## ENVIRONMENTAL ANALYSIS ASSOCIATES, INC. 306 5th Street, Suite 2A - Bay City, MI 48708



# LABORATORY REPORT

AIRBORNE MOLD SPORE ANALYSIS

#### **Report prepared for : ABC Environmental**

Client Project #: 14133 Project Description : Main House and Guest House

EAA Project #: 24-2194

Samples Collected : 09/24/24 Samples Received : 09/26/24 Date of Analysis : 09/26/24

Authorized / data reviewed by : Joseph R. Heintskill

Joseph R. Heintskill Laboratory Manager

#### AIHA-LAP, LLC Accredited, Lab ID#: 220804

The EAA sample results are only applicable to the items tested and locations as received. Sample descriptions and volumetric data are provided by the client. All particle concentrations are rounded to 3 significant figures. In order for chart clarity, cells where the particle category was not detected are intentionally left blank.

Environmental Analysis Associates, Inc. (EAA) shall not be liable to the client or the client's customer with respect to interpretation, recommendations made or actions implemented by either the client or the client's customer as a result of or based upon the test results.

All samples were received in acceptable condition unless noted in the General Comments section of the data report.

Client Project # : Requested by : EAA Project# : Client Sample# 3742 3940 3742 3941 3620 9968 3742 3927 3742 3927	ABC Environmental 14133 John A. Doe	Date collected : Sample received :	Main House and Guest H 9/24/24	Page 2 o louse Sample condition : A					
EAA Project# : Client Sample# 3742 3940 3742 3941 3620 9968 3742 3927 3742 3949 Category Sample #>	24-2194 <b>Sample Description / Loc</b> Bathroom - Source Leak	Sample received :		Sample condition : A	acontoble on marking of				
Client Sample# 3742 3940 3742 3941 3620 9968 3742 3927 3742 3949 Category Sample #>	Sample Description / Loc Bathroom - Source Leak		9/26/24		cceptable as received				
3742 3940 3742 3941 3620 9968 3742 3927 3742 3949 Category Sample #>	Bathroom - Source Leak	allon							
3742 3941 3620 9968 3742 3927 3742 3949 Category Sample #>			Atypical dust	- General Comments					
3742 3927 3742 3949 Category Sample #>			Typical dust						
3742 3949 Category Sample #>	Bedroom 1	Bedroom 1 Typical dust							
Category Sample #>	Bedroom 2		Typical dust						
Category Sample #>	Bedroom 2 Bath		Typical dust						
	AIRBORNE MOLD SPOR	E CONCENTRATIONS (	cts/m <sup>3</sup> ) Spore Trap Sam	ple Analysis	High mag. used 500X				
Total Mold Spores (cts/m <sup>3</sup> )	3742 3940	3742 3941	3620 9968	3742 3927	3742 3949				
	9710	2430	2340	5300	3240				
Alternaria	14								
Aspergillus / Penicillium	4160	777	1970	1870	914				
Pigmented Asco & Basidio	686	229	46	320	183				
Mix tiny, hyal Asco & Basidio	3430	1420	274	2650	1690				
Botrytis									
Chaetomium									
Cladosporium	686		46	411	457				
Curvularia	46								
Drechslera / Bipolaris									
Epicoccum									
Fusicladium-like									
Nigrospora									
Oidium / Peronospora									
Pithomyces	46			46					
Rusts									
Smuts / Myxomycetes / Periconia	46								
Stachybotrys	594								
Stemphylium									
Torula									
Ulocladium									
Other Hyaline Fungi									
Other Fungi									
Unidentified Fungi									
Hyphae fragments	320								
Algal / fern spores									
Insect parts									
POLLEN (Total cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed				
Not specified									
Pinus									
COMMON AEROSOLS (cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed				
Skin cell fragments									
Fiberglass fibers									
Cellulosic / synthetic fibers									
Unidentified opaque									
Mineral / clay soil dust									
OTHER AEROSOLS (cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed				
Statistical Parameters	0.022	0.000	0.000	0.022	0.02				
Vol. analyzed (m <sup>3</sup> )-high mag - 500x: Detect limit(Cts/m <sup>3</sup> )-high magnification:	45.7	0.022 45.7		45.7	45.7				
% sample analyzed-high magnification:	43.7	43.7		29%	29%				
Vol. analyzed(m <sup>3</sup> )/entire sple 150-300x:	0.075	0.075		0.075	0.07				
* Detection limit (Cts/m <sup>3</sup> )/entire sple:	13.3	13.3		13.3	13.:				
* Note: The "entire sample" detection limit									
Sample flow rate (lpm): Sample trace length (mm):	15.0	15.0		15.0	15.0				
	14.40 0.420	14.40 0.420		14.40 0.420	14.4 0.42				

