May 12, 2025

Dear members of the Joint Standing Committee on the Judiciary:

My name is Shanena Barnes, and I am here today to testify in support of LD 1927: An Act to Protect Housing Quality by Enacting Mold Inspection, Notification and Remediation Requirements.

When we first moved into the apartment, I was pregnant and had a two-year-old running around the empty space joyfully. She was excited, and so were we. The landlord seemed caring, promising to keep the place in shape and let him know if anything needed fixing. Maybe that's why we trusted his family for so long.

But things didn't stay that way. After my second daughter was born, into that home, the bathroom started showing signs that something wasn't right. The wall behind the tub hadn't been installed correctly, and moisture from behind it began eating away at the caulking. What started white turned brown, then black. I brought it to their attention, but I was told it was just mildew—nothing to worry about.

But we were worried. We saw what it did to her. She had already started life with a challenge—born with bilateral club feet, wearing casts by nine days old. And now she was developing painful sores on her skin, in the folds of her body, wherever moisture touched. They would bleed. On top of that, she developed a long list of allergies—milk, egg, soy, peanuts, walnuts, cats, and dogs. Imagine this: what's one thing most kids love? Bubble baths. But because of our living conditions, those became her enemy too, triggering her breakouts, causing her more pain.

And it wasn't just her. Our once goofy, happy two-year-old began to change. Her laughter faded. She would get so angry, flipping into tantrums where she'd tear apart her room. That had never happened before in this place. That version of her—hurt, upset, unpredictable—has never entirely disappeared. My husband was also showing signs. He was developing breathing problems, mood swings, and other issues. Some of these issues will be lifelong afflictions. Again, we were assured that the problem was a simple mildew issue, and we were responsible for keeping it clean. Little did we know that the problem was a lot worse than anticipated.

Shortly after we had moved in, the third-floor apartment caught fire, and the fire department doused it with water. The landlord begged the tenants not to use their renters' insurance and told them he would fix what had caught fire. At this point, the water had leaked into our apartment on the first floor, and there were signs of water damage in our walls. We complained to the landlord and were assured that it would be fixed. The landlord had us clear the affected room and leave for 10 days. We decided to go on a vacation. When we returned from vacation, we found that the landlord had not fixed the wall. He did work in the bathroom. What he did in the bathroom was minimal. He replaced the sink and put new vinyl on the floor. Can you say landlord special?

We lived in this apartment for three more years, not knowing the hidden danger in the room where our girls slept. While we were there, the damage started to grow. Holes began appearing on the floor opposite the kids' room. More complaining to the landlord. In his eyes, we were becoming problem tenants. All because we wanted a safe place to live. The landlord has shown his true intentions. He did not care about us, and that was defeating. What could we do in a housing market as bad as it was? So, what was his solution? It was to sell the building to someone else and wipe his hands clean.

Enter the new landlord. Five months before we were evicted, the building was sold, and we were informed that we were being evicted. We fought the eviction and won a stay until the end of the year. We informed the new owner of our problems, and he said he would fix them when we move out. Great, not only do we have to find a new place to live, but we have to live in this crumbling apartment until we can find a place. We asked the landlord for a mold test and a lead test. He refused. We paid for testing out of our own pockets—\$ 760 for mold testing. The mold test confirmed our suspicions of black mold in the apartment—a lot of it. Black mold is growing in the walls and ceiling in our daughter's room. Black mold was found in the bathroom and the kitchen.

There was no legal help for this, no protection for my daughters. And no protection for us. As we were getting sicker and facing homelessness over something that was not our fault, we felt lost, defeated, and scared. How do we continue the fight? It is not right that our health and safety can be jeopardized for money. We paid our rent and expected the minimum of housing. How can we prevent this in the future? How do we know if the new place will be mold-free? I find it funny that when the home inspector came for the inspection, he saw no mold in the apartment. Yet when we paid for a mold inspection, mold was found in abundance. The city of Auburn has failed us, and the State of Maine has failed us. The state needs protections for its people. There must be changes and laws to prevent landlords from allowing this to continue.

