# AQ Testing Services, LLC

440 Cobia Drive, Suite 701 - Katy, Texas 77494 - (281) 391-9604

## LIMITED INDOOR MOLD ASSESSMENT REPORT

SUPPLEMENTED ON NOVEMBER 9, 2021

Evaluation Site: 8706 Lupton Lane, Houston, TX 77055 ("Evaluation Site")

Prepared for: Dena Winkler ("Client")

Date of Inspections: November 5, 2021 and November 9, 2021

A.Q. Testing Services, LLC Inspecting Consultant: Mason Buchholz, MAC #1432 - Expires 06-25-2023

A.Q. Testing Services, LLC ("AQ") is a mold assessment consulting company and neither it nor any of its employees or members perform mold remediation services. All services provided by AQ are in accordance with the Texas Mold Assessment and Remediation Rules ("TMARR").

<u>Evaluation Requested – November 5, 2021:</u> Mold inspection and testing in each of the rooms/locations set forth below under the section "Air Sample Locations and Laboratory Findings – November 5, 2021".

<u>Evaluation Requested – November 9, 2021</u>: Mold inspection and testing in each of the rooms/locations set forth below under the section "Air Sample Locations and Laboratory Findings – November 9, 2021".

For the purposes of this report, it is assumed the Evaluation Site faces South.

Within the scope of the evaluation requested, testing was performed not solely for the purpose of establishing the then current condition of indoor air quality, but to identify the presence of hidden mold growth that could affect indoor air quality and/or damage the structure. Be aware that wall and/or cabinet sample results are not considered elevated unless the mold spore counts exceed 7000 spores of Penicillium/Aspergillus, visible mold growth is present or marker mold species exceeding a 3 raw count are identified in the laboratory analysis report.

## Visual Inspection Results:

The Inspecting Consultant observed the following on the Inspection Dates.

Room Name	Observation	Location
Wet Bar	AC drain line – present	Inside the sink cabinet
Wet Bar	Uninsulated AC drain line	Inside the sink cabinet
Wet Bar	Debris possibly visible mold	Exterior of the mini refrigerator

Kitchen	Water stains and water damage	Bottom panel inside the sink				
		cabillet				
Kitchen	Discoloration possibly water	Rear panel inside the sink				
	damage	cabinet				
Living Room	Relative humidity – 45%	Background				
	Temperature - 67° F					
Master Bedroom	Relative humidity – 41%	Background				
	Temperature - 69° F					
Master Bathroom	AC drain line – present	Inside the East wall vanity				
		cabinet				
Master Bathroom	Uninsulated AC drain line	Inside the East wall vanity				
		cabinet				
Master Bathroom	Stains	Bottom panel inside the East				
		wall vanity cabinet				
Master Bathroom	Water stains and water damage	Bottom panel inside the South				
		wall vanity cabinet				
2 <sup>nd</sup> Floor Hallway	Relative humidity – 40%	Background				
	Temperature - 69° F					
2 <sup>nd</sup> Floor Bedroom #1	Visible mold	Both AC vent registers				
2 <sup>nd</sup> Floor Bedroom #1 Closet	Visible mold	AC vent register				
2 <sup>nd</sup> Floor Bedroom #1 Bathroom	AC drain line – present	Inside the East wall vanity				
		cabinet				
2 <sup>nd</sup> Floor Bedroom #1 Bathroom	Uninsulated AC drain line	Inside the East wall vanity				
		cabinet				
2 <sup>nd</sup> Floor Bedroom #2 Closet	Visible mold	AC vent register				
2 <sup>nd</sup> Floor Media Room	Visible mold	Both AC vent registers adjacent				
		to the North wall				
Side Attic common to the 2 <sup>nd</sup>	Visible mold	Exterior of the PVC and AC unit				
Floor Bedroom #2						
Side Attic common to the 2 <sup>nd</sup>	Visible mold	Exterior of the AC ductwork				
Floor Bedroom #2						
The soil level is near the top of the foundation at the rear exterior of the Evaluation Site which is						
conducive to wa	ter penetration at the weep holes du	uring rain events.				

