



Limited Initial Assessment

**205 E Burleigh Blvd.
Tavares, FL 32778**

AMRC Project # 24-080832-IAQ

August 27, 2024

Submitted to:

**Mr. Kevin McCraw
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American Management Resources Corporation (AMRC) is pleased to present this report for the limited initial assessment for water damage and visible microbial growth within the commercial office located at 205 E Burleigh Blvd. in Tavares, Florida (the 'site', or 'room(s)'). This report summarizes visual assessment, direct reading measurements, sampling data, and recommendations.

EXECUTIVE SUMMARY

On August 22, 2024, AMRC visited the site and performed a non-destructive limited visual assessment of accessible building materials and select contents, and collected measurements of moisture content, temperature, and relative humidity. Additionally, air samples were collected for fungal spore analysis. During the assessment, AMRC did observe localized areas of water damage and visible suspect mold growth, and elevated moisture was detected. The temperature and relative humidity readings were within recommended guidelines. The air samples collected did not reveal fungal amplification at the time of the assessment.

Based on the presence of impacted building materials, it is AMRC's opinion that the source(s) of the water intrusion or moisture should be repaired, and impacted materials should be removed/cleaned by an experienced contractor according to current industry guidelines. Recommendations are provided in this document.

SITE DESCRIPTION

The subject site is a one-story, concrete block structure built on a poured concrete slab. The exterior of the structure consists of stucco. The interior wall and ceiling systems consist of wallboard material. The Heating Ventilation and Air Conditioning (HVAC) is supplied by a split system.

METHODS AND MATERIALS

Visual Inspection

AMRC inspected readily accessible areas for visible microbial (mold) growth and/or water-impacted building materials. Observations are described below, and noteworthy photos are provided in the attached photo log.

Moisture Measurements

Using a GE Surveymaster™ Protimeter, AMRC measured moisture levels in select building materials throughout the site. Results of moisture content in wood is expressed as a percent of moisture content (%MC) and the moisture content in other building products is expressed as a percent wood moisture equivalent (%WME). Generally, readings between 0 and 15% WME/MC are considered 'not elevated', readings between 15 and 20% WME/MC are 'above normal' and readings above 20% WME/MC are considered 'elevated'.¹The relative known moisture (REL) is determined using the scanning function of the Protimeter and are used as a relative percentage of moisture equivalents. Excessive moisture in buildings can lead to decay and deterioration of components and decorative finishes.

¹Protimeter Technical Data Sheet 52. March 1996

Temperature/Relative Humidity (RH)

Direct read measurements for temperature and relative humidity were measured during the site visit using an AZ 7755 Portable CO₂ Meter. The results were compared with the recommended guidelines of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Incorporated (ANSI-ASHRAE 55-2010 “Thermal Environmental Conditions for Human Occupancy”) which gives thermal environmental conditions considered to be both comfortable and healthy for building occupants. The recommended temperature zones lie between 71- and 76-degrees Fahrenheit (°F) and between 20 and 60 percent relative humidity (%RH), depending on the clothing worn and the activities of the building occupants. These guidelines are intended to achieve thermal conditions at which 80 percent of the occupants will find the building environment acceptable (comfortable). The Environmental Protection Agency (EPA) recommends maintaining the relative humidity between 30 – 60% to inhibit the potential for mold growth.²

Carbon Dioxide

The concentration of carbon dioxide was measured using an AZ 7755 Portable CO₂ Meter and the results were compared to ASHRAE guidelines. ASHRAE standards recommend indoor concentrations not exceed outdoor concentrations by more than 700 parts per million (ppm). Concentrations of carbon dioxide that exceed the outdoor by 700 ppm can be used as an indicator of inadequate ventilation, i.e., insufficient introduction of fresh make-up air.

Non-viable Microbial Samples

Airborne levels of microorganisms were measured using a calibrated Buck BioAire and Allergenco cassettes for direct examination and identification of fungal spores and fungal structures. Results are reported in concentrations of structures per cubic meter (structures/m³) and are attached to this report. The samples were analyzed by an accredited laboratory, Daane Labs, an independent microbiology identification laboratory located in Naples, Florida, using chain of custody procedures.

OBSERVATIONS, RECOMMENDATIONS AND RESULTS

Visual Inspection and Moisture Measurements

Table 1: Visual Observations

Area/Room	Observation	Recommendation**
Conference Rooms 1 & 2, Offices 1, 2, 6, 7, 8, 9, Bathroom, Men’s, Women’s, Storage, Cubicles	<ul style="list-style-type: none">◦ A malodor was not observed.◦ Water staining/damage and visible suspect mold growth were not observed.◦ Elevated moisture was not detected.	<ul style="list-style-type: none">◦ Unless further observations reveal damage in this area, remediation is not necessary.
Office 3	<ul style="list-style-type: none">◦ A malodor was not observed.◦ Water damage was observed at the base of the rear exit door trim.◦ Visible suspect mold growth was observed at the base of the rear exit door frame behind the trim.◦ Elevated moisture was not detected.	<ul style="list-style-type: none">◦ Remove the rear exit door trim from both sides.◦ Clean the exposed door frame and drywall by HEPA filter vacuuming and wiping with a detergent cleaner.

