

## **Prepared by:**

Environmental Research & Restoration  
4730 North 31<sup>st</sup> Court  
Hollywood, FL 33021

**Partial Inspection Date: December 29<sup>th</sup>, 2020**

**Reference: Confidential Partial Water Intrusion & Limited Microbial Assessment**  
of the  
**MiraLago Estates Clubhouse**  
Located at:  
**8955 MiraLago Way,**  
**Parkland, FL 33076**

Dear Jeff Goldstein,

**Environmental Research & Restoration (ERR)** is pleased to submit this partial assessment of our site visit at the above-referenced location, conducted on **December 29<sup>th</sup>, 2020**. This report represents our site observations and partial recommendations for further action.

Due to the limited access and time restrictions imposed on this assessment a detailed scope of work is not given at this time. A comprehensive assessment is recommended in order to provide the specific remediation requirements/protocols for the prevention of cross-contamination (spreading of microbial spores) throughout the non-contaminated areas.

Unabated mold and bacteria can become a serious health threat to susceptible individuals. It is recommended that the comprehensive assessment outlined above be conducted as soon as practical, as living microorganisms digest the structure on which they grow.

After the comprehensive assessment and completion of the remediation procedures, it is imperative that **Environmental Research & Restoration** be notified prior to the removal of any containment barriers, erected by the remediation contractors, to conduct a visual inspection with **Post-Remediation Verification (PRV) Clearance Testing** to render the areas clean, prior to restoring the environment to its original condition.

Thank you for allowing **Environmental Research & Restoration** to assist you with addressing your environmental needs.

**(1) Executive Summary**

**ERR** conducted a Confidential Partial Water Intrusion & Limited Air Quality Assessment of the **MiraLago Estates Clubhouse**. The Partial Limited Assessment was due to the imposed time limitations and access restrictions imposed by the **MiraLago** management.

This assessment was conducted in whole by **Gustavo Idarraga**, Certified Indoor Environmentalist, and Certified Mechanical Air Conditioning Technician with multiple Mechanical AC Certifications, and reviewed by **Maurice Baum**, Professional Industrial Hygienist; Certified Hazardous Materials Manager, Certified Microbial Consultant, and Licensed and Certified Fire and Smoke Damage Investigative Consultant.

This study was conducted on **December 29<sup>th</sup>, 2020** in response to concerns of suspect microbial growth and contamination within the **Clubhouse** after the chimney had leaks and there were signs of black mold growth throughout as well as a strong musty odor.

A scientific sampling strategy was developed, and limited environmental data was collected and analyzed to determine if compromised building materials were present. The data collected identified isolated areas and building materials as compromised. **A remediation plan is pending a thorough scientific data with the follow up comprehensive assessment.**

## **(2) Introduction**

On **December 29<sup>th</sup>, 2020**, pursuant to the authorization of **Mr. Jeff Goldstein, President Homeowner's Association**, **ERR** personnel conducted a partial inspection of the **Miralargo Estate Clubhouse**. A scientific sampling strategy was developed.

Elevated moisture measurements are only documented when identified. Interviews with **Jeff Goldstein** were conducted. A limited number of representative samples were collected for water damage and mold spore analysis. The clubhouse at the time of the inspection was partially photo-documented. Unless otherwise specified, all photographs depict the condition of the clubhouse at the time of our inspection.

These photos may contain additional information, or items not specifically noted in this report or in the photograph(s). These photos are hereby incorporated into, and made part of, this inspection report. This report is for the sole use of our client. Use by others without this company's or our client's permission is prohibited.

## **(3) Visual Observations**

- The front of the **MiraLago Estate Clubhouse** faces **East**.
- The roof is barrel tiled.

### **Majestic Ballroom**

- There are visible water stains on the ceiling and around the A/C vents, which appear to be from the roof and from excessive condensation.
- There is heavy mold growth in the A/C vents, ducts and ceiling.
- There is visible water damage on the **East** wall below the windows.
- The **South** wall below the windows appears to have visible water damage from the windows or from under the base of the **South** wall.
- The relative temperature was **63 F°** and the relative humidity was found up to **66%**. The elevated humidity is contributing to the mold growth.
- There is visible surface mold inside the **Cathedral ceiling**.
- **One (1)** tape sample collected from the **Ballroom East Wall behind the baseboard** identified **Penicillium/ Aspergillus** too numerous to count ("TNTC"), scientific findings attached herein.

### **Majestic Ballroom-Scope of Work**

- **ERR** cannot prescribe a comprehensive scope of work at this time due to the

- limited access and time restrictions imposed to conduct this assessment.
- Upon completion of a comprehensive assessment with additional scientific sampling data, **ERR** will prescribe a detailed remediation protocol.

### **Aqua Lounge**

- The relative temperature was **64 F°** and the relative humidity was identified up to **67%** in the **Aqua Lounge**.
- There are heavy water stains on the ceiling around the A/C vents.
- Substantial suspect mold growth was present at the **North West** corner.
- This inspection revealed that there was a previous plumbing leak under the sink, which contains visible water stains and mold growth.
- A tape sample collected from the **Lounge Cabinets Under the Sink** identified **Chlamydozoetes** too numerous to count (“**TNTC**”) as per scientific findings attached herein.