I thank the Committee for taking the time to listen to my testimony, and I urge you to please support this bill to protect all Mainers, especially our most vulnerable.

Thank you for all that you do.

<u>Shanena D. Barnes O</u>





















Air Quality Management Services, Inc.

"Discovering Solutions for Healthier Living"

January 2nd, 2025

Shanena Barnes 2 Great Falls Plaza – Unit 58 Auburn, Maine 04212



Re: Mold Assessment at 65 Whitney Street (Apartment 1) property in Auburn, Maine.

AQM Project #: 24-928

Air Quality Management Services, Inc. (AQM) conducted a mold assessment at your request on December 27th, 2024 at the above location, to characterize airborne and surface mold levels as well as mold / moisture issues in Apartment 1 and Basement area.

I. Background

Assessment requested due to concern for exposure to mold in the Apartment. Client has reported water damaged flooring in the Kitchen and Bathroom, water damage (reported as fire suppression) on walls and ceiling in Bedroom 1, and water damage from Unit above impacting ceiling in Master Bedroom.

II. Testing

Air samples: Air samples were collected using a high-volume sampling pump and Air-O-Cell media (Spore-Trap) cassettes. Samples were collected in representative locations to determine airborne particle and fungal burdens. Samples were collected at 15 liters per minute flow rate for either 5 or 10 minutes. An ambient outdoor sample was collected as a comparative reference.

Surface samples: Tape lift samples were collected from representative surfaces to evaluate mold growth and/or settled spores / dust. Samples were collected using special microscope slides fitted with clear tape tabs.

Samples for mold analysis were submitted to Micro Diagnostic Services in Lewiston, Maine.

Temperature / Relative Humidity: Area temperature and relative humidity were determined using an EXTECH RH300 combination meter.

Moisture Readings: Moisture content of building materials (if applicable) was measured using a Delmhorst "MoistureCheck" meter in either scanning or penetration mode.

<u>III. Observations</u> (see photos for examples and more details)

- Water damage and mold growth was observed inside the Kitchen sink cabinet. The floor at the sink cabinet measured wet. Water has or is leaking from sink plumbing.
- Water damage observed on ceiling tile and surfaces above ceiling tile in Bedroom 1. Mold growth was observed on wall and strapping on surfaces above ceiling tile. Damages appear consistent with reported water damage.
- Floor in Bathroom measured wet. Water likely leaking from shower.
- Water damage observed on Master Bedroom Ceiling.
- Mold growth was observed on the Basement Ceiling in area under the Kitchen Sink, likely from water leaking from Kitchen sink. Mold growth was also observed on items stored in the Basement. Mold growth on items and contents in the Basement is typically associated with surface condensation from uncontrolled humidity. Client reported observing water leaking in the Basement, from foundation, and pooling on floor. Water intrusion in the Basement can also exacerbate moisture and humidity issues in the Basement.
 - Attached to the Basement is an exposed dirt floor Crawlspace. Moisture can evaporate and migrate through the dirt and exacerbate moisture issues.
- In general, humidity issues in a Home are related to lack of adequate dehumidifier use in the Basement, general foundation dampness, and general humidity issues (from environmental humidity and lack of use). Other possible issues are inadequate (use of) or lacking exhaust fans at appliances (above stove and dryer) or in Bathroom(s).
- Foundation dampness most Basement humidity issues are due to lack of adequate dehumidification and general foundation dampness caused by chronically wet soil surrounding the foundation. Conditions that promote wet soil close to the foundation are: lack of gutters or gutters with downspouts that do not carry water well-away from the foundation, land that slopes downward toward the foundation and shielding from sunlight by trees and other vegetation.
- Mold / bacterial film observed on gasket of washing machine door. This is typically associated with dampness. Water can accumulate in the gasket when in use and after use and promote mold growth if the door is kept closed after use.

