



ERI Analytical

ERI is pleased to provide the enclosed report of analysis for the samples submitted. All analyses are performed in our in-house laboratory utilizing highly trained professionals, experienced in light microscopy. Our microscopists are trained at the McCrone Research Institute, Chicago, Illinois, specifically in fungal spore and pollen identification.

Air-O-Cell Cassette

The Air-O-Cassette is a unique sampling device for the rapid collection and analysis of a wide range of airborne particles, including fungal spores. Samples are analyzed via light microscopy at 1000 X magnification, with at least (50% of the sample) being analyzed. The results are reported as **total**, meaning they include both viable and non-viable fungal spores. Unfortunately, this technique does not allow for differentiation between *Aspergillus* and *Penicillium* spores. Additionally it does not allow for cultivation or speciation of spores. Slides containing greater than 500 fungal spores are difficult to count accurately due to overcrowding and are therefore estimations. Similarly, excessive particulate debris can mask the presence of fungal spores, thereby reducing counting accuracies. All slides are graded with the following debris scale for data qualification.

- 1= Small amount of debris observed, does not affect enumeration.
- 2= Limited amount of debris observed, counts may be underestimated.
- 3= Substantial amount of debris observed, counts underestimated.
- 4= Severe amount of debris observed, counts significantly underestimated.
- 5 = Counts not available due to excessive debris.

Microscopic Screen

A microscopic screen is a rapid analytical technique for confirming the presence and identity of fungi on a surface. The results are expressed as a percentage range relative to the prevalence and concentration of fungi in the sample. Samples are analyzed via light microscopy at 1000 X magnification. The results are reported as **total**, meaning they include both viable and non-viable fungal spores. Unfortunately, this technique does not allow for the differentiation between *Aspergillus* and *Penicillium* spores. Additionally this analysis does not allow for cultivation or specification of spores.

In this example, the *Chaetomium* is a mold which grows in a prolonged, persistently wet environment, and is indicative of a chronic moisture issue. Check for roof leaks or condensation around HVAC registers.

Microscopic Screen and Fungi Identification

Lab Number	A	B	C
Sample Identification	Fungal Spore Identification	Fungal Spore Identification	Fungal Spore Identification
	1. ceiling		
<i>Alternaria</i>			
<i>Ascospores / Arthrinium</i>	0-5%		
<i>Aspergillus/Penicillium</i>			
<i>Aureobasidium</i>			
<i>Basidiospores</i>			
<i>Bipolaris/Dreschlera</i>			
<i>Botrytis</i>			
<i>Chaetomium</i>	10-20%		
<i>Cladosporium</i>			
<i>Curvularia</i>			
<i>Epicoccum</i>			
<i>Fusarium</i>			
<i>Memnoniella</i>			
<i>Nigrospora</i>			
<i>Oidium/Peronospora</i>			
<i>Pithomyces/Ulocladium</i>	5-10%		
<i>Rusts</i>			
<i>Smuts/Myxomycetes/Periconia</i>			
<i>Stachybotrys</i>			
<i>Torula</i>			
<i>Unidentified Conidia</i>			
Mycelial Fragments	0-5%		
Fungal Spores	30-40%		
Notes:			

ERI Consulting, Inc.
 2026 Republic Dr., Suite A
 Tyler, TX 75701
 Attn: John Doe

Project Name: John Doe
 Project ID: living room ceiling
 Sample Type: swab
 Date Sampled: 0/00/00
 Date Reported: 0/00/00

Prepared by (Lab Analyst)