



Mold Inspection Report

November 16, 2023

Norman Public Library Central
103 West Acres Street
Norman, OK 73069

Inspectors: Gary Cavins and Jessica Von Tungeln
Assistant/Apprentice Inspectors: Jacob Miller, Lindsey Thomas, and David Serna

Introduction:

A mold investigation, including testing was conducted at 103 West Acres Street, Norman, OK 73069, after closing hours on Tuesday, November 14, 2023. This investigation and testing consisted of a visual inspection of the interior of the property, testing the air quality of common areas, and testing any areas of concern that were discovered during the visual inspection. Our testing methods consisted of air quality (spore trap) samples, tape lifts, and bulk samples. Thirty-two samples were delivered to the lab on the morning of Wednesday, November 15, 2023, and the results were received at three o'clock pm the same day. A preliminary protocol was written and issued so the remediation process could begin; however, a more detailed protocol will be issued as additional assessment is completed and more information becomes available.

1. Visual Inspection:

Gary Cavins and Lindsey Thomas conducted a visual inspection of the interior of the property located at 103 West Acres, Street, Norman, OK 73069, beginning after closing at nine o'clock pm on Tuesday, November 14, 2023. Numerous areas of visible water damage and microbial growth were identified throughout the facility and dispatched to the testing team as they were located. The inspection team utilized flashlights, UV lights, olfactory sense, and monitored the humidity and temperature throughout different areas of the facility. The following areas of concern were located during the visual inspection:

Staff Office 115:

- Possible visible microbial growth on a ceiling tile near the window on the west exterior wall. The ceiling tile was pulled, and water staining and potential microbial growth were visible on the other side of the tile. While inspecting above the acoustical ceiling in this area, significant water trails and microbial growth were located traveling down the plumbing chase. A considerable mold colony covered most of the bottom of this exterior chase wall and is travelling up the wall.
- There are multiple other ceiling tiles throughout the room with light water staining and indications of water intrusion.

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- Above the acoustic ceiling, there are numerous areas of water staining on steel columns and beams.

First Floor – Newspaper/Magazine Area:

- Visible water staining on ceiling tiles above the brick wall with newspaper display.

First Floor – Children’s Area

- Visible water damage and microbial growth on the ceiling near the exit door.
- Multiple fabric-covered bay windows were discolored and damaged by water intrusion. Upon further inspection, there was microbial growth visible on the outside drywall of these bay windows. This was visible when a ladder was set up and a ceiling tile was removed for additional inspection.

Second Floor – Room 201A

- Visible damage to the paint was seen from a leak around a window.

Second Floor – Room 231

- Water damage beneath the light fixture on the east side study room.

Second Floor – Room 233

- Tape seams are beginning to show, and a gap is beginning to form at the wall-to-ceiling joint, these can be an indication of water intrusion.

Second Floor – Study Area Suspended Ceiling

- Visible microbial growth was found on top of the suspended ceiling, and the ceiling tiles above the suspended ceiling have significant water staining.

Second Floor – Southwest Area

- Numerous ceiling tiles have water damage near the brick wall and exterior windows. We found no visible microbial growth; however, the lights intermittently went off on this floor impacting visibility.

Second Floor – East and South Ledger Board

- During the containment setup on November 16, 2023, microbial growth was found on the ledger board near the window adjacent to the TPO roof. This microbial growth ran the extent of the east and 60% of the south sides.

Third Floor – Room 305 (Pioneer Room)

- Visible water damage was located at the wall-to-ceiling transition in the corner of this room. Above the drop ceiling there are water trails and possible microbial growth.

Third Floor – Southwest Deck Exit Area

- Potential microbial growth was visible on ceiling tiles in this area. Above the drop ceiling there is water staining on the firewall and water trails on the beams and pipe above this area.

Third Floor – Room 311

- Water staining was found on a ceiling tile, but no signs of microbial growth were seen.

Third Floor - Roof Access Stairwell

- Significant water damage and microbial growth are below the deck for the roof access door and on the third-floor access landing.

Visual Inspection Conclusion

Numerous areas of visible water damage and microbial growth were found during the inspection. The staining and extent of the damage in some of these areas suggest that water intrusion has been an issue for an extended period. Due to the extent of visible damage and microbial growth, there are likely additional areas of water intrusion, damage, and microbial growth.

2. Air Quality Testing:

Air quality testing was performed in all areas with apparent water intrusion and potential microbial growth. A sample was taken from each floor in an open, common area to use as an interior control to establish what is normal for the indoor environment in comparison to other rooms with water damage/microbial growth. An exterior control sample was also taken. Seventeen spore trap samples were delivered to the lab for analysis. The lab determines the type of spores and the suspected quantity of each per cubic meter of air in the room/area they were taken. The areas below are samples that came back with mold species that may have the potential to be pathogenic or toxigenic and have a count exceeding the exterior control counts.

Staff Office 115

The sample in this office had very high levels of *Stachybotrys* spores, and the Hyphal Fragment count was much higher than the exterior control sample.