Room Name	Levels of Mold
Wet Bar sink cabinet	Elevated – Penicillium/Aspergillus
Kitchen sink cabinet	Elevated – Penicillium/Aspergillus
Master Bathroom East wall vanity cabinet	Elevated – Penicillium/Aspergillus
Master Bathroom South wall vanity cabinet	Elevated – Penicillium/Aspergillus
2 <sup>nd</sup> Floor Bedroom #1 Bathroom East wall vanity	Elevated – Penicillium/Aspergillus
cabinet	

2 <sup>nd</sup> Floor Bedroom #1 Closet ceiling adjacent to	No Elevations			
the AC vent register				
One outdoor baseline sample was collected.				

Air Sample Locations and Laboratory Findings – November 9, 2021:

Room Name	Levels of Mold				
Formal Living Room South wall right electrical	Elevated – Penicillium/Aspergillus				
outlet					
Dining Room South wall electrical outlet	No Elevations				
Powder Room vanity cabinet	Elevated – Penicillium/Aspergillus				
Living Room South wall electrical outlet	Elevated – Penicillium/Aspergillus				
Breakfast Room North wall electrical outlet	Elevated – Penicillium/Aspergillus				
Laundry Room sink cabinet	Elevated – Penicillium/Aspergillus				
Master Bedroom South wall electrical outlet	Elevated – Penicillium/Aspergillus				
2 <sup>nd</sup> Floor Bedroom #1 South wall electrical outlet	Elevated – Penicillium/Aspergillus				
2 <sup>nd</sup> Floor Bedroom #2 East wall electrical outlet	Elevated – Penicillium/Aspergillus				
2 <sup>nd</sup> Floor Bedroom #2 Bathroom East wall vanity	Elevated – Penicillium/Aspergillus				
cabinet					
2 <sup>nd</sup> Floor Media Room North wall right electrical	No Elevations				
outlet					
2 <sup>nd</sup> Floor Bedroom #3 East wall electrical outlet	Elevated – Penicillium/Aspergillus				
2 <sup>nd</sup> Floor Bedroom #3 Bathroom West wall vanity	Elevated – Penicillium/Aspergillus				
cabinet					
One outdoor baseline sample was collected.					

In lieu of destructive testing to determine the presence of hidden mold, the Consultant performed nondestructive air testing using a method similar to the "Wall Check". If confirmation testing is performed it would be necessary to use the same testing method and to test the exact locations to reasonably compare results.

## Recommendations:

The recommendations made herein represent the opinions of the Consultant. Based upon our visual observations, limited testing and our experience, we make the following recommendations.

- Eliminate all moisture sources.
- Lower the soil level to at least four inches below the top of the foundation at the rear exterior.
- Mold remediation in the Wet Bar including, but not limited to removal of all affected cabinets and drywall, ceiling to floor, from the East wall behind the sink cabinet. Remove the mini refrigerator and inspect for leaks. Wipe down the exterior of the mini refrigerator with an anti-microbial

cleaning product. The AC drain line must be properly insulated before post remediation "passed" clearance can be achieved.

- Mold remediation in the Master Bathroom including, but not limited to removal of both affected vanity cabinets and drywall behind the vanity cabinets. The AC drain line must be properly insulated before post remediation "passed" clearance can be achieved.
- Mold remediation in the 2<sup>nd</sup> Floor Bedroom #1 Bathroom including, but not limited to removal of the affected vanity cabinet and drywall from the East wall behind the vanity cabinet. The AC drain line must be properly insulated before post remediation "passed" clearance can be achieved.
- Be aware that mold growth behind vanity cabinets with AC drain lines is often caused by condensation associated with poorly insulated or uninsulated AC drain lines.
- Mold remediation in the Kitchen including, but not limited to removal of all affected sink cabinet material. Inspect the newly exposed drywall behind the sink cabinet for water stains and/or visible mold. If either is found, photograph and send to the Consultant for further instructions.
- Mold remediation in each of the Formal Living Room, Living Room, Breakfast Room, Master Bedroom, 2<sup>nd</sup> Floor Bedroom #1, 2<sup>nd</sup> Floor Bedroom #2 and 2<sup>nd</sup> Floor Bedroom #3 including, but not limited to removal of all affected drywall, baseboard and trim.
- Mold remediation in each of the Powder Room, Laundry Room, 2<sup>nd</sup> Floor Bedroom #2 Bathroom and 2<sup>nd</sup> Floor Bedroom #3 Bathroom including, but not limited to removal of all affected vanity/sink cabinets and drywall behind the vanity/sink cabinets.
- Since elevated levels of mold were identified as being present in 16 out of 19 total air samples collected indoors and we cannot see inside the walls and behind the cabinets, <u>we recommend</u> <u>comprehensive testing at all remaining walls/cabinets untested to date to enable the Client to</u> <u>make an informed decision regarding the purchase of the property and the cost of repairs.</u> Please call (281) 391-9604 to schedule additional testing.
- Have the AC units, coils, plenums, ducts and vents professional cleaned.
- As a precaution, we recommend having a third-party licensed AC professional inspect the HVAC equipment/systems for proper sizing and installation of components that could cause high humidity and condensation as well as mold growth inside the plenums and ducts.
- As a precaution, have the Attic ventilation assessed to be sure it is adequate.
- Be aware that building science defects such as improper attic ventilation, improper AC sizing and installation, unsealed top-plates and chases can cause systemic mold growth.