² <http://www.epa.gov/mold/moldresources.html>

Area/Room	Observation	Recommendation**
Office 4	<ul style="list-style-type: none"> ◦ A malodor was not observed. ◦ Water staining/damage was not observed. ◦ Visible suspect mold growth was observed on the supply vent next to the attic hatch. ◦ Elevated moisture was not detected. 	<ul style="list-style-type: none"> ◦ Clean the vent by HEPA filter vacuuming and wiping with a detergent cleaner.
Office 5	<ul style="list-style-type: none"> ◦ A malodor was not observed. ◦ Water staining was observed on the ceiling below the air handler. ◦ The ceiling was bowed downward below the air handler. It was reported that this is a repeat impact that has not occurred within the last 3 years. The attic has a plywood floor, and the topside of the drywall was inaccessible. ◦ Elevated moisture was not detected. 	<ul style="list-style-type: none"> ◦ If needed, remove the impacted ceiling two feet beyond the bowing.
Break Room/ Electrical Room	<ul style="list-style-type: none"> ◦ A malodor was not observed. ◦ Slight water damage (paint delamination) was observed at the base of the rear exit door frame in the electrical room. ◦ Visible suspect mold growth was not observed. ◦ Elevated moisture was detected in the drywall below the break room window and rear wall and in the drywall on the left wall (near front corner) in the electrical room. 	<ul style="list-style-type: none"> ◦ Under containment, remove the drywall from the left and rear break room walls from the floor to the windowsill and extend four feet (4') in length. ◦ Under containment, remove the drywall from the left electrical room wall from the floor up five (5') and extending two feet (2') in length from the front wall. ◦ Continue removing materials as needed a minimum of two feet beyond visible mold, water staining, and/or wet materials. ◦ Monitor the rear exit door frame for discoloration. If discoloration appears, remove the door trim. ◦ Conduct water testing to identify point(s) of water intrusion and repair as needed.
Lobby	<ul style="list-style-type: none"> ◦ A malodor was not observed. ◦ Water staining/damage was not observed. ◦ Slight visible suspect mold growth was observed on the supply vent. ◦ Elevated moisture was not detected. 	<ul style="list-style-type: none"> ◦ Clean the vent by HEPA filter vacuuming and wiping with a detergent cleaner.
◦The directions/locations within the rooms provided in the table above are given assuming you are standing outside looking at the entry door.		

Temperature/Relative Humidity (RH)/ Carbon Dioxide

Table 2: Temperature, Relative Humidity and Carbon Dioxide Readings

Location	Temperature (°F)	Relative Humidity (%RH)	Carbon Dioxide (ppm)
Outdoor	84.1	99.9	552
Conference Room 1	72.5	49.6	776
Conference Room 2	73.3	55.2	794
Office 1	72.8	50.5	802
Office 2	73.9	53.2	829
Office 3	74.7	53.8	859
Office 4	74.6	53	844
Office 5	74.4	53.7	826
Office 6	74.9	53.9	977
Office 7	74.7	51.8	833
Office 8	73.5	55.2	788
Office 9	73	52.2	780
Storage	74	53.8	805
Cubicles	73.3	54.4	824
Break/Elec. Room	74.6	53.9	850
Lobby	74.4	53.3	805

- The temperature was within the recommended guideline for thermal comfort during the sampling period.
- The relative humidity was within the recommended guideline for limiting conditions conducive to mold growth during the sampling period.
- The carbon dioxide was within the recommended guideline.

Non-viable Microbial Samples

Table 3: Fungal Air Sample Results

Location	Total Spore Count (spores/m ³)	Outdoor Spore Count (spores/m ³)
Conference Room 1	440	7,400

- Based on the sampling data, fungal amplification was not apparent in the air during the sampling event.

Notes: When fungal samples are collected within a building, it is expected to find some level of fungal spores and parts present, both in the air and on surfaces. Indoor living environments should not be expected to be sterile. Molds are part of the natural indoor and outdoor environment. The outdoor environment provides a continuous opportunity for these organisms to be present. Therefore, it is impossible to rid a typical indoor environment completely of mold spores (“mold free”) or maintain an environment free of mold spores; some mold spores will be found floating through the air and in dust. Mold growth is controlled by controlling moisture, and indoor mold growth can and should be prevented or controlled by controlling moisture indoors.³There are no EPA or federal mold standards or standardized methods for sample collection, analyses of mold, or data interpretation. There are no peer reviewed health or exposure-based standards that can be used to evaluate a mold sampling result.⁴The analysis is presumptive, and the results are limited to what is in the air and collected by the sampling device at the exact time of sampling.

Molds are everywhere in the environment, especially in the humid south, and require the following to grow: an organic matter food source, appropriate temperature, adequate moisture, and oxygen. Availability of water is the most significant factor affecting mold growth. The ability for mold to grow, and the types of fungi that could grow, are determined by the water activity of the surface on which it is growing. Most molds require a surface moisture or humidity level of 70-90% to start growing, however, some can grow in conditions as low as 61%. Depending on the amount of available water, mold growth can occur very quickly, within 24-48 hours. Long-term, high-humidity conditions allow porous materials to absorb moisture from the air and can be favorable for mold growth.

General recommendations are discussed below for remediation of microbiologically impacted contents and should be followed for all areas that contain suspect microbiological growth. The cleanup recommendations should be used in other areas if further affected materials are found during the cleanup work. Also, it is recommended that a general cleaning be performed on the interior surfaces of the project areas at the completion of remediation activities.