### **Aqua Lounge- Scope of Work**

- **ERR** cannot prescribe a comprehensive scope of work at this time due to the limited access and time restrictions imposed to conduct this assessment.
- Upon completion of a comprehensive assessment with additional scientific sampling data, **ERR** will prescribe a detailed remediation protocol.

### **South Ladies Room**

- The relative temperature of the **South Ladies Room** was **64.8 F°** and the relative humidity was identified up to **66.4%**.
- Apparently, there was a previous leak from the sprinkler system.
- There are visible water stains on the ceiling and suspect mold growth.
- The chiller lines run above the ceiling and appear to be sweating excessively.

### **South Ladies Room- Scope of Work**

- **ERR** cannot prescribe a comprehensive scope of work at this time due to the limited access and time restrictions imposed to conduct this assessment.
- Upon completion of a comprehensive assessment with additional scientific sampling data, **ERR** will prescribe a detailed remediation protocol.

### **Mechanical Room**

- There is heavy condensation from the chiller lines, which is creating elevated humidity inside of the mechanical room. Therefore, it is providing a fertile environment for mold growth on the walls, ceilings and on the air handler unit.
- There are also visible water stains and mold growth around the chiller lines and the entire room including the door.
- **One (1)** sample collect from the **Mechanical Room West Wall** identified high levels of toxic mold species too numerous to count (“**TNTC**”) and scientific finding are attached herein.
- A tape sample collected from the **Mechanical Room Ceiling** identified **Stachybotrys** too numerous to count (“**TNTC**”).
- Notably, **Stachybotrys species** is a black mold and considered toxic to

susceptible individual.

#### **Mechanical Room-Scope of Work**

- **ERR** cannot prescribe a comprehensive scope of work at this time due to the limited access and time restrictions imposed to conduct this assessment.
- Upon completion of a comprehensive assessment with additional scientific sampling data, **ERR** will prescribe a detailed remediation protocol.

#### **(4) Remediation Activities**

- **Window Leak Detection Testing:** If drywall is removed below windows, a leak detection test should be conducted to ensure that the windows are not leaking.
- All contamination should be removed a minimum of **1' foot** beyond the last visible trace, in compliance with the Institute of Inspection Cleaning & Restoration Certification (**IICRC**) standards and updated **New York City Mold Remediation Guidelines**. The remediation contractor must erect a containment barrier to encapsulate the immediate work section. The containment barrier should be maintained under negative air until the building has passed clearance testing.
- **ERR** should be notified **48 hours** prior to **PRV Clearance Testing**.
- **Note:** The State of Florida has a mold remediation and assessor bill. Under this law, any contractors working on residential or commercial property should provide a certificate of insurance to the homeowner or building owner. This certificate of insurance should be a liability policy for no less than \$1,000,000.00 with a specific mold rider covering mold pollution and/or cross contamination.

#### **(5) Wall Evaluation**

1. Evaluate the condition of the interior sides of all exposed walls for evidence of water damage and/or visible microbial growth. If any evidence of water damage and/or visible microbial growth is still present, the affected section should be removed **2' feet** beyond the last visible trace, and disposed of.
2. Interior sides of all exposed walls shall be damp-wiped with an approved anti-bacterial solution and **HEPA** (High-Efficiency Particulate Air) vacuumed.
3. Inspect the exposed wood framing in the perimeter walls for microbial growth and decay. All wood studs exhibiting microbial growth should be removed to the height of the remediated drywall. Interior wall cavities and wood framing are to be damp-wiped with an approved antibacterial solution.
4. Once dry, the wood should be sanded and/or wire brushed to remove approximately 1/8" inch of wood, damp-wiped and HEPA vacuumed **AGAIN**, as noted above.
5. No fungi inhibitor or stain-blocking agent shall be applied until the structure has passed **PRV Clearance Testing**.
6. Negative pressure containment barriers shall remain in place until **ERR** has conducted a **PRV Clearance Inspection**.
7. The polyethylene (**Visqueen**) barrier should be damp-wiped with an anti- microbial solution prior to removal.
8. All remaining wall surfaces within the containment area should then be damp-wiped with an antimicrobial solution and HEPA vacuumed.

## **(6) Air Conditioning Cleaning**

**It is imperative that after cleaning the air duct system, all fiberglass boots, junction boxes and panel insulation be sealed with FiberLock 8000, or equivalent, to prevent any fiberglass particulate release.**

**\*NOTE: A licensed AC contractor should perform professional cleaning of the air conditioning system and components. A certified member of the NADCA (National Air Duct Cleaners Association) should clean the air ducts.**

The air conditioning units and air ducts should be professionally cleaned and **sealed** to prevent the release of fiberglass particulates into the air, as outlined in the HVAC section of this report on the following pages.

**It is the responsibility of a licensed AC contractor to determine whether the air ducts should be cleaned/repaired, or replaced.**

1. All work shall be conducted with the system in the “OFF” position.
2. Remove all supply and return air duct grids.
3. Clean the interior of all air handler units. Clean insulation via contact vacuum method and foil line installation.
4. Pre-vacuum diffusers, grills and registers in the ductwork. If necessary, remove, chemically wash / clean, and reset.
5. Install a vacuum collector unit at a predetermined location and clean the section of ductwork using omni-directional air nozzles and rotary brushes as necessary.
6. All duct lines are to be professionally inspected to ensure no breach in the duct membrane or drop box connection. If breaches are identified after cleaning, they are to be thoroughly re-sealed prior to releasing the facility.
7. All fiberglass duct-board within the AC duct system must be sealed to prevent release of fiberglass particulates.