IV. Results

Temperature and Relative Humidity

Area	Temp (°F) %RH		GPP Moisture
ND	ND	ND	ND
Temp = Temperature: %	SRH = Relative Humidity (%). GP	P Moisture = Grains per Pound mo	sisture content of air

Temp = Temperature; %RH = Relative Humidity (%); GPP Moisture = Grains per Pound moisture content of an (higher values indicate greater amounts of water in the air); ND = Not Determined

Moisture Readings (not applicable / not determ	ined if no entry below	; usually only elevate	d readings are listed)
--	------------------------	------------------------	------------------------

Area	Location	Material	Moisture Elevated
Kitchen	Floor at Sink	Vinyl	Yes
Bathroom	Floor at Shower	Vinyl	Yes
Master Bedroom	Ceiling	Plaster	No

IV. Results (Continued)

Airborne Mold Sampling (refer to lab report for full details)

Sample #	Location	Overall Airborne Mold Level (1)	Mold Type(s) of Concern / Amplified Mold (2)
A1	Outdoors (3)	Low	Not Applicable
A2	Apartment 1	Low/Moderate	Aspergillus/Penicillium-like, Low/Moderate
A3	Basement	Very High	Ascospores, Low Aspergillus/Penicillium-like, Very High Chaetomium, Low Hyphal Fragments, Low/Moderate Stachybotrys, Low/Moderate

Air sample results are summarized as follows:

(1) All spores from all origins (indoor and outdoor), with levels based on AQM experience (2) Spores at atypical levels and/or significantly elevated indoors, based on industry consensus and AQM experience. Note that for Aspergillus/Penicillium-like spores, a common outdoor spore that is also commonly involved in air quality issues, the typical outdoor level in Maine through much of the warmer months is 200 to 300 counts per cubic meter of air (though wide variations can occur).

(3) Comparative Reference Sample

Result for each air sample (A2 and A3) identified elevated levels of mold spores of concern, as compared to the outdoor control (A1). This is likely related to mold growth on contents and surfaces.

Surface Mold Sampling (refer to lab report for full details)

Sample	*		Mold Type(s) Present at Excess Level (1) or
#	Location	Comments	Mold Type(s) of Concern (2)
Т1	Surfaces in Decoment	Visible / Suspected Mold	Acremonium species, High
11	Surfaces in Basement	VISIBLE / Suspected Mold	Aspergillus species, High
			Aspergillus species, High
T2	Bedroom 1 Wall & Ceiling	Visible / Suspected Mold	Chaetomium species, High
			Ulocladium species, High
Т2	Kitahan Sink Cabinat	Visible / Suspected Mold	Aspergillus/Penicillium-like, Moderate
15	Kitchen Silk Cabinet	visible / Suspected Mold	Stachybotrys (spores), Low

Surface sample results are summarized as follows:

(1) Based on AQM experience and/or industry consensus; represents mold growth unless stated otherwise (2) Spore types strongly correlated with water damage and/or air quality concerns, based on scientific literature and/or industry consensus

Results for these surface samples confirmed levels and types of mold growth of concern.