- After comprehensive testing has been performed, have a mold remediation protocol prepared by a Texas Department of Licensing and Regulation ("TDLR") licensed mold assessment consultant according to TMARR. Call 281-391-9604 to order your protocol. There is a separate fee for preparation of the protocol.
- Should the Client decline additional testing, we request that the Client send an email stating that no additional testing is wanted and directing the Consultant to prepare the protocol based on the information set forth in this Limited Indoor Mold Assessment Report.
- Have a post remediation clearance inspection and tests performed so that the Texas Department of Insurance Certificate of Mold Damage Remediation can be obtained.
- Be aware that <u>hidden mold growth</u> can be present in any room or wall where water penetration and/or high humidity has occurred. Stains, paint and/or drywall texture changes, separation between drywall and baseboards and other trim as well as water damaged particleboard cabinets can be indicators of previous water penetration.
- Be aware that anyone attempting to remove mold and/or water damaged drywall and other building materials should wear personal protection equipment and have a good understanding of mold remediation safety procedures, use containment and HEPA air filtration, to prevent cross-contamination and exposure to elevated levels of airborne mold.
- <u>Read all Notes below.</u>

Notes:

- Be aware that the most effective method for finding hidden mold growth is air sampling. The air sampling that the inspecting consultant performed is limited to the test sites set forth in the laboratory report. We do not know if hidden mold growth is present in areas/walls that were not tested. If the Client desires additional testing, please call 281-391-9604.
- Mold can often be present behind wallpaper that is not found through air sampling. Therefore, the only way to determine if mold is present behind wallpaper is to remove the wallpaper using containment to prevent potential airborne mold cross-contamination.
- Dust and debris are often found on metal window frames. The best method for cleaning metal window frames is the use of mild soapy water.
- Although numerous moisture readings were taken throughout the Evaluation Site, only elevated readings (if any) are reported.
- It is common to find a small amount of mold growth on the exterior of AC equipment in Attics; therefore, routine cleaning of those surfaces is important to minimize mold buildup.
- It is not unusual to find a certain amount of water staining and mold on wood framing in Attics that occurred during construction. Cleaning of wood framing can be achieved by sanding or scrubbing with a wire brush.
- Since mold is commonly found in showers, we recommend routine cleaning with a mild bathroom cleaner. Always operate the vent fan when using the shower to reduce condensation that can cause

mold growth.

- This document is a report on the inspection and, if requested, testing of the Evaluation Site and is not intended to be a "Mold Remediation Protocol" as defined by TMARR, therefore, the recommendations made herein are merely guidelines for mold removal. A mold remediation protocol is a separate document.
- There are inherent limitations in the use of visual inspections to determine the presence of mold. The Consultant cannot be responsible for moving contents of substantial quantity and/or size such as full closets, cabinets, refrigerators, dishwashers, and the like obstructing the view of the Consultant. Additionally, walls, wallpaper, insulation and other building materials used in the construction of the premises can hide mold from the inspector's view.

## Exclusions:

Inspection of any area not specifically mentioned in this report is excluded from this report. The Inspecting Consultant and Principal Consultant each excludes and disclaims any liability for not finding hidden mold growth.