## **(7) Cleaning HVAC Equipment**

1. Isolate HVAC units from adjacent areas with polyethylene (**Visqueen**) sheets. Protect all motors, bearing assemblies, and belt drive assemblies within the HVAC unit housing with tape on polyethylene sheets to prevent water intrusion.
2. Carefully remove and dispose of filter media from holding frames and replace with pleated HEPA-type filters.
3. HEPA vacuum the entire space of the HVAC unit, including each component, supports, frames, etc.
4. Conduct pressure-washing of heating and cooling coil banks.
5. Hand-scrub where required to remove all residual dirt.
6. Rinse thoroughly with clear water to remove any residual dirt and cleaning agent.
7. Fan casings and impeller wheels are to be cleaned on all surfaces inside and outside.

## **(8) Clothes Dryer Vent**

The clothes dryer vent should be professionally cleaned at the time of the air duct cleaning. This eliminates buildup and recontamination of dust and mold spores into the HVAC system, and reduces the risk of fires.

### **(9) Final Cleaning**

All remaining wall surfaces within the affected area should be damp-wiped with an antimicrobial solution and HEPA vacuumed. All porous or upholstered items, linen and clothing items should be professionally cleaned and/or dry-cleaned.

### **(10) Completion Activities**

1. Upon completion of remediation, ensure the HVAC system is **OFF**, and allow air scrubbers to run for a minimum of **72 hours**.
2. Use an electric blower several times in each area inside the building to forcibly suspend particulates on the walls, ceilings and floors. The goal is to remove suspended particulates and capture microbial matter in the air scrubbers.
3. Contact **ERR** at **(954) 967-0011** to schedule **PRV Clearance Testing** of the remediated structure to certify that it is safe for occupancy.

### **(11) Moisture Measurements**

Limited moisture measurements of substrates (drywall and baseboards) were obtained using one or more of the following: **Surveymaster**, **Traymex** and/or **Ryobi** moisture meters. These instruments identify and determine the moisture content of a building substrate. Moisture is one of the three elements necessary for microbial (mold) amplification.

Moisture measurements of **0-13.9%** are considered “dry,” **14-19.9%** are considered “elevated,” and **20%** or more are considered “wet.”

Due to limited access restrictions and time restraints imposed on **ERR**, comprehensive moisture results were not obtained for the **Miralargo Estate Clubhouse**. The limited moisture measurements obtained indicated the following:

- Elevated moisture was identified in the limited areas that were accessible at the time of this inspection.

### **(12) Relative Humidity and Temperature Measurements**

Relative humidity (**RH**) and temperature measurements were obtained throughout the **Miralargo Estate Clubhouse** for comparison to outside conditions. The relative humidity measurement in the indoor ambient air was **71.5%** and temperature measurements ranged from **62.0** to **62.7 °F**. The results show that the relative humidity values were **above** the guidelines proposed by the American Society of Heating, Refrigeration and Air Conditioning Engineers (**ASHRAE**) of **30-65% RH** and also **above** the United States Environmental Protection Agency (**EPA**) values of **30-60% RH**.

### **(13) Limited Microbial Sampling**

Due to the limited access and time constraints imposed on **ERR**, only **four (4)** indoor microbial samples were collected for scientific evaluation. One **(1)** outdoor baseline sample was also recommended, but declined due to the time constraints imposed on **ERR**. Sample locations were chosen for representative qualities and **Mr. Jeff Goldstein** authorized the **four (4)** samples prior to collection. **The attached lab results indicate**



**the presence of mold spores consistent with water damage in the areas sampled.** According to the National Institute for Occupational Safety and Health (NIOSH), a spore count of **more than 1,000 spores/m<sup>3</sup>** of air is considered an “action level,” or a health hazard.

**\*NOTE:** The lab results for the limited samples collected are listed in **Exhibit A** of this report.

**\*NOTE:** A tape extraction identifies a contaminated surface and does not necessarily relate to occupational exposure.

#### **(14) All Walls Breathe**

- The following data is referenced in the **U.S. Department of Energy & Environmental Building Association, *Builder's Guide Hot-Humid Climates*** by Joseph Lstiburek, Ph.D., P. Eng.
- All walls breathe. Therefore, mold, dust, and other particulates within a wall cavity can be released into the ambient air at any given time.
- The AC return pulls all air (both clean and contaminated) through the wall.
- There is no air sampling pump available on the market, consistent with industry standards, capable of pulling more than two cubic feet of air from a given sample area. As such, if the sampling pump is moved two feet in any given direction, it can yield completely different results.
- Sampling by use of air samples **alone** is an inadequate sampling strategy that is unlikely to identify the problem.