V. Recommendations

Remedial Recommendations

- Enlist the services of a mold remediation contractor that is knowledgeable with IICRC S500 & S520 Standards (See General Information Section of this Report for more details).
- Isolate the Remediation Areas (See Below) from other areas of the Home, using plastic / polyethylene barrier and negative-air pressure. See Definition for Containment parameters.
- <u>Kitchen:</u>
 - Remove base of sink cabinet. Evaluate underlying surfaces (i.e. floor and wall) for damages and remove if found to be water damaged and moldy.
 - Remove floor system in front of sink cabinet. In general, remove two feet in each direction of damage. Remove floor to single layer sub-deck.
- Bedroom 1:
 - Remove ceiling system (ceiling tile and plaster / lathes) in area of water damage and mold growth. In general, remove two feet in each direction of damage.
 - Remove wall system, floor to ceiling, on each side of the pipe chase. In general, remove two feet out in direction of pipe chase.
- <u>Master Bedroom:</u>
 - Remove ceiling system in area of water damage. In general, remove two feet in each direction of damage.
- <u>Bathroom:</u>
 - Remove floor system in front of shower and at Vanity. In general, remove two feet in each direction of damage. May need to remove Vanity to affect floor system removal. Remove floor to single layer sub-deck.
- <u>Basement (all areas including Crawlspace)</u>:
 - Remove all insulation (fibrous / foam board) / contents / items / (any items cleaned in-place should be at the approval / discretion of the Remediation Contractor and Owner).
 - Remove all attachments on the ceiling (i.e. duct work and fiberboard, if present) to affect cleaning.
 - Remove all attachments on walls (i.e. pegboards / shelving units / plywood panels, if present) to affect cleaning.
 - Remove all workbenches and shelving units (if present) to affect cleaning.
 - o Dry, Clean / Treat (see Definitions) all remaining, exposed surfaces.
- Detail Clean, Clean / Treat (<u>see Definitions</u>) all surfaces exposed through remedial actions (e.g. removal of wall / ceiling / floor systems), if applicable.
- Detail Clean (<u>see Definitions</u>) all surfaces / contents in All Areas of Apartment 1 and Basement, because of the observed surface-mold growth, elevated levels of airborne fungi and/or probability of settled spores, and dusty conditions. Clothing / linens / bedding / towels may be laundered unless exhibiting signs of mold growth on / within the material, in which case see below for content restoration.
 - This level of cleaning shall be used for the washer machine gasket.

V. Recommendations (Continued)

- Personal contents / furniture (in Basement) have significant microbial impact and should be evaluated by the restoration specialists for cleaning or disposal. Valuable items may be identified and restored if feasible.
- <u>IMPORTANT</u>: With any recommendations for material removal (e.g. wall or ceiling systems), expand area of removal if damages and/or mold growth are found to extend beyond the boundaries initially specified (<u>the Remediation Contractor should ensure that areas / surfaces are carefully inspected in order to make any such determination</u>). Note that in general, building systems / materials <u>should always be removed 2-feet beyond the visible extent of mold growth or water damage / staining</u>.
- Replace building materials / Release Remediation area ONLY after a successful post remedial evaluation.
- <u>Note on chemical methods</u>: use of concentrated bleach / hypochlorite solutions (e.g. RMR, MMR, etc.) has become increasing popular for mold remediation, particularly in attics. This method is acceptable as long as the goal is mold removal and not mold killing. There should be no remaining orange / brown / black residues or stains. This generally requires multiple applications with scrubbing / cleaning in between applications, otherwise mold growth is only partially digested and even faint residues will still give positive mold results during post-remediation verification (PRV) testing. Note that this cleaning method is generally ineffective with rough-texture lumber.

Preventative Recommendations (some or all may or may not pertain in this case)

- Ensure to control humidity in the Home. Ensure that the bathroom ceiling exhaust fan(s), dryer exhaust, Kitchen stove exhaust and/or or any other appliance exhaust are installed, properly sealed and operated and vent directly outdoors to prevent humidity issues indoors that can lead to structural impact / mold growth in the Attic and/or other indoor locations. Control humidity in the Basement by use of dehumidifier adequate for the space and/or amount of dampness and humidity present (April Aire or equivalent dehumidifier). Maintain Basement humidity at 40% or less (there is no specific level that will work in all homes). Monitor humidity to ensure proper levels.
- Consult a Professional Engineer or a competent qualified contractor to control groundwater intrusion into the Basement and/or prevent saturated soil surrounding the foundation / slab by: installing exterior foundation perimeter drainage, sloping the ground away from the foundation / slab 5% (6" for every 10"), installing gutters (If gutters are to be installed ensure they are kept free of debris and the downspouts direct water well-away from the foundation), and water proofing the foundation walls or utilizing other like systems. May consider installation of sump (fitted with pump) in the Basement.
- Maintain foliage around the house to keep moisture away from the siding / foundation; ensure adequate sunlight exposure to prevent saturated soil.
- Ensure to correct any plumbing issues and/or water intrusion issues to prevent future damages and mold growth.
 - Ensure shower system is water tight.