Note: Sample results are only applicable to the items tested and locations as received. Sample descriptions and volumetric data are provided by the client. Background dust loading criteria (Estimated area%): Typical-low <5%, Typical 5-20%, Atypical, 20-40%, Elevated 40-80%, Overloaded >80%

Authorized / data reviewed by: Joseph R. Heintskill

Analyst: err

Report date: 10/11/24 Date analyzed: 9/26/24

ENVIRON	MENTAL ANALYSIS ASSC	CIATES, INC 306	5th Street, Suite 2A - Ba	ay City, MI 48708	
		E MOLD SPORE /	ANALYSIS	EAA Method # :	MOLD-A01
	ABC Environmental			Page 3	of 6
Client Project # :			Main House and Guest		
Requested by :		Date collected : Sample received :		Sample condition :	Acceptable as received
EAA Project# :		<u> </u>			
Client Sample#	Sample Description / Loc	ation	Background Dust Loadin	g - General Comments	
3742 3951	Guest Bath		Typical dust		
3742 3939	TV Room		Typical dust		
3742 3947 3742 3953	OA Mezzanine		Typical dust Typical dust		
3742 3955 3742 3966	Main Floor		Typical dust		
3742 3900				unla Analysia	Link man wood 500X
	AIRBORNE MOLD SPOR		High mag. used 500X		
Category Sample #>	3742 3951	3742 3939		3742 3953	3742 3966
Total Mold Spores (cts/m <sup>3</sup> )	2060	1050	6010	27700	1160
Alternaria					
Aspergillus / Penicillium	229			26700	411
Pigmented Asco & Basidio	91	46	46	137	91
Mix tiny, hyal Asco & Basidio	1600	823	1690	731	549
Botrytis					
Chaetomium					14
Cladosporium	91	137	3150	137	46
Curvularia	31	107	0100	137	40
Drechslera / Bipolaris					
Epicoccum					
Fusicladium-like					
Nigrospora					
Oidium / Peronospora					
Pithomyces					46
Rusts		46	27		
Smuts / Myxomycetes / Periconia	46				
Stachybotrys					
Stemphylium					
Torula					
Ulocladium					
Other Hyaline Fungi					
Other Fungi			1100		
Unidentified Fungi			1100		
Hyphae fragments			137	91	91
			137	91	91
Algal / fern spores					
Insect parts					
POLLEN (Total cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Not specified					
Pinus					
COMMON AEROSOLS (cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Skin cell fragments					
Fiberglass fibers					
Cellulosic / synthetic fibers					
Unidentified opaque					
Mineral / clay soil dust					
OTHER AEROSOLS (cts/m <sup>3</sup> )	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed
Statistical Denominations					
Statistical Parameters Vol. analyzed (m <sup>3</sup> )-high mag - 500x:	0.022	0.022	0.022	0.022	0.022
Detect limit(Cts/m <sup>3</sup> )-high magnification:		45.7		45.7	45.7
% sample analyzed-high magnification:		45.7		29%	45.7 29%
Vol. analyzed (m <sup>3</sup> )/entire sple 150-300x:		0.075		0.075	0.075
* Detection limit (Cts/m <sup>3</sup> )/entire sple:		13.3		13.3	13.3
* Note: The "entire sample" detection lim					
Sample flow rate (lpm):	15.0	15.0		15.0	15.0
Sample trace length (mm):		14.40		14.40	14.40
Microscope field diameter (mm):	0.420	0.420	0.420	0.420	0.420

Note: Sample results are only applicable to the items tested and locations as received. Sample descriptions and volumetric data are provided by the client. Background dust loading criteria (Estimated area%): Typical-low <5%, Typical 5-20%, Atypical, 20-40%, Elevated 40-80%, Overloaded >80%

Authorized / data reviewed by: Joseph R. Heintskill

Analyst: err

Report date: 10/11/24 Date analyzed: 9/26/24

### **AIRBORNE MOLD SPORE ANALYSIS**

(Mold and Dust Comparison Summary - Cts/m<sup>3</sup>)

Client Name : ABC Environmental

EAA Method #: MOLD-A01

Page 4 of 6

Client Project # : 14133 Requested by : John A. Doe					Project description : EAA Project# :		Main House and Guest House						
									Durat				
<b>C</b> ommune #		Mold	A	Chronic	Outdates	the set of a						orous Dust	Other
Sample #		Spores * Total	Aspergillus / Penicillium	W.I. Fungi	Outdoor	Hyphae	Dellan	Skin cell		Cellulose /	Unident.	-	Other Particles
Description 3742 3940		9,710	4,160	594	Spores 4,950	Fragments 320	Pollen	Fragments	Fiberglass	Synthetic	Opaque	Minerals	Particles
Bathroom - Source Leak		5,710	4,100	554	4,550	520							
3742 3941		2,430	777		1,650								
Closet													
3620 9968		2,340	1,970		365								
Bedroom 1													
3742 3927		5,300	1,870		3,430								
Bedroom 2													
3742 3949		3,240	914		2,330								
Bedroom 2 Bath													
3742 3951		2,060	229		1,830								
Guest Bath													
3742 3939		1,050			1,050								
TV Room													
3742 3947		6,010			6,010	137							
OA													
3742 3953		27,700	26,700		1,010	91							
Mezzanine													
<b>3742 3966</b> Main Floor		1,160	411	14	732	91							