#### **(15) Occupational Health Concerns**

As of the date of our visit, the **Miralargo Estate Clubhouse** **was not** being occupied. Generally, it is recommended that occupants with allergy history, or persons occupying areas requiring remediation, find temporary working arrangements once the proposed decontamination and restoration procedures commence. These arrangements should be maintained until the proposed decontamination and restoration procedures are completed, and the work area has passed clearance testing. The occupants of the **Miralargo Estate Clubhouse** are encouraged to provide their medical health provider and, if applicable, veterinarian, with a copy of this report to determine if relocation is warranted, based on their relevant medical history.

#### **(16) Occupational Health Concerns for Remediation Contractors**

##### **CAUTIONARY ALERT: COVID-19 UPDATE**

Remediators should adhere to the active safety protocols emerging on the **CDC** (*Centers for Disease Control & Prevention*), **OSHA** (*Occupational Health & Safety Administration*) and **WHO** (*World Health Organization*) websites.

The elevated presence of mold spores in the affected area(s) could create a potential health threat to susceptible occupants. Identification of microbial contamination is only the first step in remediation. It is therefore important that remediation be conducted as quickly as practical, with the use of appropriate personal protection equipment (**PPE**).

Microbial contaminants in buildings may cause or exacerbate allergy-like symptoms (wheezing, chest tightness, shortness of breath, nasal congestion, eye irritation, etc.),



especially in individuals with a history of allergic disease (asthma, rhinitis, etc.). It is therefore recommended that individuals with persistent health problems which appear to be fungi-related (mold or mildew), or other bioaerosol exposures, avoid prolonged exposure to contaminated areas.

This notice is referenced in the *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*, NY City Department of Health, April 2000, and is mandated under the **IICRC S520 Standard**. In addition, persons with a history of allergies should pay close attention to the individual health effects listed in **Exhibit A** of this report. Exposure to bioaerosols should be evaluated by a medical professional.

### **(17) Scope of Work**

To minimize liability, exposure, cross-contamination and costs, work should be conducted in accordance with industry standards such as:

- The IICRC S520 Mold Remediation Standard, December, 2015 should be followed in its entirety.
- The American Conference of Governmental Industrial Hygienist (ACGIH Guidelines) for remediation of mold contaminated building components (walls, ventilation systems, support beams, etc.);
- The American Indoor Air Quality (AMIAQ) standards; and
- The American Industrial Hygiene Association's (AIHA) Bio Safety Guide (field guide for the determination of biological contaminants in environmental samples).

### **(18) Preparation Tasks**

The following tasks refer to the flooring, walls, ceiling and AC units only, and do not address the more stringent measures for residential units (foodstuff, furnishings, etc.).

### **(19) Site Preparation & CAUTIONARY ASBESTOS ALERT**

1. Personal protection equipment (PPE) for restoration employees must be employed until the completion of High-Efficiency Particulate Air (HEPA) vacuuming of the **Miralargo Estate Clubhouse**. PPE must comply with the Occupational Safety & Health Administration (OSHA) standards and the IAQ Guidelines.
2. **Modified Level-C PPE** should be worn (Tyvex suits, Nitril gloves, Tyvex booties, full/half face respirator with HEPA cartridges). If using half-face respirator, safety glasses must be used.
3. **It is the Environmental Contractor's responsibility to determine whether asbestos is present. ERR strongly recommends that asbestos testing be conducted prior to remediation activities. Should any tested areas test positive for asbestos, a complete Asbestos Survey of the area to be remediated is required. Otherwise, all areas to be remediated must be considered an exposure risk for asbestos containing material (ACM).**
4. The contractor conducting the restoration must have a valid respiratory protection plan and documentation of fit testing and personnel physicals, and be in full compliance with OSHA standards.
5. The HVAC unit must be in the **OFF** position for the duration of the restoration and reconstruction of the **Miralargo Estate Clubhouse**.

6. All entryways must be sealed with polyethylene sheeting and duct tape to achieve negative pressure. Air scrubbing units that will ensure a minimum of six air exchanges per hour must be in place and functioning throughout the remediation period, and up to 1 hour prior to **PRV Clearance Testing**.
7. Signage should be posted outside the containment area prior to the beginning of work, which states:  
**“WARNING – CONTAMINATED WITH MOLD. AUTHORIZED PERSONNEL ONLY.”**
8. Signage should be posted on the interior of the building, clearly visible prior to containment entry, but not visible from the outside.
9. The health provider for the building owner must approve all decontamination or antimicrobial solutions, and consult the appropriate MSDS.

#### **(20) Personal Effects / Contents**

Personal effects (contents) should be cleaned, HEPA vacuumed, damp-wiped, removed, and stored before remediation. Clothing should be professionally laundered or dry-cleaned by a certified member of the **Restoration Cleaners Association**.

#### **(21) Proper Disposal**

Proper disposal includes placing manageable sections of the contaminated materials in a **6-mil polyethylene (Visqueen) bag**. The bag should be sealed for suitable disposal in the outside roll-off container.

#### **(22) Drywall Removal**

Drywall removal is required when drywall becomes water-compromised. When drywall gets wet, there are two established industry standards:

- The National Drywall Association
- FEMA

**Both standards state**, “...when drywall becomes wet, it should be removed.” Therefore, the scope of work is not based simply on mold damage, but rather on the fact that the drywall was wet (i.e. soaked in standing water), and therefore meets the definition of “compromised at the time of our inspection.”