Based on these initial site visits, the following general recommendations are made:

1. Cleaning and decontamination work should be completed by trained workers utilizing a written specification/recommendation/protocol.
2. The work areas should be unoccupied; the HVAC system servicing the work areas should be shut down and the ventilation ducts sealed during work activities. Dehumidification equipment should be used to condition the air when the HVAC system is not in use.
3. High Efficiency Particulate Air (HEPA)-filtration machines should be used throughout the project area during and after cleaning activities to reduce the particulate.
4. Biocides can have negative effects on some individuals and building materials. If biocides are to be used in this project, AMRC recommends the contractor discuss with the appropriate site manager all products to be used in the remediation activities. AMRC

³EPA. <http://iaq.supportportal.com/ics/support/kbanswer.asp?deptID=23007&task=knowledge&questionID=16460>

⁴FL Department of Health. <http://www.floridahealth.gov/%5C/environmental-health/mold/index.html#should%20test%20for%20mold>

recommends a mild detergent solution or clean water for use in cleaning activities during this project.

5. At a minimum, the interior of the air handler(s) servicing the impacted areas should be cleaned (including the coils, fan and insulation) using HEPA-filtered vacuum cleaners and wet wiping with an appropriate cleaner. Any damaged insulation should be replaced.
6. HEPA vacuuming of surfaces is recommended at the start and finish of the aforementioned cleaning processes.
7. Once all work has been completed, the areas should be re-inspected for microbial growth to evaluate the effectiveness of the remediation activities. If further assessment of the work area is necessary, fungal samples may also be collected.
8. HEPA filtration should run for a minimum of 24 hours following the conclusion of remediation activities and prior to final inspection and testing.
9. A post-remediation inspection should be performed at the end of remediation activities. AMRC recommends that the following criteria are met in each of the impacted areas prior to dismantling the containment(s) and reconstruction:
 - Project area(s) are free of visible dust and debris;
 - Remaining building materials/contents are free of visible mold;
 - Absence of malodors;
 - If air samples are collected, mold spore concentrations inside the containment should be similar (in total spore count and genera) or less than, samples collected outside the containment and outdoors;
 - If surface samples are collected, mold spore concentrations should be reported as no more than "Low" and are dependent upon the spore identification.

This report has been prepared for the sole use of Hunt Real Estate Services and may not be relied on by any other party without AMRC's written permission. These recommendations are provided at your request and are meant to provide a brief outline of work suggested to remediate the mold growth in the known areas of the subject site and apply to conditions observed at the site during the time of the assessment and do not predict future conditions. These recommendations are suggestions and minimal guidelines for an experienced and competent remediation contractor to include in their work plans and procedures and are not a site-specific specification. A site-specific specification can be prepared if requested. It is possible that during the remediation work, further areas of microbiological growth may be discovered, and additional work, above and beyond AMRC's initial scope of work, may be necessary.

In all situations, the underlying cause of moisture accumulation and/or fungal growth must be fully rectified or fungal growth will continue; or, in cases where full remediation has been performed, fungal growth will recur. If overall moisture accumulation within the building is not prevented and controlled, then fungal growth will occur.

AMRC does not intend this report to offer any conclusions about the integrity of the structure or the overall cleanliness of the inspected areas. The AMRC site visit and any opinions expressed are limited to non-destructive assessment methods. AMRC is not a medical or health services company. AMRC has no medical staff and is not licensed to practice medicine or to give medical advice. AMRC recommends that appropriate medical advice be sought by anyone concerned about the potential risks and hazards of exposure to microbiological organisms if present.

AMRC appreciates this opportunity to provide technical assistance. If you have any questions, please do not hesitate to contact us at (239) 936-8266.

Respectfully,

AMERICAN MANAGEMENT RESOURCES CORPORATION



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Enclosure: Photo Log
 Laboratory Report



Photo 1: 205 E Burleigh Blvd., Tavares, FL 32778

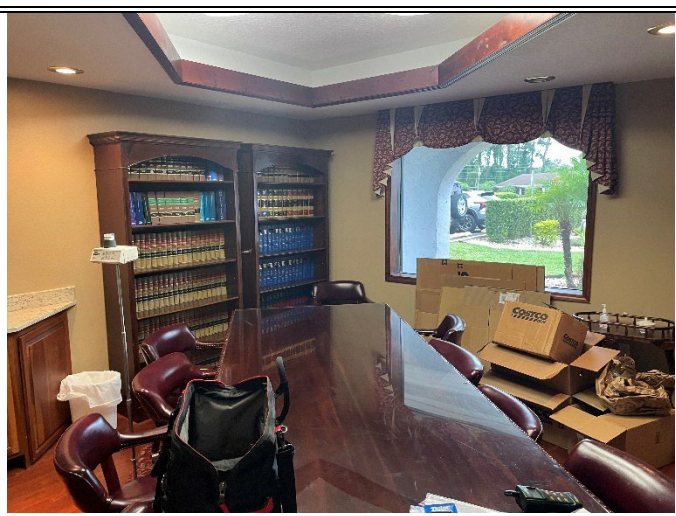


Photo 2: Conference Room-Overview.