Note: Sample results are only applicable to the items tested and locations as received. Sample descriptions and volumetric data are provided by the client. All individual particle category values are rounded to 3 significant figures. In order to provide chart clarity, cells where the particle category was not detected are intentionally left blank. This test report shall not be reproduced except in full, without the written approval of the laboratory.

EAA provides a separate AIR PROFILE M database on our website (eaalab.com) for a comparison with samples collected from other buildings nationwide. This reference document is only intended to provide an initial comparison with historical measurements compiled by EAA from other problem and non-problem buildings. The final opinions and interpretation regarding how the tested items apply to site specific conditions on your project are not provided within this EAA laboratory report, and can only be provided by the IEP or client that conducted the original inspection and sample collection.

ENVIRONMEN			5th Street, Suite 2A -				
100	-	NE MOLD SPORE A					
	COUNT DATA ONLY - Do not use for volumetric concentration comparisons Page 5 of 6						
	ABC Environmental	Description :	Main House and Guest	t House			
Client Project # :	14133	Date collected :	9/24/24				
EAA Project# :	24-2194	Sample received :	9/26/24	Analysis magnification: 50	0x		
Client Sample#	Sample Description / L	ocation	Raw / Extrapolated Cou	nt Comments			
3742 3940	Bathroom - Source Lea	k	Note: When a fractional raw	particle count is present, (e.	g. 0.3), the count		
3742 3941	Closet		is based on counting the "en	tire sample" at low magnificat	on.The results are		
3620 9968	Bedroom 1		•	high magnification detection			
	Bedroom 2			count page is required to be	,		
	Bedroom 2 Bath			A-LAP accreditation program.	· · · · · · · · · · · · · · · · · · ·		
		IIST (Raw / Extranc		nly) - Spore Trap San	nlo Analysis		
		3742 3941					
Category Sample #>	3742 3940		3620 9968	3742 3927	3742 3949		
Total Mold Spores - Total cts	212	53	51	116	71		
Alternaria	0.3						
Aspergillus / Penicillium	91	17	43	41	20		
Pigmented Asco & Basidio	15	5	1	7	4		
Mix tiny, hyal Asco & Basidio	75	31	6	N 58	37		
Botrytis	10	01		NL CON CO	51		
Chaetomium				R			
	4 -		1r				
	15		or 1	<b>NY'</b> 9	10		
Curvularia	1		43 1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				
Drechslera / Bipolaris			OU NO				
Epicoccum			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Fusicladium-like			N al				
Nigrospora		A	-NTIA-				
Oidium / Peronospora		00	E				
Pithomyces	1	OP ON		1			
	1						
Rusts	4	1 Er con					
Smuts / Myxomycetes / Periconia	1	L'EFE					
Stachybotrys	13	ילוי					
Stemphylium	W. O	{``					
Torula	NU						
Ulocladium	.00						
Other Hyaline Fungi	V						
Other Fungi							
Unidentified Fungi							
-	7						
Hyphae fragments	7						
Algal / fern spores							
Insect parts							
POLLEN (Total cts)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
Not specified							
Pinus							
	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
Skin cell fragments	not analyzeu	not analyzeu	not analyzed	not analyzed	not analyzeu		
U							
Fiberglass fibers							
Cellulosic / synthetic fibers							
Unidentified opaque							
Mineral / clay soil dust							
OTHER PARTICLES	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
		<b>,</b>					
Statistical Parameters							
Vol. analyzed (m <sup>3</sup> )-high mag - 500x:	0.022	0.022	0.022	0.022	0.022		
Detect limit(Cts/m <sup>3</sup> )-high magnification:	45.7	45.7		45.7	45.7		
% sample analyzed-high magnification:	45.7 29%	43.7 29%		29%	43.7		
Vol. analyzed(m <sup>3</sup> )/entire sple 150-300x:	0.075	0.075		0.075	0.075		
* Detection limit (Cts/m <sup>3</sup> )/entire sple:	13.3	13.3		13.3	13.3		
* Note: The "entire sample" detection limit					10.0		
Sample flow rate (lpm):	15.0	15.0		15.0	15.0		
Sample trace length (mm):	14.40	14.40		14.40	14.40		
Microscope field diameter (mm):	0.420	0.420	0.420	0.420	0.420		

 NOTE: The raw particle count data cannot be used as a measure of the actual airborne concentration and only represents the number of "raw" or extrapolated particles counted.