## Exposure Guidelines

In the U.S., no federal agency has clear authority to regulate exposure to biological agents associated with Building Related Illnesses. Countable bioaerosols have no Permissible Exposure Limits ("PELs") or Threshold Limit Values ("TLVs") for the following reasons; the culturable/countable bioaerosols have no single entry; the human response range varies greatly from one individual to the next; it is not possible to collect and evaluate all bioaerosols components using a single sampling method; and the information relating bioaerosol concentrations to health effects is generally insufficient to describe exposure response. Due to a wide variety of microorganisms found across different regions of the U.S. and the influence of normal humidity and temperature conditions, the concentrations of bioaerosols vary significantly from area to area. With the absence of exposure limits, it is common industry practice, as supported by the American Conference of Governmental Industrial Hygienist ("ACGIH"), the American Industrial Hygiene Association ("AIHA") and the Environmental Protection Agency ("EPA") guidelines, to compare outside bioaerosol concentrations and species to inside bioaerosol concentrations and species. Generally speaking, the indoor air flora should be quantitatively lower than, but qualitatively similar (genus or species) to, that of outdoor air. All occupant health inquiries should be referred to a physician knowledgeable in the health effects of environmental mold exposures.

## Conditions and Limitations

Air sampling results are limited as they represent airborne concentrations at the time of sample collection only. Changes in operating procedures, ventilation, temperature, humidity, occupancy, equipment, sources, products used, and other conditions may cause variations in anticipated airborne concentrations. The Inspecting Consultant has performed the tasks set forth above in a professional manner, consistent with industry standards. The Inspecting Consultant and the Principal Consultant, however, cannot guarantee and does not warrant, that this limited assessment has revealed all adverse environmental conditions affecting the site, nor can they warrant that the assessment requested would satisfy the dictates

of, or provide a legal defense in connection with, environmental laws or regulations. This report must be read and considered in its entirety. It is the responsibility of the Evaluation Site owners to disclose all known issues of prior water intrusion events and/or microbial contamination issues. The Inspecting Consultant and Principal Consultant cannot assume responsibility for the investigation of any unknown issues, which are not brought to our attention prior to the commencement of the survey. The results reported and any opinions set forth herein are solely for the benefit of the Client and may not be quoted or used by third parties. The results and opinions set forth in this report will be valid as of the date of this report only and neither the Inspecting Consultant nor the Principal Consultant assumes any obligation to advise the Client or homeowner of any change that may later be brought to their attention. The opinions and test results proffered by others may differ from those set forth herein.

Linda Lauver, Principal Consultant MAC 0405 Expires 04/20/2023



SEEML Reference Number: H-211105013

Southeast Environmental Microbiology Laboratories 440 Cobia Drive Ste. 1901

Katy, TX. 77494 Phone: (832) 437-2667

The information and data for **AQ Testing Services**, **LLC** has been checked for thoroughness and accuracy. The following reports are contained within this document:

$\overline{\square}$

Surface/Bulk Report Spore Trap Report Andersen Fungal Report Quantitative Fungal Report

# Lab Manager Review: Magzoub Ismaíl Date: 11/05/2021

Thank you for using SEEML laboratories. We strive to provide superior quality and service. SEEML laboratories are accredited through AIHA-LAP, LLC (EMLAP #232339) for the amlysis of Spore Traps and Surface/Bulk Samples and licensed by the Texas Department of Licensing and Regulation (LAB1016).

The data within this report is reliable to three significant figures. The third significant figure is technically unjustified. In this instance, the third figure is reported as an estimate to facilitate the interpretation by the customer.

### Confidentiality Notice:

The document(s) contained herein are confidential and privileged information, intended for the exclusive use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of the document(s) is strictly prohibited. If you have received this document in error, please immediately notify us by telephone to arrange for its return. Thank you.

Guidelines for Interpretation:

No accepted quantitative regulatory standards currently exist by which to assess the health risks related to mold and bacterial exposure. Molds and bacteria have been associated with a variety of health effects and sensitivity varies from person to person.

Several organizations, including: the American Conference of Government Industrial Hygienists (ACGIH); the American Industrial Hygiene Association (AIHA); the Indoor Air Quality Association (IAQA); the United States Environmental Protection Agency (USEPA); the Centers for Disease Control (CDC), as well as the California Department of Health Services (CADHS), have all published guidelines for assessment and interpretation of mold resulting from water intrusion in buildings.

Interpretation of the data and information within this document is left to the company, consultant, and/or persons who conducted the fieldwork.