#### **(23) Limitations**

The results of this report represent conditions at the specific time and location in which the aforementioned were procured. Thus, this report should not be relied upon to represent conditions at any other location, time or date, and does not imply that this location is free of these or other contaminants. The intent of this report is to assess the basic microbial conditions of a sampled area. Although this type of analysis is a valuable tool to enhance an environmental assessment, it should not be used solely to determine an occupant’s health or exposure risk. Some fungi are not identified by direct microscopic observation alone. To access additional data, more extensive testing may be required. This report is intended for the sole use of the client and all results are private and confidential.

## Certification

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**(24) Environmental Research & Restoration** completed a Confidential Partial Water Intrusion & Limited Microbial Assessment of the **Miralargo Estate Clubhouse**. The assessment followed methods and procedures consistent with good commercial or customary practices. This report is exclusively for the use and benefit of the parties identified on the cover of this report, and is not intended for the use or benefit of any other person or entity, nor may any other person or entity rely upon it. The contents of this report may not be quoted in whole, in part, or distributed to any person or entity other than client: **Miralargo Estate Home Owner Association and Jeff Goldstein, President**, without the consent of the client or the undersigned. Should you have any questions, please do not hesitate to contact the undersigned.

## (25) References

- \* *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*, NY City Department of Health, April 2000.
- \* Institute of Inspection, Cleaning and Restoration Certification (*IICRC*) *S520 Standard* – Standard & Reference Guide for Professional Water Damage Restoration – 4<sup>th</sup> Edition, 2015
- \* Institute of Inspection, Cleaning and Restoration Certification (*IICRC*) *S500 Standard* – Standard for Professional Mold Remediation – 3<sup>rd</sup> Edition, 2015
- \* *Micro Fungi*: Suzanne Gravesen, Microbiologist; Jens S. Frisvad, Mycotoxicologist; Robert A. Samson, Mycotoxicologist, Munksgaard, 1994.
- \* New York City Department of Health (Guidelines on Assessment and Remediation of Fungi in Indoor Environments), April 2000.
- \* *Bio-aerosols Assessment and Control*, American Conference of Governmental Industrial Hygienist, ACGIH, Cincinnati, Ohio, 1999.
- \* *Field Guide for the Determination of Biological Contaminants in Environmental Samples*, an AIHA Bio-Safety Guide.
- \* *IAQ Microbiology Reference Guide*, Aerotech Kalmar Laboratories Phoenix, Arizona, 2000.
- \* American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 62-2001.
- \* Other citations omitted.

Respectfully Submitted,

*Gustavo Idarraga*

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**Gustavo Idarraga, CIE, CMAT**  
Certified Indoor Environmentalist,  
Certified Mechanical Air Conditioning Technician



Reviewed by:

*Dr. Maurice Baum (hc)*

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**Dr. Maurice Baum, PIH, CHMM, CMC, CFSC**  
Professional Industrial Hygienist  
Certified Hazardous Materials Manager  
Certified Microbial Consultant  
Certified Fire & Smoke Damage Investigative Consultant



**EXHIBIT**  
**A**  
**SCIENTIFIC**  
**ANALYTICALS &**  
**CHAIN OF CUSTODY**



Dove Environmental Corporation

3301 N.W. 55TH ST., FT. LAUDERDALE, FL 33309  
888-854-0477



PREPARED FOR: ENVIRONMENTAL RESEARCH AND RESTORATION

TEST ADDRESS: 8955 MIRALAGO WAY PARKLAND, FL 33076

# CERTIFICATE OF MOLD ANALYSIS

## PREPARED FOR:

ENVIRONMENTAL RESEARCH AND RESTORATION

PHONE NUMBER: (954) 967-0011

EMAIL: ENRR2003@GMAIL.COM

## TEST LOCATION:

MIRALAGO ESTATES HOA ATTN: JEFF GOLDSTEIN

8955 MIRALAGO WAY

PARKLAND, FL 33076

CHAIN OF CUSTODY # 52413132

COLLECTED: TUE DECEMBER 29, 2020

RECEIVED: TUE DECEMBER 29, 2020

REPORTED: TUE DECEMBER 29, 2020

APPROVED BY:

**JOHN D. SHANE PHD**  
**LABORATORY MANAGER**

VERSION: 1.0 (A VERSION NUMBER GREATER THAN ONE (1) INDICATES THAT THE DATA IN THIS REPORT HAS BEEN AMENDED)

EPA regulations or standards for airborne or surface mold concentrations have not been established. There are also no EPA regulations or standards for evaluating health effects due to mold exposure. Information about mold can be found at [www.epa.gov/mold](http://www.epa.gov/mold).

All samples were received in an acceptable condition for analysis unless noted specifically in the Comments section under a particular sample. All results relate only to the samples submitted for analysis and apply to the samples as received by the laboratory. Volumes, flowrates, areas or other information are supplied by the customer. This information can affect the validity of the results. Results have not been adjusted for field or laboratory unless otherwise noted. InspectorLab bears no responsibility for sample collection activities or analytical method limitations. No warranty is either express or implied and InspectorLab assumes no responsibility or liability for error in public information utilized, statements from sources other than InspectorLab, or developments resulting from situations outside the scope of this analysis, nor for the purpose for which the client uses the analysis. The determinations in this report are outside the scope of the AIHA LAP, LLC scope of accreditation. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. InspectorLab liability is limited to the cost of the sample analysis and may not exceed the amount of the fee paid by the client.

