



PERFORMANCE IN THE FIELD

CASE STUDY

January 2023
Suburban New York



OVERVIEW

This case study involves a suburban home that required light remediation top to bottom. Our entire suite of mold solutions were used to deliver fantastic results.

RE-Hydro was used in the basement for heavier cleaning. BIO-Clean was utilized in the finished areas of the home for a thorough cleaning without damaging surface finishes. Finally, all three levels of the home were fogged with DE-Mold to sanitize the air and penetrate construction materials for the elimination of mold, bacteria, viruses, allergens, etc.

SOLUTIONS USED

- **DE-MOLD** Plant-based biological fog
- **RE-HYDRO** Hydrogen Peroxide heavy duty surface cleaner
- **BIO-CLEAN** Plant-based biological surface cleaner

1.5 Days to complete work

2 Technicians performing work

3 Solutions used for remediation

RESULTS

Organism	Pre Counts	Post Counts	Reduction
Aspergillus / Penicilium	3,600	40	98.9%
Cladosporium	90	None Detected	100%
Stachybotrys	11,200	100	99.1%
Total Spore	15,210	310	98.0%



EMSL Analytical, Inc.

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EMSL Order: 062300004
Customer ID: FPNY42
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Malverne, NY 11565
Project: [Redacted]
Collected Date: 01/02/2023
Received Date: 01/03/2023 08:46 AM
Analyzed Date: 01/03/2023

Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	062300004-0001			062300004-0002			062300004-0003		
Client Sample ID:	1			2			3		
Volume (L):	75			75			75		
Sample Location:	Basement			Kitchen			Upstairs Hall W/AC		
Spore Types	Raw Count	Count/m ²	% of Total	Raw Count	Count/m ²	% of Total	Raw Count	Count/m ²	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	1	40	0.3	-	-	-	-	-	-
Aspergillus/Penicillium	83	3600	23.7	26	1100	29.1	12	520	36.4
Basidiospores	3	100	0.7	10	440	11.6	12	520	36.4
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	2	90	0.6	1	40	1.1	-	-	-
Cladosporium	2	90	0.6	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1*	10*	0.1	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	257	11200	73.6	8	300	7.9	2	90	6.3
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Ascotricha	1	40	0.3	43	1900	50.3	8	300	21
Aureobasidium++	1	40	0.3	-	-	-	-	-	-
Total Fungi	351	15210	100	88	3780	100	34	1430	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	2	-	-	1	-	-	1	-
Background (1-5)	-	4	-	-	2	-	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

Daniel Clarke, Asbestos Laboratory Manager
or other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Carle Place, NY AIHA LAP, LLC-EMLAP Accredited #102344

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Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	062300004-0004			062300004-0005			062300004-0006		
Client Sample ID:	4			5			6		
Volume (L):	75			75			75		
Sample Location:	Upstairs Hall No A/C			Master Bed w/AC Heat			Master Bed No A/C		
Spore Types	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total	Raw Count	Count/m ³	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	10	440	40.7	5	200	51.3	2	90	30
Basidiospores	5	200	18.5	2	90	23.1	4	200	66.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	1	40	3.7	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	3	100	9.3	-	-	-	1*	10*	3.3
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Ascotricha	6	300	27.8	3	100	25.6	-	-	-
Aureobasidium++	-	-	-	-	-	-	-	-	-
Total Fungi	25	1080	100	10	390	100	7	300	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	2	-	-	1	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	062300004-0007		
Client Sample ID:	7		
Volume (L):	75		
Sample Location:	Outside		
Spore Types	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	4*	50*	1.4
Ascospores	9	400	11
Aspergillus/Penicillium	2	90	2.5
Basidiospores	60	2600	71.4
Bipolaris++	-	-	-
Chaetomium++	-	-	-
Cladosporium	7	300	8.2
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium++	-	-	-
Ganoderma	-	-	-
Myxomycetes++	4	200	5.5
Pithomyces++	-	-	-
Rust	-	-	-
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Ascotricha	-	-	-
Aureobasidium++	-	-	-
Total Fungi	86	3640	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	44	-
Analyt. Sensitivity 300x	-	13*	-
Skin Fragments (1-4)	-	1	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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Lab Sample Number:	062300916-0001			062300916-0002			062300916-0003		
Client Sample ID:									
Volume (L):	75			75			75		
Sample Location:	Kitchen			Basement			Hall Upstairs		
Spore Types	Raw Count	Count/m ²	% of Total	Raw Count	Count/m ²	% of Total	Raw Count	Count/m ²	% of Total
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	1	40	12.9	-	-	-
Aspergillus/Penicillium	6	300	62.5	1	40	12.9	-	-	-
Basidiospores	1	40	8.3	2	90	29	2	90	42.9
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	1	40	19
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	1	40	8.3	1	40	12.9	1	40	19
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	3	100	20.8	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	3	100	32.3	1	40	19
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	11	480	100	8	310	100	5	210	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	44	-	-	44	-	-	44	-
Analyt. Sensitivity 300x	-	13*	-	-	13*	-	-	13*	-
Skin Fragments (1-4)	-	1	-	-	2	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	3	-	-	2	-	-	3	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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Lab Sample Number:	062300916-0004		
Client Sample ID:			
Volume (L):	75		
Sample Location:	Outside		
Spore Types	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	1	40	2.5
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	1*	10*	0.6
Bipolaris++	-	-	-
Chaetomium++	-	-	-
Cladosporium	27	1200	75.9
Curvularia	-	-	-
Epicoccum	5	200	12.7
Fusarium++	-	-	-
Ganoderma	-	-	-
Myxomycetes++	2	90	5.7
Pithomyces++	-	-	-
Rust	1	40	2.5
Scopulariopsis/Microascus	-	-	-
Stachybotrys/Memnoniella	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
Total Fungi	37	1580	100
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	44	-
Analyt. Sensitivity 300x	-	13*	-
Skin Fragments (1-4)	-	1	-
Fibrous Particulate (1-4)	-	1	-
Background (1-5)	-	3	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

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