	•
AQ Testing Services, LLC	Date Sampled: 11/05/2021
440 Cobia Dr., Suite 701	Date Received: 11/05/2021
Katy, TX 77494	Date Analyzed: 11/05/2021
281-391-9604	Date Reported: 11/05/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211105013
TEST METHOD: DIRECT MICROSCOPY EXAMINATION SEEML SOF	P 7

Revisions:	020				0.20					
TOTAL SPORES/M <sup>3</sup>	320	4160		748	9720		1440	18700		
Sample Volume(liters)	75			75			75			
Background debris (1-5)**	3			5			5			
Pithomyces										
Zvgomvcetes										
Oidium										
Colorless/Other Brown*										
Ulocladium										
Torula										
Tetraploa										
Stemphylium										
Stachybotrys										
Spegazzinia	•									
Smuts/Periconia/Myxomy	9	117	3							
Rusts										
Polythrincium			-							
Penicillium/Aspergillus	28	364	9	748	9720	100	1440	18700	100	
Nigrospora	3	39	<1							
Memnoniella										
Fusarium										
Cercospora										
Epicoccum	_									
Curvularia	2	26	<1							
Cladosporium	52	676	16							
Chaetomium										
Bipolaris/Drechslera										
Basidiospores	192	2500	60							
Ascospores	32	416	10							
Alternaria	2	26	<1		500.00/11			3, 20, 00, 11		
	raw ct	spores/m <sup>3</sup>	%	raw ct	spores/m <sup>3</sup>	%	raw ct	spores/m <sup>3</sup>	%	
Spore Trap Used		AOC			AOC			AOC		
Pollen	•				1		L			
Hyphal Fragments	5	65								
Detection Limit (spores/m <sup>3</sup> )		13	0.0		13			13		
Lab Sample ID	H-211105013-046			H-	H_211105013-047			H-211105013-048		
Comment/Notes										
Location	OD			Wet Bar Cab			Kitchen Sink Cab			
Client Sample ID	3347 2947		3347 2939			3347 2937				

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

AQ Testing Services, LLC	Date Sampled: 11/05/2021
440 Cobia Dr., Suite 701	Date Received: 11/05/2021
Katy, TX 77494	Date Analyzed: 11/05/2021
281-391-9604	Date Reported: 11/05/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211105013

TEST METHOD: DIRECT N	MICROSCO	JPY EXAMIN	ATION SE	EML SOP	(					
Client Sample ID	3347 2938				3347 2949			3347 5030		
Location	Master Bath East Vanity		Maste	Master Bath South Vanity			2F BDR #1 Bath Vanity			
Comment/Notes				1						
Lab Sample ID	H-	211105013-0	)49	H-	211105013-0	)50	H-211105013-051			
Detection Limit (spores/m <sup>3</sup> )		13			13		13			
Hyphal Fragments							1	13		
Pollen										
Spore Trap Used		AOC			AOC			AOC		
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	
Alternaria		1.			· ·			1	1	
Ascospores										
Basidiospores	12	156	<1							
Bipolaris/Drechslera										
Chaetomium										
Cladosporium	88	1140	2	20	260	<1	24	312	<1	
Curvularia										
Epicoccum										
Cercospora										
Fusarium										
Memnoniella										
Nigrospora										
Penicillium/Aspergillus	4560	59300	98	2880	37400	99	10320	134000	100	
Polythrincium										
Rusts										
Smuts/Periconia/Myxomy										
Spegazzinia										
Stachybotrys										
Stemphylium										
Tetraploa										
Torula										
Ulocladium										
Colorless/Other Brown*										
Oidium										
Zygomycetes										
Pithomyces										
Background debris (1-5)**	5			5			4			
Sample Volume(liters)	75			75			75			
TOTAL SPORES/M <sup>3</sup>	4660	60600		2900	37700		10344	134000		
Revisions:										

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore. The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

- I+	
AQ Testing Services, LLC	Date Sampled: 11/05/2021
440 Cobia Dr., Suite 701	Date Received: 11/05/2021
Katy, TX 77494	Date Analyzed: 11/05/2021
281-391-9604	Date Reported: 11/05/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211105013