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PREPARED FOR: ENVIRONMENTAL RESEARCH AND RESTORATION

TEST ADDRESS: 8955 MIRALAGO WAY PARKLAND, FL 33076

## Detailed Mold Report

(WATER-INDICATING FUNGI, IF PRESENT, ARE SHOWN BELOW IN RED)

Analysis Method	Surface Analysis			Surface Analysis			Surface Analysis			Surface Analysis		
Lab Sample #	52413132-1			52413132-2			52413132-3			52413132-4		
Sample Identification	TAPE1			TAPE2			TAPE3			TAPE4		
Sample Location	LOUNGE CABINETS UNDER SINK			BALLROOM EAST WALL BEHIND BASEBOARD			MECHANICAL ROOM WEST WALL			MECHANICAL ROOM CEILING		
Sample Type / Metric	Tape Lift			Tape Lift			Tape Lift			Tape Lift		
Analysis Date	Tue December 29, 2020			Tue December 29, 2020			Tue December 29, 2020			Tue December 29, 2020		
Determination	GROWTH			GROWTH			GROWTH			GROWTH		
Fungal Types Identified		Mold Present			Mold Present			Mold Present			Mold Present	
Chlamydospores		Present			---			---			---	
Cladosporium		---			---			Present			---	
Hyphae		---			Present			Present			Present	
Penicillium/Aspergillus		---			Present			---			---	
Stachybotrys		---			---			Present			Present	
Zygosporium		---			---			Present			---	
Total Spore Count <sup>#</sup>		NA			NA			NA			NA	
Minimum Detection Limit	1			1			1			1		
<b>Comments/Definitions</b> <b>Raw Count:</b> Actual number of spores observed and counted. <b>Spores/m<sup>3</sup>:</b> Spores per cubic meter. <b>% of Total:</b> Percentage of a particular spore in relation to total number of spores. <b>Present</b> = growth observed. <b>---</b> : Spore type was not observed. <b>*</b> : Indicates to look above at the names in red under "indoor problem fungi".	Presence of current or former MOLD GROWTH observed.  CHLAMYDOSPORES - Too Numerous To Count.			Presence of current or former MOLD GROWTH observed.  PENICILLIUM / ASPERGILLUS - Too Numerous To Count.			Presence of current or former MOLD GROWTH observed.  CLADOSPORIUM - Too Numerous To Count. STACHYBOTRYS - 842 spores / square inch. ZYGOSPORIUM - Too Numerous To Count.			Presence of current or former MOLD GROWTH observed.  STACHYBOTRYS - Too Numerous To Count.		

## Mold Glossary

**PREPARED FOR:** ENVIRONMENTAL RESEARCH AND RESTORATION

**TEST ADDRESS:** 8955 MIRALAGO WAY PARKLAND, FL 33076

### Introduction

All spores found in indoor air are also normally found in outdoor air because most originate or live in the soil and on dead or decaying plants. Therefore, it is not unusual to find mold spores in indoor air. This Mold Glossary is only intended to provide general information about the mold found in the samples that were provided to the laboratory.

#### *Chlamydospores*

**Outdoor Habitat:** Soil and decaying vegetation

**Indoor Habitat:** Wetted wood and gypsum wallboard paper, paper products.

**Allergy Potential:** None known

**Disease Potential:** None known

**Toxin Potential:**

**Comments:** Asexual resting spores of all fungi

#### *Cladosporium*

**Outdoor Habitat:** Cladosporium is one of the most common environmental fungi observed worldwide and is widely reported from soil and decaying vegetation.

Cladosporium herbarum and C. cladosporioides are among the most frequently encountered species, both in outdoor and indoor environments.

**Indoor Habitat:** Wetted wood and gypsum wallboard paper, paper products, textiles, rubber, window sills. Cladosporium has the ability to grow at low temperatures and can thus, grow on rubber gaskets and food in refrigerators.

**Allergy Potential:** Type I (hay fever, asthma) - an important and common outdoor allergen

**Disease Potential:** Opportunistic pathogen in immunocompromised persons, not normally a pathogen in healthy individuals. Cladosporium are some of the most common species reported as indoor contaminants, occasionally linked to health problems.

**Toxin Potential:** Cladosporium has two known toxins (cladosporin and emodin). These toxins are not known to be highly toxic. There is no evidence in the literature of toxic effects associated to inhalation of Cladosporium conidia (spores) indoors.

**Comments:** The most commonly reported spore in the outdoor air worldwide. This makes Cladosporium one of the most commonly reported and abundant spore types both indoors and outdoors. The prevalence of this spore can vary throughout the year, but is especially high in late summer and autumn, especially where cereal crops are commonly planted.

An important and common allergen source.