First Floor – Common Area (Interior Control)

Stachybotrys spores were detected in the first-floor common area.

First Floor – Newspaper/Magazine Area:

Stachybotrys spores were present.

First Floor – Children’s Area (Exit Door)

Alternaria spore counts were higher than the exterior sample.

First Floor – Bay Window Area (purple)

Stachybotrys spores were detected in this sample.

Second Floor – Study Area Suspended Ceiling

A low count of *Stachybotrys* spores was detected in this area.

Third Floor – Common Area (Interior Control)

A low count of *Stachybotrys* spores was detected in this area.

Third Floor – Room 305 (Pioneer Room)

A low count of Stachybotrys spores were detected in this area

Third Floor – Southwest Patio Exit Area

A low count of Stachybotrys spores were detected in this area and the Hyphal Fragment count was higher than the exterior sample.

Third Floor - Roof Access Stairwell

The Alternaria count was slightly higher than the exterior control sample.

Air Quality Testing Conclusion

Air quality testing (spore traps) confirmed there is microbial growth present in the facility and Stachybotrys spores are airborne in multiple areas, including the first and third floor common area sample. The staff office 115 had a very high level of Stachybotrys spores and Hyphal Fragments. All other areas with Stachybotrys present have low spore counts; however, it is present in many areas throughout the facility which is concerning overall due to it affecting the air quality of the building and potentially being a health and safety concern for employees and patrons.

3. Tape Testing:

Tape lifts are samples taken directly from a suspected visible mold colony. Tape lifts are effective at determining the type and concentration of mold spores. Tape lifts are primarily utilized in areas of visible microbial growth when it is not practical to take a bulk sample. Nine tape lift samples were taken during this inspection. Below are the samples that contained spore types that have the potential to be pathogenic or toxigenic.

Staff Office 115 – Plumbing Chase

Abundant Hyphal Fragments, Alternaria spores, and Stachybotrys spores.

First Floor – Newspaper/Magazine Area:

Moderate number of Hyphal Fragments and Stachybotrys spores.

First Floor – Bay Window Area (purple)

Abundant number of Hyphal Fragments and Stachybotrys spores.

Tape Testing Conclusion

The results of the tape testing confirm that there are actively growing colonies of Stachybotrys and Alternaria.

4. Bulk Testing:

When an area has visible microbial growth and a sample of the material itself can be removed and analyzed, this is a bulk sample. Bulk samples can confirm the presence of mold species on materials taken directly from the area of investigation. The following samples contained spore types that may have the potential to be pathogenic or toxigenic.

Staff Office 115 – Plumbing Chase (Drywall)

Present: Hyphal Fragments and Stachybotrys

First Floor – Children’s Area (Exit Door, Drywall from the ceiling)

Present: Hyphal Fragments and Alternaria

Second Floor – Study Area Suspended Ceiling

Present: Hyphal Fragments, Alternaria, and Stachybotrys

Second Floor – 201A (Drywall)

Present: Hyphal Fragments and Alternaria

Third Floor - Roof Access Stairwell

Present: Hyphal Fragments and Stachybotrys

Bulk Testing Conclusion

The results of our bulk testing confirm that several areas of microbial growth found during our inspection are actively growing/spreading Stachybotrys and Alternaria.

Mold Investigation and Testing Conclusion:

This mold investigation confirmed microbial growth in areas that appear to have had ongoing water intrusion issues. The mold species present are especially concerning in a facility that children, elderly, and immunocompromised individuals frequent as they may be more susceptible to having adverse reactions to mold species such as Stachybotrys and Alternaria that can be allergenic, pathogenic, and/or toxigenic. The presence of Hyphal Fragments in most of our samples is concerning as this is an indicator of active growth. The humidity in the building is well below levels that would likely contribute to microbial growth and most areas of concern located during our investigation and testing are sites of ongoing leaks and water intrusion issues. We recommend removing all microbial growth found and addressing the sources of water intrusion as soon as possible to help mitigate future microbial growth/spread.

Recommendations:

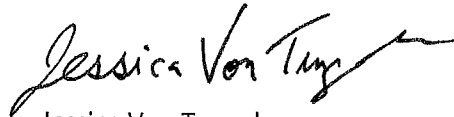
1. Engage a professional mold remediation company to address the identified areas of mold growth and remediate it promptly. There is a high likelihood that the company doing the remediation will find additional mold and which could necessitate further testing and modification of remediation protocols.
2. Repair any sources of water intrusion to prevent future mold development. We recommend engaging with a building envelope consultant to help resolve the ongoing exterior water intrusion.
3. Ensure proper ventilation and maintain humidity control to minimize mold growth.
4. Regularly inspect and maintain the property to prevent mold-related issues in the future.

Please note that this report is based on the observations and testing conducted on the date of inspection. Mold conditions may change over time, so periodic assessments are advisable. For any further questions or assistance, do not hesitate to contact us.

Respectfully,



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