TEST METHOD: DIRECT N	MICROSCO	JPY EXAMIN	IATION SI	EML SOP	1		
Client Sample ID	3347 5029						
Location	2F BDR #1 Closet Register						
Comment/Notes							
Lab Sample ID	H-	211105013-0	)52				
Detection Limit (spores/m <sup>3</sup> )		13					
Hyphal Fragments	1	13					
Pollen							1
Spore Trap Used		AOC					
	raw ct.	spores/m <sup>3</sup>	%				
Alternaria							
Ascospores							
Basidiospores	4	52	8				
Bipolaris/Drechslera							
Chaetomium							
Cladosporium	4	52	8				
Curvularia							
Epicoccum							
Cercospora							
Fusarium							
Memnoniella							
Nigrospora							
Penicillium/Aspergillus	40	520	83				
Polythrincium							
Rusts							
Smuts/Periconia/Myxomy							
Spegazzinia							
Stachybotrys							
Stemphylium							
Tetraploa							
Torula							
Ulocladium							
Colorless/Other Brown*							
Oidium							
Zygomycetes							
Pithomyces							
Background debris (1-5)**	2						
Sample Volume(liters)	75						
TOTAL SPORES/M <sup>3</sup>	48	624					
Revisions:							

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

Katy, TX. 77494 Phone: (832) 437-2667

440 Cobia Drive Ste. 1901



SEEML Reference Number: H-211109028

Southeast Environmental Microbiology Laboratories 440 Cobia Drive Ste. 1901

Katy, TX. 77494 Phone: (832) 437-2667

The information and data for **AQ Testing Services**, **LLC** has been checked for thoroughness and accuracy. The following reports are contained within this document:

$\mathbb{H}$
X

Surface/Bulk Report Spore Trap Report Andersen Fungal Report Quantitative Fungal Report

# Lab Manager Review: Magzoub Ismaíl Date: 11/09/2021

Thank you for using SEEML laboratories. We strive to provide superior quality and service. SEEML laboratories are accredited through AIHA-LAP, LLC (EMLAP #232339) for the amlysis of Spore Traps and Surface/Bulk Samples and licensed by the Texas Department of Licensing and Regulation (LAB1016).

The data within this report is reliable to three significant figures. The third significant figure is technically unjustified. In this instance, the third figure is reported as an estimate to facilitate the interpretation by the customer.

Confidentiality Notice:

The document(s) contained herein are confidential and privileged information, intended for the exclusive use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of the document(s) is strictly prohibited. If you have received this document in error, please immediately notify us by telephone to arrange for its return. Thank you.

Guidelines for Interpretation:

No accepted quantitative regulatory standards currently exist by which to assess the health risks related to mold and bacterial exposure. Molds and bacteria have been associated with a variety of health effects and sensitivity varies from person to person.

Several organizations, including: the American Conference of Government Industrial Hygienists (ACGIH); the American Industrial Hygiene Association (AIHA); the Indoor Air Quality Association (IAQA); the United States Environmental Protection Agency (USEPA); the Centers for Disease Control (CDC), as well as the California Department of Health Services (CADHS), have all published guidelines for assessment and interpretation of mold resulting from water intrusion in buildings.

Interpretation of the data and information within this document is left to the company, consultant, and/or persons who conducted the fieldwork.

AQ Testing Services, LLC	Date Sampled: 11/09/2021
440 Cobia Dr., Suite 701	Date Received: 11/09/2021
Katy, TX 77494	Date Analyzed: 11/09/2021
281-391-9604	Date Reported: 11/09/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211109028

TEST METHOD: DIRECT M	<b>MICROSCC</b>	OPY EXAMIN	ATION SE	EML SOP	7					
Client Sample ID	3347 2954				3347 2982		3347 5028			
Location	OD			Formal Livi	Formal Living Room South Wall REO			Dining Room South Wall EO		
Comment/Notes										
Lab Sample ID	H-	211109028-2	32	H-	211109028-2	233	H-	211109028-2	234	
Detection Limit (spores/m <sup>3</sup> )		13			13			13		
Hyphal Fragments	2	26					1	13		
Pollen		1 1		1	13	ľ				
Spore Trap Used		AOC			AOC			AOC		
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	
Alternaria	3	39	3	1	13	<1		1		
Ascospores	8	104	8							
Basidiospores	48	624	48		1 1					
Bipolaris/Drechslera										
Chaetomium				1	13	<1				
Cladosporium	36	468	36	4	52	<1	16	208	52	
Curvularia							1	13	3	
Epicoccum										
Cercospora										
Fusarium										
Memnoniella										
Nigrospora										
Penicillium/Aspergillus	4	52	4	660	8580	99	12	156	39	
Polythrincium										
Rusts										
Smuts/Periconia/Myxomy	1	13	1	2	26	<1	1	13	3	
Spegazzinia										
Stachybotrys										
Stemphylium										
Tetraploa										
Torula										
Ulocladium										
Colorless/Other Brown*										
Oidium										
Zygomycetes										
Pithomyces							1	13	3	
Background debris (1-5)**	2			5			3			
Sample Volume(liters)	75			75			75			
TOTAL SPORES/M <sup>3</sup>	100	1300		668	8680		31	403		
Revisions:										