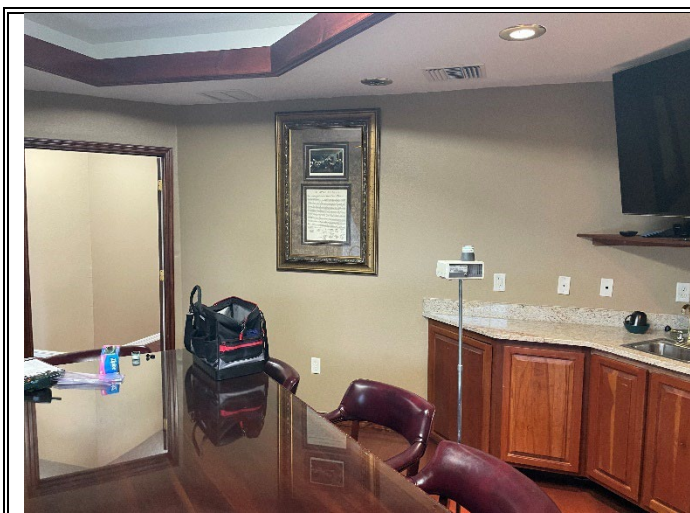


Photo 3: Water staining/damage and visible suspect mold growth were not observed.



Photo 4: Water staining/damage and visible suspect mold growth were not observed.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)





Photo 5: Elevated moisture was not detected.



Photo 6: Overview of readings.



Photo 7: Conference Room 2-Overview.

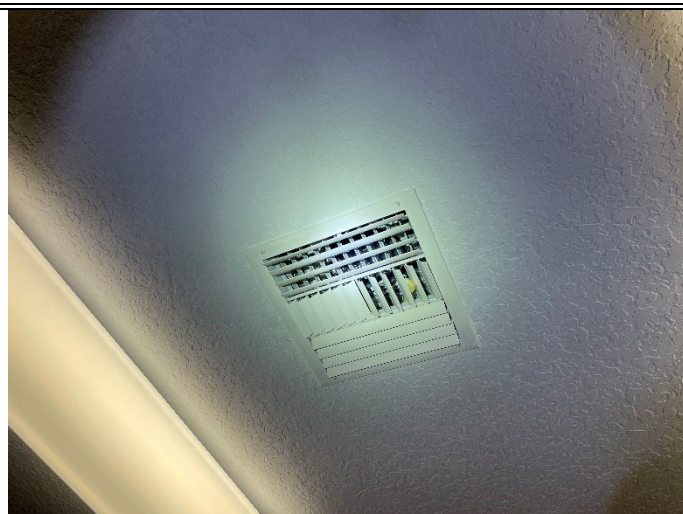


Photo 8: Water staining/damage and visible suspect mold growth were not observed.

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Date: August 22, 2024 (Photographs Taken)



Photo 9: Elevated moisture was not detected.



Photo 10: Overview of readings.



Photo 11: Office 1-Overview.



Photo 12: Water staining/damage and visible suspect mold growth were not observed.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)

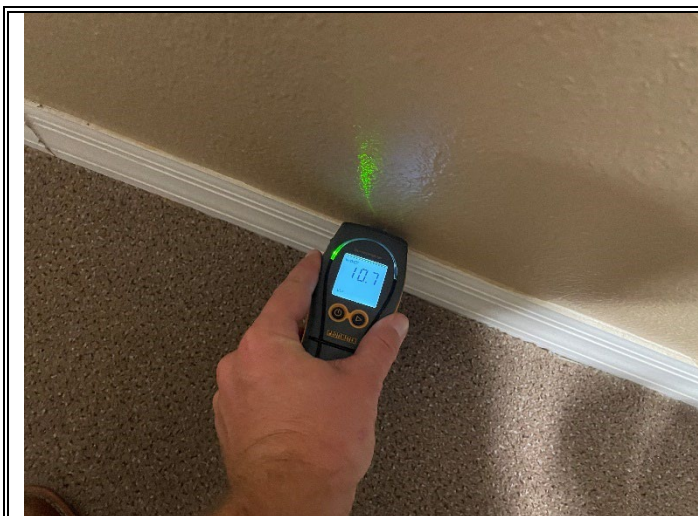


Photo 13: Elevated moisture was not detected.



Photo 14: Overview of readings.



Photo 15: Office 6-Overview.



Photo 16: Water staining/damage and visible suspect mold growth were not observed.

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Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 17: Elevated moisture was not detected.



Photo 18: Overview of readings.



Photo 19: Office 7-Overview.

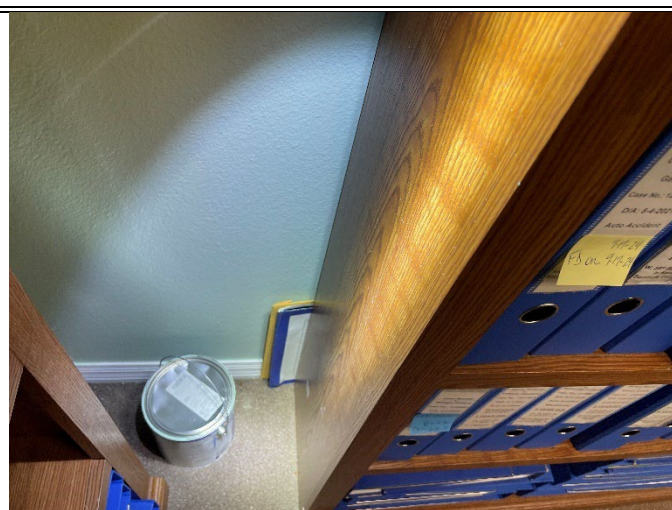


Photo 20: Water staining/damage and visible suspect mold growth were not observed.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 21: Water staining/damage and visible suspect mold growth were not observed.



Photo 22: Overview of readings.