## Mold Glossary

PREPARED FOR: ENVIRONMENTAL RESEARCH AND RESTORATION

TEST ADDRESS: 8955 MIRALAGO WAY PARKLAND, FL 33076

### *Hyphae*

**Outdoor Habitat:** Any cellulose-based substance that fungi can inhabit.

**Indoor Habitat:** Wetted wood and gypsum wallboard paper, etc.

**Allergy Potential:** Known to be allergenic.

**Disease Potential:** None known

**Toxin Potential:** None known

**Comments:** "Root-like" structures of fungal growth that can become airborne and can possibly be allergenic. When hyphae are found growing on a surface and associated with fruiting bodies and/or fungal spores, they indicate that growth has taken. Sometimes hyphae grow and do not produce spores. Hyphae are generally not specific to any particular type of fungus or mold type. A mass of hyphae on a surface is indicative of mold growth.

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### *Penicillium/Aspergillus*

**Outdoor Habitat:** Soil and decaying vegetation, textiles, fruits. These spores are commonly observed and are a normal part of outside air.

**Indoor Habitat:** Wetted wood and gypsum wallboard paper, textiles, leather, able to grow on many types of substrates.

**Allergy Potential:** Type I (hay fever, asthma), Type III (hypersensitivity pneumonitis)

**Disease Potential:** Opportunistic pathogen in immunocompromised persons, not normally a pathogen in healthy individuals.

**Toxin Potential:** Several known

**Comments:** Extremely common in indoor air in low to moderate amounts as compared to the outside air. This type of spore should not constitute an overwhelming percentage (e.g., 90% or greater) and/or be present in very high numbers as compared to the outside (control). However, this type of mold is not always detected in outside air.

There is a wide range of what is a NORMAL amount of this type of mold spores in indoor air.

These two genera are grouped together because they cannot be reliably differentiated into their respective genera based solely on spore morphology.

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## Mold Glossary

PREPARED FOR: ENVIRONMENTAL RESEARCH AND RESTORATION

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### *Stachybotrys*

**Outdoor Habitat:** Soil and decaying vegetation, especially straw

**Indoor Habitat:** Wetted wood, gypsum wallboard paper, cardboard boxes and ceiling tiles. This type of mold needs significant water to grow and thrive

**Allergy Potential:** Type I (hay fever, asthma)

**Disease Potential:** None known

**Toxin Potential:** Several known (including macrocyclic trichothecenes, satratoxin F, G, H)

**Comments:** Spores can be dispersed into the air when old and dry, but are wet, slimy and heavy when actively growing and thus are not easily dispersed into the air. Significantly higher numbers of spores, as compared to outside background levels, of this genus are not normal for indoor environments and indicate a current or former water problem. It is not that unusual to find the occasional *Stachybotrys* spore in the air indoors. *Stachybotrys* has several mycotoxins and has been implicated as a causative agent in disease. HIGH CONCENTRATIONS AND LONG EXPOSURES TO STACHYBOTRYS SHOULD BE AVOIDED.

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### *Zygosporium*

**Outdoor Habitat:** Soil and decaying vegetation

**Indoor Habitat:** Wetted wood and gypsum wallboard paper

**Allergy Potential:** None known

**Disease Potential:** None known

**Toxin Potential:** None known

**Comments:** Rarely observed growing indoors, very difficult to identify spores without fruiting bodies

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3301 NW 55TH ST., FT LAUDERDALE, FL 33309  
(888)854-0477

## CHAIN OF CUSTODY

COMPANY ACCOUNT CODE



310311873

WEATHER:

FOG RAIN SNOW WIND

R/H

TEMP

CONDITIONS

LIGHT

MODERATE

HEAVY

CLEAR

## COMPANY CONTACT INFORMATION

NOT NECESSARY IF USING COMPANY ACCOUNT BARCODE

## PROPERTY LOCATION INFORMATION

CLIENT NAME:

ADDRESS:

CITY:

STATE:

ZIP:

Mirabago Stokes H.O.A. / Jeff Goldstein. Mirabago way Portland FL 33076

### ANALYSIS TURNAROUND TIMES

### RECOMMENDED FLOW RATE & SAMPLING TIMES

### SAMPLE TYPE ANALYSIS CODES

MOLD - SAME DAY

LEAD & WATER - 3 DAYS

#### TOTAL VOLUME RECOMMENDATIONS:

AIR-O-CELL/ALLERGENCO-D:

NORMALLY - 15 LITERS / 10 MINS = 150L

HIGH DEBRIS - 15 LITERS / 5 MINS = 75L

WALL CAVITY - 15 LITERS / 30 SECS = 7.5L

ST - SPORE TRAP TYPES: AIR-O-CELL, ALLERGENCO, ETC.

BC - BULK COUNT

T - TAPE/BIO-TAPE

B - BULK

SW - SWAB

SC - SWAB COUNT

AS - ASBESTOS

LP - LEAD PAINT

W - WATER

TC - TAPE COUNT

ASBESTOS - SAME DAY

CHINESE DRYWALL - CALL  
& OTHER TESTS

## SAMPLE SERIAL #

## COLLECTION LOCATIONS

## SAMPLE NOTES

TOTAL  
VOLUME

SAMPLE  
TYPE CODE

1 Lounge cabinets under sink.  
2 Ball room East wall behind baseboard  
3 Mechanical room west wall  
4 Mechanical room ceiling