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

AQ Testing Services, LLC	Date Sampled: 11/09/2021
440 Cobia Dr., Suite 701	Date Received: 11/09/2021
Katy, TX 77494	Date Analyzed: 11/09/2021
281-391-9604	Date Reported: 11/09/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211109028

## 

Client Sample ID	3347 5031				3347 5035		3347 5033		
Location	Powder Rm Vanity		Living Room South Wall EO			Breakfast Room North Wall EO			
Comment/Notes									
Lab Sample ID	H-	211109028-2	235	H-	211109028-2	236	H-	211109028-2	237
Detection Limit (spores/m <sup>3</sup> )		13			13			13	
Hyphal Fragments				2 26			1 13		
Pollen									
Spore Trap Used		AOC			AOC			AOC	-
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%
Alternaria					·				
Ascospores									
Basidiospores									
Bipolaris/Drechslera									
Chaetomium									
Cladosporium							32	416	2
Curvularia				1	13	<1	2	26	<1
Epicoccum									
Cercospora									
Fusarium									
Memnoniella									
Nigrospora									
Penicillium/Aspergillus	1400	18200	100	2880	37400	100	1680	21800	98
Polythrincium									
Rusts									
Smuts/Periconia/Myxomy				1	13	<1	5	65	<1
Spegazzinia									
Stachybotrys									
Stemphylium									
Tetraploa									
Torula									
Ulocladium									
Colorless/Other Brown*									
Oidium									
Zygomycetes									
Pithomyces									
Background debris (1-5)**	5			5			4		
Sample Volume(liters)	75			75			75		
TOTAL SPORES/M <sup>3</sup>	1400	18200		2882	37400		1719	22300	
Revisions:									

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore. The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

AQ Testing Services, LLC	Date Sampled: 11/09/2021
440 Cobia Dr., Suite 701	Date Received: 11/09/2021
Katy, TX 77494	Date Analyzed: 11/09/2021
281-391-9604	Date Reported: 11/09/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211109028

TEST METHOD: DIRECT M	IICRUSC(		ATION SE		<u>/</u>				
Client Sample ID	3347 5032				3347 2933		3347 2275		
Location	Laundry Room Sink Cabinet		Master B	Master Bedroom South Wall EO			2F Bedroom #1 South Wall EO		
Comment/Notes									
Lab Sample ID	H-	211109028-2	238	H-	211109028-2	239	H-	211109028-2	240
Detection Limit (spores/m <sup>3</sup> )		13			13		13		
Hyphal Fragments									
Pollen									
Spore Trap Used		AOC			AOC			AOC	
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%
Alternaria					· ·				
Ascospores									
Basidiospores	8	104	<1						
Bipolaris/Drechslera							1	13	<1
Chaetomium									
Cladosporium	4	52	<1	24	312	1			
Curvularia									
Epicoccum									
Cercospora									
Fusarium									
Memnoniella									
Nigrospora									
Penicillium/Aspergillus	2670	34700	99	1620	21100	99	1180	15300	100
Polythrincium									
Rusts									
Smuts/Periconia/Myxomy				1	13	<1			
Spegazzinia									
Stachybotrys									
Stemphylium									
Tetraploa									
Torula									
Ulocladium									
Colorless/Other Brown*									
Oidium									
Zygomycetes									
Pithomyces									
Background debris (1-5)**	5			5			5		
Sample Volume(liters)	75			75			75		
TOTAL SPORES/M <sup>3</sup>	2682	34900		1645	21400		1181	15300	
Revisions:									

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore. The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

AQ Testing Services, LLC	Date Sampled: 11/09/2021
440 Cobia Dr., Suite 701	Date Received: 11/09/2021
Katy, TX 77494	Date Analyzed: 11/09/2021
281-391-9604	Date Reported: 11/09/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211109028