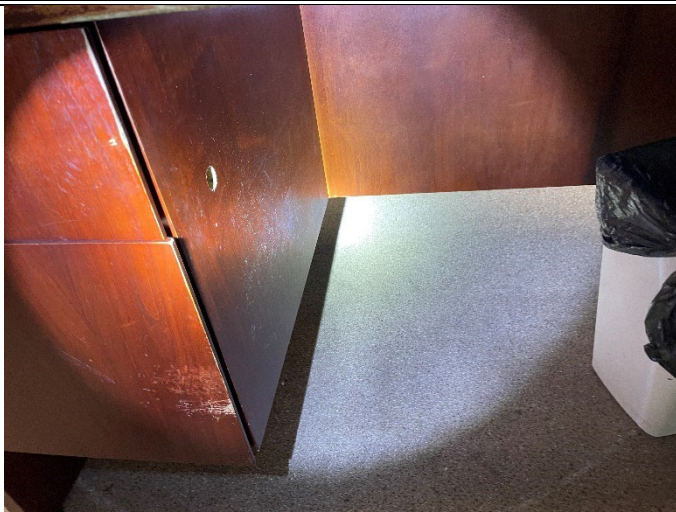


Photo 23: Office 8-Overview.



Photo 24: Water staining/damage and visible suspect mold growth were not observed.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)

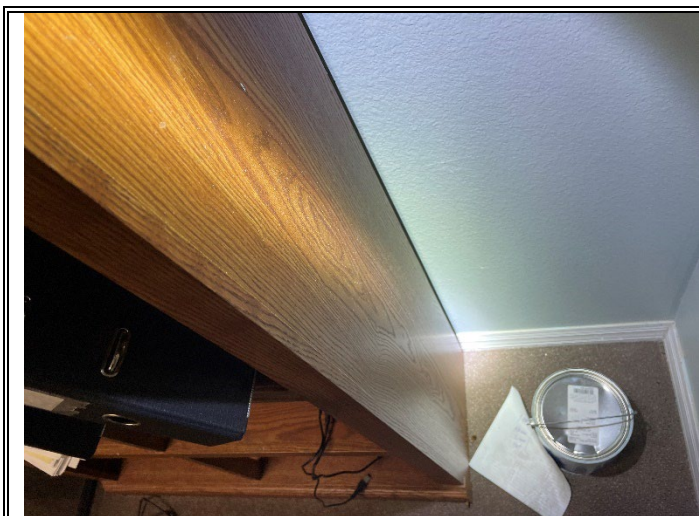


Photo 25: Elevated moisture was not detected.



Photo 26: Overview of readings.



Photo 27: Office 9-Overview.



Photo 28: Water staining/damage and visible suspect mold growth were not observed.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 29: Water staining/damage and visible suspect mold growth were not observed.

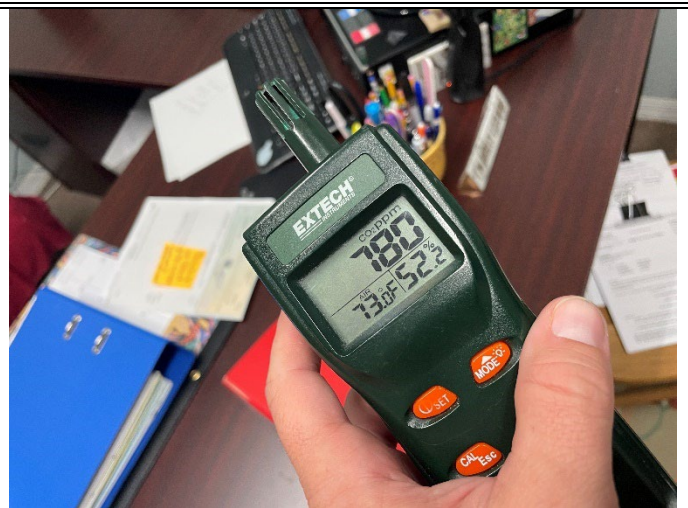


Photo 30: Overview of readings.

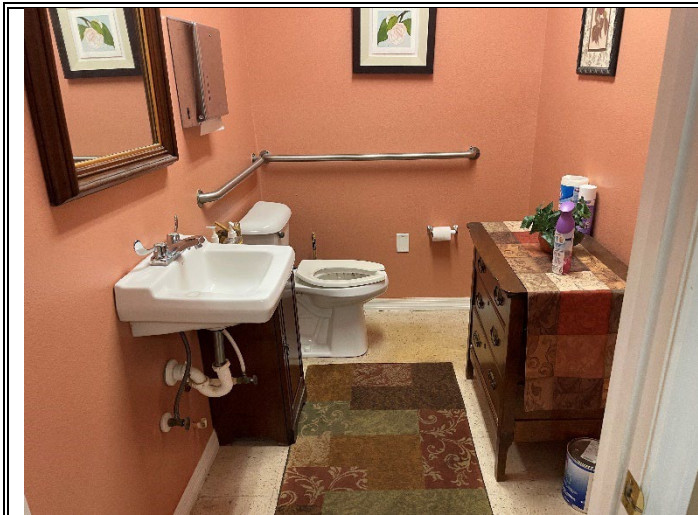


Photo 31: Bathroom- Water staining/damage and visible suspect mold growth were not observed and elevated moisture was not detected.