V. Recommendations (Continued)

• Also consider permanently enclosing dirt floor in the Crawlspace and protect via dehumidification as described above. Cover soil with suitable vapor barrier such as the Cleanspace System (Basement Systems, Inc.) or equivalent. Install sump pump if deemed necessary; ensure that water does not accumulate directly under the membrane and cannot pool on the top surface of the membrane.

VI. Definitions

- **Finished System** includes the underlying wall / ceiling insulations and appropriate vapor barriers.
- Detail Cleaning involves HEPA vacuuming <u>and/or</u> damp wiping with a mild detergent (including hard-to-reach areas / inside / underside / behind furniture and other objects). Following cleaning, there should be no visible debris or dust. <u>All mold growth must be</u> <u>removed from surfaces.</u> HEPA air-scrubbing units of appropriate size and airflow should be operated during cleaning to capture airborne debris and mold spores / fragments.
- Clean / Treat involves the application of an appropriate cleaning / treatment system. Surfaces should be thoroughly cleaned including damp / wet cleaning and wiping of surfaces; use cleaning / scrubbing method with appropriate abrasiveness based on characteristics of the material surfaces as well as types and extent of mold growth. <u>All</u> <u>mold growth must be removed from surfaces</u>. Application of any coating must be light; encapsulation is unacceptable unless done after post-remediation testing. <u>There should</u> <u>never be any visible mold, demolition debris, sheetrock dust, paper or insulation</u> <u>fragments, general dust, etc. remaining on surfaces after Clean / Treatment actions.</u>
- **Containment:** engineering controls used to minimize cross-contamination from affected to unaffected areas by airborne contaminants, foot traffic, or material handling. Containment systems normally consist of 6-mil polyethylene sheeting, often in combination with air pressure differentials (negative-air pressure), to prevent cross-contamination.

AQM appreciates this opportunity to have aided in this project. In the event you have questions or require further assistance, please do not hesitate to contact me.

Sincerely,

Industrial Hygienist Randy Geoffroy, CMI

GENERAL INFORMATION & REFERENCES

Special Notes

Negative air machines equipped with HEPA filtration in addition to HEPA filtered vacuums and poly isolation barriers should be used during the renovations to control dust and potential communication of contaminants to areas outside the immediate concern and to focus drying efforts using dehumidification. The lists provided are designed for guidance only based on analytical results and visual observations made the day of the initial evaluation. The Contractor performing the remedial activity should note any additional items not noted in these lists that have mold damage or if significant degradation of other material is discovered during the remedial actions recommended. AQM is not present during renovation activity and cannot be held responsible for all materials discovered during destructive renovations. Discovery of materials not tested or conditions not characterized should be reported to AQM for further evaluation prior to proceeding with the activity leading to their discovery.

Post-Remedial Evaluation

A post remedial evaluation should be conducted prior to releasing the area for reconstruction and re-occupancy. Air and/or surface samples in addition to moisture readings should be collected in areas of known previous impact to determine if remedial actions were effective prior to release. Air samples will be compared to background levels for release. Air samples collected inside the remediation area should be similar to or less in concentration to those collected outside the area as a control. Surface samples will be collected on exposed surfaces in the remediation area to confirm that the remedial actions were prudent. In the event contamination has not been significantly reduced, re-cleaning should be accomplished. IICRC S520 Standards suggest Condition 2 and 3 areas be returned to Condition 1 before release.