## MICDOSCODY EXAMINATION SEEMIL SO

Client Sample ID	3347 2280				3347 2279		3347 2281		
Location	2F Bedroom #2 East Wall EO		2F Bedroom #2 Bath East Wall Vanity Cabinet			2F Media Room North Wall REO			
Comment/Notes					-				
Lab Sample ID	H-	211109028-2	241	H-	211109028-2	242	H-	211109028-2	243
Detection Limit (spores/m <sup>3</sup> )		13			13			13	
Hyphal Fragments	1	13		2	26		3 39		
Pollen						-			
Spore Trap Used		AOC			AOC			AOC	
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%
Alternaria									
Ascospores	4	52	<1						
Basidiospores	16	208	<1	24	312	1	8	104	2
Bipolaris/Drechslera									
Chaetomium									
Cladosporium	8	104	<1	20	260	1	16	208	3
Curvularia									
Epicoccum									
Cercospora									
Fusarium									
Memnoniella									
Nigrospora									
Penicillium/Aspergillus	2160	28100	99	1920	25000	98	492	6400	95
Polythrincium									
Rusts									
Smuts/Periconia/Myxomy	1	13	<1				1	13	<1
Spegazzinia									
Stachybotrys									
Stemphylium									
Tetraploa									
Torula									
Ulocladium									
Colorless/Other Brown*									
Oidium									
Zygomycetes									
Pithomyces									
Background debris (1-5)**	5			5			3		
Sample Volume(liters)	75			75			75		
TOTAL SPORES/M <sup>3</sup>	2189	28500		1964	25600		517	6730	
Revisions:									

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

-4-	
AQ Testing Services, LLC	Date Sampled: 11/09/2021
440 Cobia Dr., Suite 701	Date Received: 11/09/2021
Katy, TX 77494	Date Analyzed: 11/09/2021
281-391-9604	Date Reported: 11/09/2021
	Date Revised:
	Project Name: Dena Winkler
	Project Address: 8706 Lupton Ln
	Project City, State, ZIP: Houston, TX 77055
	SEEML Reference # : H-211109028

TEST METHOD: DIRECT N	<b>MICROSCO</b>	JPY EXAMIN	IATION SE	EML SOP	(			
Client Sample ID	3347 4964				3347 2283			
Location	2F Bedroom #3 East Wall EO			2F Bedro	oom #3 Bath W Vanitv Cabine	/est Wall t		
Comment/Notes					2			
Lab Sample ID	H-	211109028-2	244	H-	211109028-2	45		
Detection Limit (spores/m <sup>3</sup> )		13			13			
Hyphal Fragments	1	13		2	2 26			
Pollen								1
Spore Trap Used		AOC			AOC			
	raw ct.	spores/m <sup>3</sup>	%	raw ct.	spores/m <sup>3</sup>	%		
Alternaria								
Ascospores								
Basidiospores								
Bipolaris/Drechslera								
Chaetomium								
Cladosporium								
Curvularia								
Epicoccum								
Cercospora								
Fusarium								
Memnoniella								
Nigrospora								
Penicillium/Aspergillus	1452	18900	100	1642	21300	100		
Polythrincium								
Rusts								
Smuts/Periconia/Myxomy	2	26	<1					
Spegazzinia								
Stachybotrys								
Stemphylium								
Tetraploa								
Torula								
Ulocladium								
Colorless/Other Brown*								
Oidium								
Zygomycetes								
Pithomyces								
Background debris (1-5)**	4			4				
Sample Volume(liters)	75			75				
TOTAL SPORES/M <sup>3</sup>	1454	18900		1642	21300			
Revisions:								

### Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.

The analytical sensitivity is the spores/m<sup>3</sup> divided by the raw count, expressed in spores/m<sup>3</sup>. The limit of detection is the analytical sensitivity

(in spores/m<sup>3</sup>) multiplied by the sample volume (in liters) divided by 1000 liters.

\*Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

\*\*Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

Disclaimer: The sample results are determined by the sample volume, which is privided by the customer.

This report relates only to the samples tested as they were received.

Respectfully submitted, SEEML

Magzoub Ismail

Magzoub Ismail, Approved Laboratory Signatory

Katy, TX. 77494 Phone: (832) 437-2667

440 Cobia Drive Ste. 1901











<u>Photographs - November 5, 2021</u>



<u>Photographs - November 5, 2021</u>











## <u>Photographs - November 5, 2021</u>









## <u>Photographs - November 5, 2021</u>





Δ













































## <u>Photographs - November 9, 2021</u>