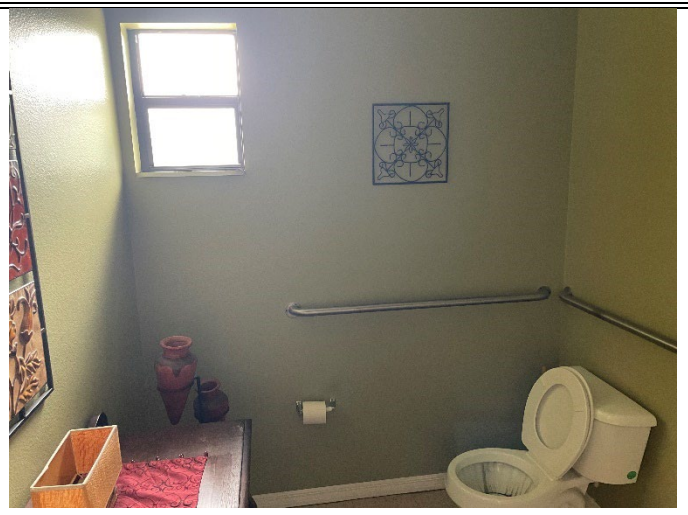


Photo 32: Men's- Water staining/damage and visible suspect mold growth were not observed and elevated moisture was not detected.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)

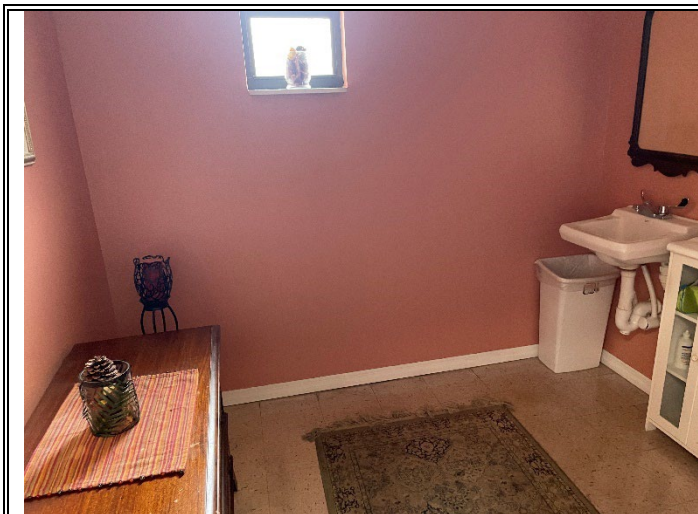


Photo 33: Women's- Water staining/damage and visible suspect mold growth were not observed and elevated moisture was not detected.



Photo 34: Cubicles-Overview.



Photo 35: Water staining/damage and visible suspect mold growth were not observed and elevated moisture was not detected.

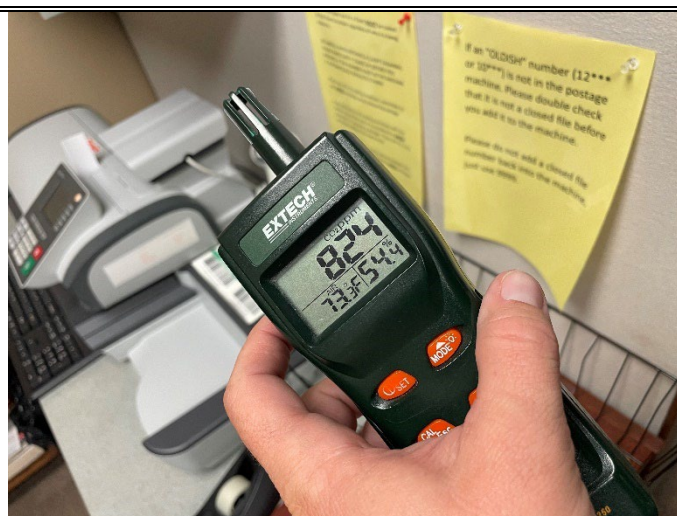


Photo 36: Overview of readings.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 37: Office 3-Overview.

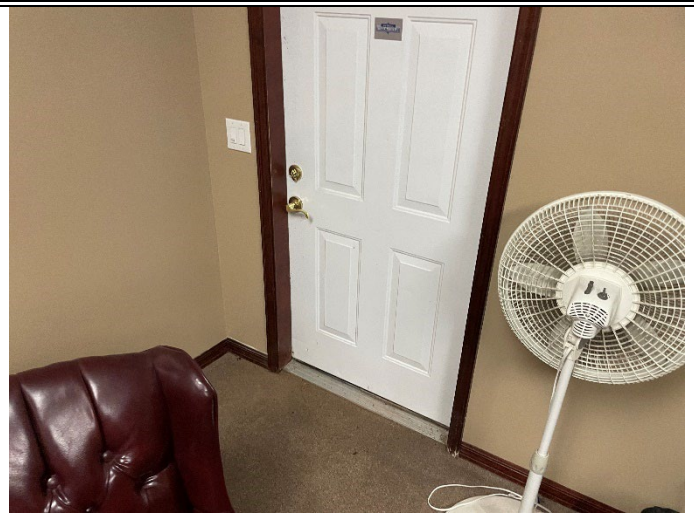


Photo 38: Rear exit door.



Photo 39: Water damage was observed at the base of the rear exit door trim.