Surface  
Surface  
Surface  
Surface  
Tape  
Tape  
Tape  
Tape

10 ALL REPORTS CAN BE VIEWED AFTER LOGGING INTO INSPECTORLAB.COM AT [HTTPS://INSPECTORLAB.COM/ISG/INSPECTORS/SEARCHPROPERTIES](https://inspectorlab.com/isg/inspectors/searchproperties)

SAMPLED BY: Gasbrow I

DATE: 12/29/20

RELEASED BY: NONE INSPECTOR ONLY

DATE: 1/1/

ACCEPTED  
REJECTED



PREPARED BY:

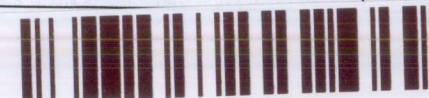
MAC

ANALYZED BY:

MAC

REPORTED BY:

MAC



52413132

Environmental Research and Restoration  
Maurice Baum - (954) 967-0011 - Samples: 4  
Date Received: 12/29/20 12:50 PM

SEND TO: 3301 NW 55TH ST., FT LAUDERDALE, FL 33309 RESULTS ALWAYS AVAILABLE

RESERVED

**EXHIBIT**  
**B**  
**PHOTOGRAPHS**



# MiraLago: Clubhouse

8955 MiraLago Way, Parkland, FL 33076

Inspection Date: December 29<sup>th</sup>, 2020

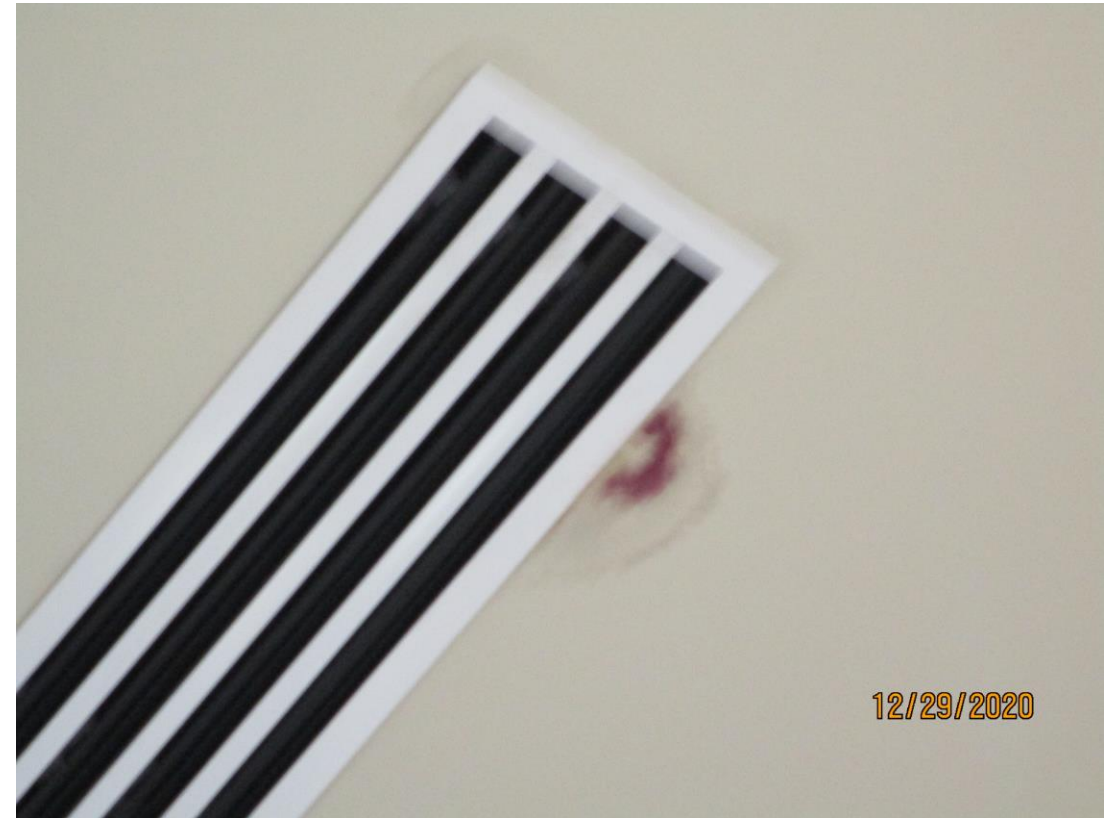




# Water stain and mold growth on **Majestic Ballroom** ceiling



# Water stain and mold growth on **Majestic Ballroom** ceiling



# Water stain and mold growth on **Majestic Ballroom** ceiling





# Water damage in **East** and **West** walls baseboard in **Majestic Ballroom**



# Water stains and mold growth inside the Aqua Lounge lower cabinets under the sink



# Water damage on the Aqua Lounge ceiling





# Water stains and mold growth on the **South Ladies Room ceiling**





# Low temperature and elevated humidity in Majestic Ballroom



# Water stains and mold growth above the **South Ladies Room** ceiling from chiller lines



# Low temperature and elevated moisture **LOUNGE ROOM**



# Chiller lines water temperature

## Mechanical Room





# Mold growth in Mechanical Room

## South wall





# Water stains and mold growth in **Mechanical Room North** wall and ceiling



# Visible damage on A/C plenum





# Water damage and mold growth in **Mechanical Room North** wall behind the chiller lines