References

Institute of Inspection Cleaning and Restoration Certification Documents should be referenced for the remediation / cleaning activities – implementing most recent editions of Standards

- IICRC S500 Standard and Reference Guide for Professional Water Damage Restoration, 2021 Edition.
- ANSI/IICRC S520 4th Edition 2024 Mold Remediation Standard and Reference Guide for Professional Mold Remediation
- □ OSHA SHIB 03-10-10 "A Brief Guide to Mold in the Workplace"
- □ USEPA EPA 402-K-01-001 Mold Remediation in Schools and Commercial Buildings
- New York City Guidelines on Assessment and Remediation of Fungi in the Indoor Environments
- National Air Duct Cleaners Association (NADCA) Documents ACR 2005 Assessment, Cleaning and Restoration

An Insured and Certified Professional Remediation Company should be retained to conduct the work as stated above. Competent knowledge of the above standards should be ensured.

ASSESSMENT LIMITATIONS

ASSESSMENT LIMITATIONS

The observations, conclusions and recommendations described in this assessment report were made under the conditions stated herein, taking into account any information / concerns provided or reported to AQM, and were arrived at in accordance with generally accepted standards related to indoor air quality investigations and good industrial hygiene practice. The conclusions presented in the report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of described services, time and/or any budgetary constraints. Assessments were made at the request of the Client based on information's provided at the time of authorization to proceed with the evaluation.

The findings relating to this assessment were not intended to be exhaustive in nature, nor do they attempt to identify all possible source of indoor contaminants such as chemical or mold throughout the entire structure. Building materials may contain asbestos. In the event that asbestos building materials are suspected, further testing should be performed prior to renovations / demolition of affected building materials. Testing of building materials for asbestos will be in accordance with applicable local / state / federal standards. Also, painted surfaces may contain lead. Lead testing should be performed for Buildings constructed before 1979. The Federal Government banned consumer use of lead-based paints in 1978. If lead-based paints are present, ensure to follow local / state / federal standards for applicable removal actions.

Any measured results, analytical data, and/or physical conditions observed are only valid for the period in which this inspection / testing were conducted. Certain assumptions can be made based on information provided to AQM on/or before the time of the assessment coupled with analytical data and observations made at the time of the inspection / testing.

Where such quantitative laboratory analyses have been conducted by an outside / independent laboratory, AQM has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the data. This data has been reviewed and interpretations made as presented in the report.

Historical events or ambient air conditions that may have existed prior to this assessment cannot be correlated in any way with the enclosed data. No warranty, real or implied, is made as to what was or is the exact cause or source that may have adversely affected the indoor air quality prior to the date of this assessment.

The report is based on AQM's professional opinion and on our experience in conjunction with information gathered during the assessment and laboratory data provided. Information and recommendations set forth in this report are intended to characterize current conditions based on the reported concerns and discoveries made at the time of the inspection and testing period. Information is being provided to aid in the development of corrective actions or remediation that may improve overall conditions identified and/or to improve the overall air quality.

PHOTO DOCUMENTATION

<u>Photo Oder – top to bottom left, top to bottom</u> <u>right</u>

Kitchen:



View of floor and sink cabinet



Floor is damaged at sink cabinet



Mold growth inside sink cabinet



Floor at sink cabinet is wet



AQM Project #24-928

Bedroom 1:



General view



Water damaged ceiling tile



Water damage on surfaces as viewed from above ceiling tiles



Mold growth on wall, wall above ceiling tile



Another view of surfaces above ceiling tile



Mold growth on ceiling strapping



AQM Project #24-928

Basement:



Water has been observed leaking in foundation



Water observed pooling on floor



General view



Mold growth on items



General view



General view



General view



Mold on box





General view



General view



There is an attached dirt floor Crawlspace off Basement



There is an attached dirt floor Crawlspace off Basement



Another photo showing mold on item



Slime mold / bacteria in washing machine, this is typical if door is closed after using



Water damage and mold growth on ceiling area, area under Kitchen



Close-up of area in previous photo



Bathroom:



There is an exhaust fan



Shower walls not well sealed



Shower walls not well sealed



Shower walls not well sealed



View of floor



Floor measured wet



Master Bedroom:



General view



Water damaged ceiling

Living Room:



View of wall, wall common to Bathroom



No signs of water damage on lower wall or floor



SUPPORTING DOCUMENTATION

Micro Diagnostic Services, LLC

Service Request Record

349 Randall Rd, Unit 5 Lewiston Maine 04240					Please do not wi	rite in this s	Dace	
www.microdiagnostic.net	· · · · · · · · · · · · · · · · · · ·				1995 A. 1995			
Customer: Air Quality Manager	ment Services, Inc.							
Address: P.O.	Box 2491							
City, State, Zip: Lewi			~	~				
Authorized Contact: Rand	Assigned	WO No:	244	80				
Phone: 207-657-7360	FAX: 207-657-736	51	Land Mer					
Sampled by: Randy Geoffroy	all and a strength of the stre	Email: randy@agmservices.com						
Billing: <u>Connie@aqmservic</u>	es.com		Project N	umber / N	ame: 24-928 - A	uburn		
			P.O. Num	ber: 24-	928			
Turnaround Time:	Standard (2-day)	✓ Next Day	Same	e Day	3-5 Day			
Sampled by (signature):	<u>nn</u>					A REAL AND THE		
		Sample In	formatio	n				
Sample Identif	ication	Sample Type	Date Sam	/ Time Ipled	Sample Volume / Area	Analysis Code	MDS Use Only	
AI-OLFJOS	SAS	Ara	122	14	75L	Itol	24480-1	
AZ AITI		Ark			75L	Ad	-2	
A3- Lasen	ent	Aux			757	toi	-3	
	<u> </u>	and a second second						
TI-Curfure a	Deprest	Tulo			NA	501	-4	
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12 11 aloom	1 604117	Iare		<u></u>	10 [0]	201		
3-K (eilin)	- 1 / 1	Tie		7	111	501		
15 Fitcher	1176(92	1ªpe	- 0	1 and	NIA	101		
			-					
Sample Types: A = Air, T = Tap	e, S = Swab, B = Bulk,	, O = Other						
Analysis Codes:								
A01 = Air-O-Cell Fungi	S01 = Direc	t Exam Fungi						
A02 = Air-O-Cell Expanded	S02 = Direc	t Exam Fungi Qua	nt					
A03 = Burkhard Fungi	S03 = Direc	t Exam Expanded						
A04 = Burkhard Expanded			0					
C	nlomontony Informati	ion Testing or Pou	oorting Inc	tructions	Baymont Inform	notion		
Su	piementary mormati	ion, resting or ke	sorting ins	structions	, Fayment mion	nation.		
L		·····						
Data	Custody Record - P	lease complete the	e first 3 bo	oxes of th	e first line, below	N.		

		Custody Record - Please complete	the first 3 boxes of the first line, below.
Date	Time	Samples Relinquished By	Samples Accepted at MDS
12/27/21	1630	m	12-28-24 100 AM/M



Client: Air Quality Management, Inc. Project: 24-928 Auburn WO: 24480 Medium: Air-O-Cell Received: 12/28/2024 Reported: 12/30/2024 Method: ASTM D7391