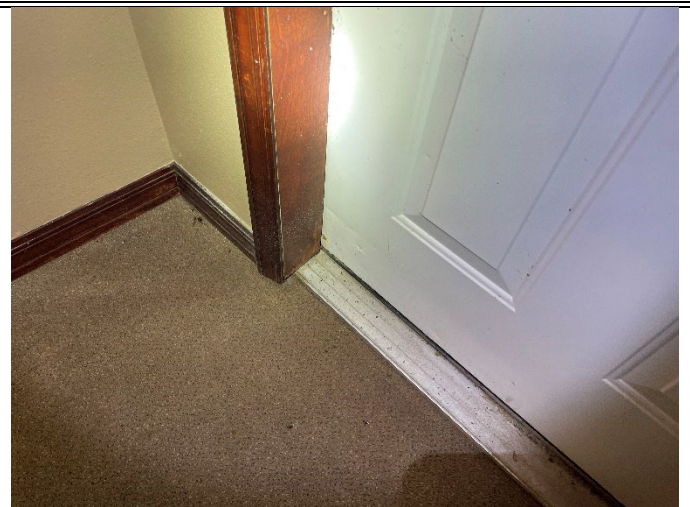


Photo 40: Water damage was observed at the base of the rear exit door trim.

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Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 41: Visible suspect mold growth was observed at the base of the rear exit door frame behind the trim.



Photo 42: Elevated moisture was not detected.

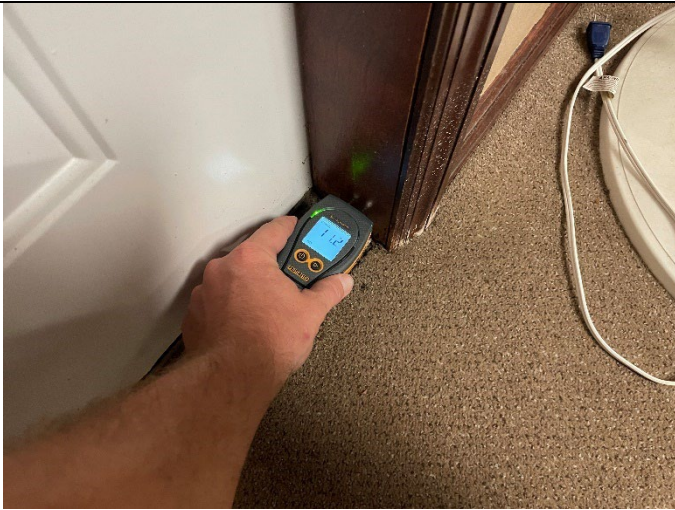


Photo 43: Elevated moisture was not detected.



Photo 44: Overview of readings.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 45: Office 4-Overview.



Photo 46: Visible suspect mold growth was observed on the supply vent next to the attic hatch.



Photo 47: Overview of readings.

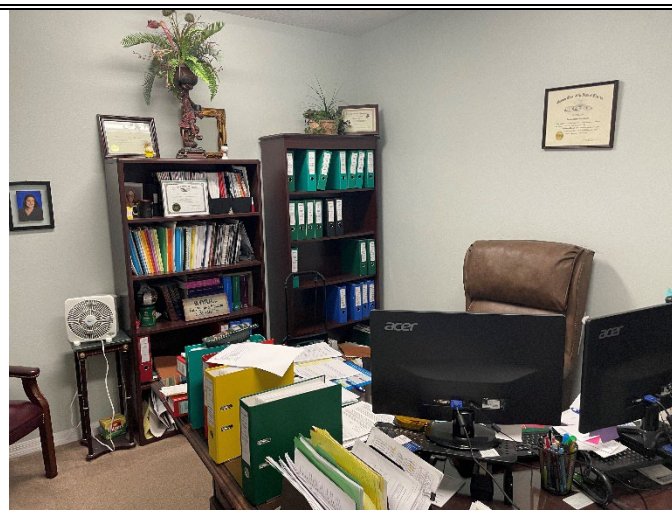


Photo 48: Office 5-Overview.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 49: Water staining was observed on the ceiling below the air handler.



Photo 50: The ceiling was bowed downward below the air handler.



Photo 51: Overview of readings.



Photo 52: Break Room-Overview.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



Photo 53: Elevated moisture was detected in the drywall below the break room window and rear wall.



Photo 54: Elevated moisture was detected in the drywall below the break room window and rear wall.



Photo 55: Elevated moisture was detected in the drywall below the break room window and rear wall.

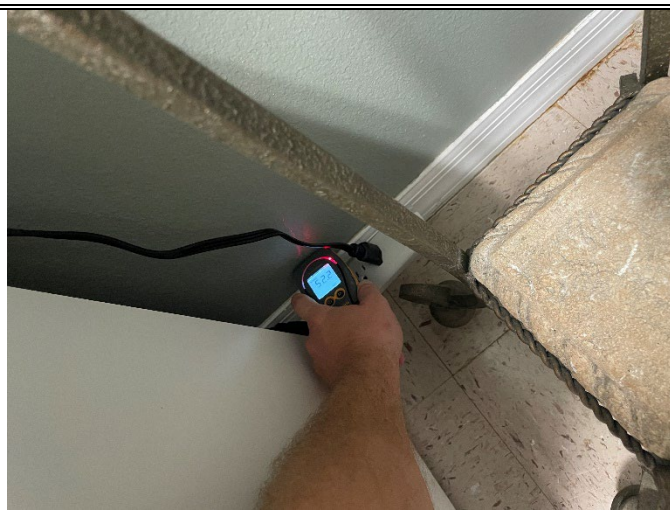


Photo 56: Elevated moisture was detected in the drywall below the break room window and rear wall.

