



# EMSL Analytical, Inc.

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EMSL Order: 371719882  
Customer ID: WEEN50  
Customer PO:  
Project ID:

**Attn:** Jennifer Luttrell  
West Chester Environmental  
307 North Walnut Street  
West Chester, PA 19380  
**Phone:** (610) 431-7545  
**Fax:** (610) 431-7543  
**Collected:** 09/13/2017  
**Received:** 09/15/2017  
**Analyzed:** 09/16/2017  
**Project:** WE-17-201

### Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

Lab Sample Number:	371719882-0001			371719882-0002			371719882-0003		
Client Sample ID:	C100			C101			C102		
Volume (L):	120			120			120		
Sample Location									
Spore Types	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total	Raw Count	Count/m <sup>3</sup>	% of Total
Alternaria	-	-	-	-	-	-	-	-	-
Ascospores	15	410	5.7	-	-	-	3	80	0.4
Aspergillus/Penicillium	146	4030	56	30	830	65.9	513	14200	77.9
Basidiospores	56	1500	20.8	8	200	15.9	51	1400	7.7
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	34	940	13.1	6	200	15.9	70	1900	10.4
Curvularia	-	-	-	-	-	-	1	30	0.2
Epicoccum	-	-	-	-	-	-	1*	8*	0
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	4	100	1.4	-	-	-	4	100	0.5
Myxomycetes++	5	100	1.4	1	30	2.4	17	470	2.6
Pithomyces	2	60	0.8	-	-	-	1	30	0.2
Rust	2	60	0.8	-	-	-	1*	8*	0
Scopulariopsis	-	-	-	-	-	-	-	-	-
Stachybotrys	-	-	-	-	-	-	-	-	-
Torula	-	-	-	-	-	-	-	-	-
Ulocladium	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
<b>Total Fungi</b>	<b>264</b>	<b>7200</b>	<b>100</b>	<b>45</b>	<b>1260</b>	<b>100</b>	<b>662</b>	<b>18226</b>	<b>100</b>
Hyphal Fragment	1	30	-	-	-	-	2	60	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	28	-	-	28	-	-	28	-
Analyt. Sensitivity 300x	-	8*	-	-	8*	-	-	8*	-
Skin Fragments (1-4)	-	2	-	-	2	-	-	2	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	2	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

Vincent Iuzzolino, M.S., Laboratory Manager  
or other approved signatory

No discernable field blank was submitted with this group of samples.

High levels of background particulate can obscure spores and other particulates leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "" Denotes particles found at 300X. "\*" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ AIHA-LAP, LLC-EMLAP Lab 100194

Initial report from: 09/16/2017 08:54:24

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



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### Test Report: Air-O-Cell™ Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods EMSL 05-TP-003, ASTM D7391)

<b>Lab Sample Number:</b>	371719882-0004		
<b>Client Sample ID:</b>	C103		
<b>Volume (L):</b>	120		
<b>Sample Location</b>			
<b>Spore Types</b>	<b>Raw Count</b>	<b>Count/m<sup>3</sup></b>	<b>% of Total</b>
Alternaria	-	-	-
Ascospores	-	-	-
Aspergillus/Penicillium	-	-	-
Basidiospores	-	-	-
Bipolaris++	-	-	-
Chaetomium	-	-	-
Cladosporium	-	-	-
Curvularia	-	-	-
Epicoccum	-	-	-
Fusarium	-	-	-
Ganoderma	-	-	-
Myxomycetes++	-	-	-
Pithomyces	-	-	-
Rust	-	-	-
Scopulariopsis	-	-	-
Stachybotrys	-	-	-
Torula	-	-	-
Ulocladium	-	-	-
Unidentifiable Spores	-	-	-
Zygomycetes	-	-	-
<b>Total Fungi</b>	-	<b>No Trace</b>	-
Hyphal Fragment	-	-	-
Insect Fragment	-	-	-
Pollen	-	-	-
Analyt. Sensitivity 600x	-	28	-
Analyt. Sensitivity 300x	-	8*	-
Skin Fragments (1-4)	-	-	-
Fibrous Particulate (1-4)	-	-	-
Background (1-5)	-	-	-

Bipolaris++ = Bipolaris/Drechslera/Exserohilum  
Myxomycetes++ = Myxomycetes/Periconia/Smut

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**Proj:** WE-17-201

## Test Report: Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, and Other Particulates from Tape Samples (EMSL Method: M041)

Lab Sample Number:	371719882-0005				
Client Sample ID:	C100TL				
Sample Location:					
Spore Types	Category	-	-	-	-
Agrocybe/Coprinus	-	-	-	-	-
Alternaria	-	-	-	-	-
Ascospores	-	-	-	-	-
Aspergillus/Penicillium	Low	-	-	-	-
Basidiospores	Rare	-	-	-	-
Bipolaris++	-	-	-	-	-
Chaetomium	-	-	-	-	-
Cladosporium	Low	-	-	-	-
Curvularia	-	-	-	-	-
Epicoccum	-	-	-	-	-
Fusarium	-	-	-	-	-
Ganoderma	-	-	-	-	-
Myxomycetes++	-	-	-	-	-
Paecilomyces	-	-	-	-	-
Rust	-	-	-	-	-
Scopulariopsis	-	-	-	-	-
Stachybotrys	-	-	-	-	-
Torula	-	-	-	-	-
Ulocladium	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-
Zygomycetes	-	-	-	-	-
Fibrous Particulate	-	-	-	-	-
Hyphal Fragment	-	-	-	-	-
Insect Fragment	-	-	-	-	-
Pollen	-	-	-	-	-

Category: Count/per area analyzed  
Rare: 1 to 10 Low: 11 to 100 Medium: 101 to 1000 High: >1000

Bipolaris++ = Bipolaris/Dreschlera/Exserohilum Myxomycetes++ = Myxomycetes/Periconia/Smut  
\* = Sample contains fruiting structures and/or hyphae associated with the spores.

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