 Where a fractional value is present (e.g. 0.3 or 1.3) for any mold or dust category, the entire trace for this category was analyzed and the "entire sample detection limit" applies.

 Analyst : err
 Date analyzed: 9/26/24

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 8/25/21

ENVIRONMEN	ITAL ANALYSIS ASSOC	CIATES, INC 306	5th Street, Suite 2A -	· · ·			
Children .	AIRBOR	NE MOLD SPORE A					
RAW	COUNT DATA ONLY - Do	not use for volumetric co	oncentration comparisons Page 6 of 6				
Client Name :	ABC Environmental	Description :	: Main House and Guest House end of report				
Client Project # :	14133	Date collected :	9/24/24				
EAA Project# :	24-2194	Sample received :	9/26/24	Analysis magnification : 5	500x		
	Sample Description / Location Raw / Extrapolated Count Comments						
	Guest Bath		v particle count is present, (	e.g. 0.3), the count			
3742 3939	TV Room		is based on counting the "e	ntire sample" at low magnific	ation.The results are		
3742 3947	OA		then "back-calculated" to th	e high magnification detectio	n limit for that specific		
3742 3953	Mezzanine		particle category. This "raw	" count page is required to b	e reported to the		
3742 3966	Main Floor		client as directed by the All-	A-LAP accreditation program	n.		
	AIRBORNE MOLD / [	DUST (Raw / Extrapo	lated Spore Counts C	Only) - Spore Trap Sa	mple Analysis		
Category Sample #>	3742 3951	3742 3939	3742 3947	3742 3953	3742 3966		
Total Mold Spores - Total cts	45	23		606	25		
Alternaria					20		
Aspergillus / Penicillium	5			584	0		
Pigmented Asco & Basidio	ີ ວ	1	1	504	9		
•	2	1	1				
Mix tiny, hyal Asco & Basidio	35	18	37	NLY NS 16	12		
Botrytis			•	01-0150			
Chaetomium			12	pAn.	0.3		
Cladosporium	2	3	1 37 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3	1		
Curvularia			N1 CO				
Drechslera / Bipolaris			NUT ON				
Epicoccum							
Fusicladium-like			V at				
Nigrospora		A	NTN				
Oidium / Peronospora		004.1	E				
Pithomyces		2AT ON			1		
Rusts			0.6		•		
Smuts / Myxomycetes / Periconia	1.	18 20	0.0				
		CET					
Stachybotrys	24	~ \) 5'					
Stemphylium		-					
Torula	0 Nº						
Ulocladium	100						
Other Hyaline Fungi	V						
Other Fungi			24				
Unidentified Fungi							
Hyphae fragments			3	2	2		
Algal / fern spores							
Insect parts							
POLLEN (Total cts)	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
Not specified	···· <b>j</b> -···	<b>_</b>			<b>_</b>		
Pinus							
	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
Skin cell fragments	not analyzeu	not analyzeu	not undryzeu	not undryzeu	not analyzeu		
Fiberglass fibers							
5							
Cellulosic / synthetic fibers							
Unidentified opaque							
Mineral / clay soil dust							
OTHER PARTICLES	not analyzed	not analyzed	not analyzed	not analyzed	not analyzed		
Statistical Parameters							
Vol. analyzed (m <sup>3</sup> )-high mag - 500x:	0.022	0.022		0.022	0.022		
Detect limit(Cts/m <sup>3</sup> )-high magnification:	45.7	45.7		45.7	45.7		
% sample analyzed-high magnification:	29%	29%		29%	29%		
Vol. analyzed(m <sup>3</sup> )/entire sple 150-300x:	0.075	0.075		0.075	0.075		
* Detection limit (Cts/m <sup>3</sup> )/entire sple:	13.3	13.3		13.3	13.3		
* Note: The "entire sample" detection limit Sample flow rate (lpm):	t applies to the "large" partients 15.0	cle categories analyzed dur 15.0	ing the low magnification exa 15.0	amination of the entire samp 15.0	le 15.0		
Sample how rate (ipm). Sample trace length (mm):	14.40	14.40		14.40	14.40		
Microscope field diameter (mm):	0.420	0.420	0.420	0.420	0.420		
	0.420	0.420	tration and only represents t	0.420	0.420		

 NOTE: The raw particle count data cannot be used as a measure of the actual airborne concentration and only represents the number of "raw" or extrapolated particles counted.

 Where a fractional value is present (e.g. 0.3 or 1.3) for any mold or dust category, the entire trace for this category was analyzed and the "entire sample detection limit" applies.

 Analyst : err
 Date analyzed: 9/26/24

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