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Date: August 22, 2024 (Photographs Taken)

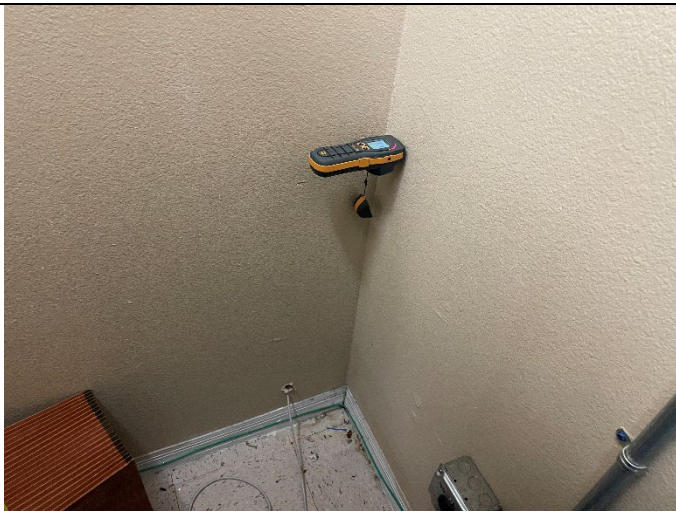


Photo 57: Elevated moisture was detected in the drywall on the left wall (near front corner) in the electrical room.



Photo 58: Elevated moisture was detected in the drywall on the left wall (near front corner) in the electrical room.



Photo 59: Lobby-Overview.



Photo 60: Slight visible suspect mold growth was observed on the supply vent.

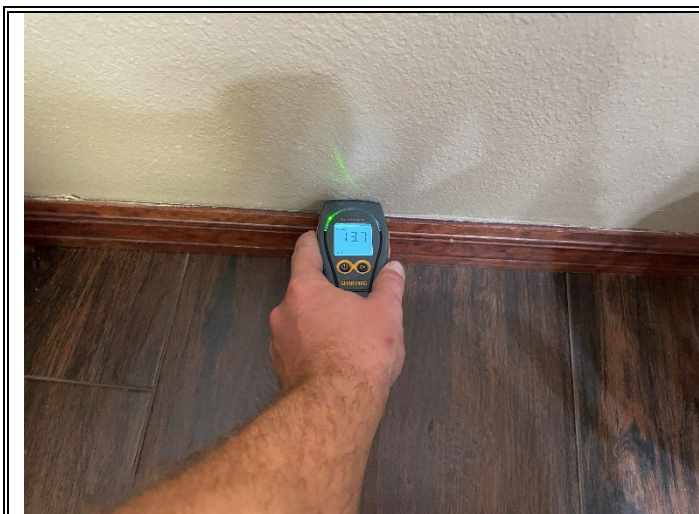


Photo 61: Elevated moisture was not detected.



Photo 62: Overview of readings.



Photo 63: Outdoor- Overview of readings.

Title: Site Photographs 24-080832-IAQ
Site: 205 E Burleigh Blvd., Tavares, FL 32778
Date: August 22, 2024 (Photographs Taken)



REPORT CODE: M-AMRC-226233

Company		AMRC Environmental					Project Name	Hunt Real Estate		Analyzed by/ Date	RFM	8/26/2024
Address		5230 Clayton Ct, Fort Myers, FL 33904										
Contact		Cassie Rahe					Project Address	205 E Burleigh Blvd Tavares, Fl				
Phone		239-936-8266										
Email		cassie@amrc-environmental.com					Project Number		24-080832-AS/LAQ			
Lab ID Number		226233-1		226233-2			Intentionally Left Blank		Intentionally Left Blank		Intentionally Left Blank	
Collection Date		8/22/24		8/22/24								
Volume		75		75								
Location		Outside 1		Inside								
% Slide Analyzed		100		100								
Spore Identification		Raw Count	Spore/m ³	% of Total	Raw Count	Spore/m ³	% of Total					
	Aspergillus/ Penicillium		0	0		0	0					
	Chaetomium		0	0		0	0					
	Stachybotrys		0	0		0	0					
	Alternaria		0	0		0	0					
	Arthrinium		0	0		0	0					
	Ascospores	270	3600	49	7	93	21					
	Basidiospores	198	2640	36	8	107	24					
	Cladosporium	57	760	10	11	147	33					
	Cercospora		0	0		0	0					
	Curvularia	3	40	1	3	40	9					
	Dreschlera/ Bipolaris		0	0		0	0					
	Epicoccum		0	0		0	0					
	Fusarium		0	0		0	0					
	Ganoderma	27	360	5		0	0					
	Memmoniella		0	0		0	0					
	Myxomycetes/ Smut		0	0	2	27	6					
	Nigrospora		0	0	2	27	6					
	Pithomyces		0	0		0	0					
	Rust		0	0		0	0					
	Spegazzinia		0	0		0	0					
	Torula		0	0		0	0					
	Ulocladium		0	0		0	0					
	Other		0	0		0	0					
Total Fungi		555	7400	100	33	440	100					
Hyphal Fragment			0	N/A	4	53	N/A					
Background Debris (1-5)*		2		2								

Background Debris is a subjective assessment of the debris level (i.e., house dust) present in the sample, ranked from 1 to 5. A higher number corresponds to a higher level of debris.

*Higher Background Debris may interfere with the analyst's ability to identify spores

1 = 0-5% debris; 2 = 5-25% debris; 3 = 25-75% debris; 4 = 75-90% debris; 5 = 90-100% debris

The laboratory is not responsible for project sampling. Customer provided information: Project Name, Project Number, Project ID, Project Address, Collection Date, Volume, and Location

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