Micro Diagnostic Services, LLC 349 Randall Rd, Unit 5

Lewiston, ME 04240

Airborne Fungal Spore Analysis by Direct Optical Microscopy

info@microdiagnostic.net

Lab Number:	24480 -1			24480 -2		24480 -3						
Sample Description:	A1				A2		A3					
	Outdoors			Apt 1			Basement					
Air Volume Sampled (I.)		75			75			75				
Detection Limit (Ct /m2):		50			75 50			F0				
Background (0.5):		<u> </u>			<u> </u>		<u> </u>					
Background (0-5).	D	11		3			4 ⁺			D		
	Raw Ct	Ct/m^3	0/	Raw	Ct/m^3	0/	Raw	Ct/m^3	0/	Raw	Ct/m^3	0/
Spore Genus/Category	υ	Cl./III	%	01	CL./III	70	Cl	CL./III	%	51	GU./III	%
Alternaria												
Ascospores							29	1,460	1			
Aspergillus/Penicillium-like	2	100	6	81	4,070	83	5,200	261,390	96			
Basidiospores	29	1,460	91	6	300	6	11	550	0			
Bipolarus++												
Ganoderma												
Chaetomium*							91	1,210	0			
Cladosporium				4	200	4						
Curvularia												
Epicoccum												
Fusarium												
Memnoniella*												
Pithomyces												
Pestalotia												
Rusts												
Myxomycetes++	1	50	3	4	200	4	9	450	0			
Stachybotrys*							221	2,950	1			
Stemphilium												
Torula												
Trichoderma												
Ulocladium												
Other Colorless												
Hyphal Fragments				3	150	3	77	3,870	1			
Total Fungi	32	1,610	100	98	4,920	100	5,638	271,880	100			

Comment:

Note: Values may not appear to be additive due to rounding; detection limit may be reduced in some samples by background interference.

Bipolaris++ = Bipolarus/Dreschlera/Exserohilium; Myxomycetes++ = Smuts/Myxomycetes/Periconia

*Denotes spores counted over 100% of the sample trace; Minimum detection limit / multiplier may vary from overall detection limit / multiplier.

Debris Rating Scale: 0 = No trace visible; 5 = Contiguous debris. Background debris levels greater than 3 indicate poor visibility for the analyst reading the slide, which can result in under-counting of some types of spores, particularly smaller spores such as Apergillus/Penicillium-like.

Disclaimer: Micro Diagnostic Services (MDS) is not responsible for limitations of sampling or analytical methodologies. Client is responsible for all sample collection activities including labeling of samples and proper submission of sample information on the Service Request Record form. Interpretation of data contained in this report is the responsibility of the Client. This report relates only to the samples contained herein and may not be reproduced, except in full, without written approval by MDS. In all cases, MDS maintains liability limited to the analytical fees charged by MDS for analysis. Use of this report or data contained herein by any party implies acceptance of these terms.

Analyst:

Nick Ferrala, Microbiologist, BA, CIEC



Client: Air Quality Management, Inc. Project: 24-928 Auburn WO: 24480 Medium: Tape Lift Received: 12/28/2024 Reported: 12/30/2024 Method: IH-S01

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Microscopic Examination Report - Fungi Semi-Quantitative Analysis

Lab Number:	24480 -4	24480 -5	24480 -6	
Sample Description:	T1 - Surfaces in	T2 - Bedroom 1	T3 - Kitchen Sink	
	Basement	Wall + Ceiling	Cab	
		Ŭ		
Spore Genus/Category	Abundance Rating	Abundance Rating	Abundance Rating	Abundance Rating
Acremonium	*High*			
Aspergillus	*High*	*High*		
Aspergillus/Penicillium-like			*Moderate*	
Basidiospores				
Bipolarus++				
Coelomycete				
Chaetomium		*High*		
Cladosporium				
Curvularia				
Epicoccum				
Fusarium				
Graphium				
Pithomyces				
Penicillium				
Rusts				
Myxomycetes++				
Stachybotrys			Low	
Stemphilium				
Torula				
Trichoderma				
Ulocladium		*High*		
Hyaline Mycelia				
Hyphal Fragments				

Comment:

Bipolaris++ = Bipolarus/Dreschlera/Exserohilium; Myxomycetes++ = Smuts/Myxomycetes/Periconia

Relative Abundance Rating, per area analyzed:

"---" = None; no occurrence within the area analyzed.

Analyst:

Trace = 1 to 10 spores / particles within the area analyzed.

Low = 11 to 100 spores / particles within the area analyzed.

Moderate = 101 to 1000 spores / particles within the area analyzed.

High = greater than 1000 spores / particles within the area analyzed.

Note that high spore and background levels may obscure other spore types / particles present at lower levels.

* * = Sample contains vegetative / spore-producing structures in association with spores.

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