



EnviroBiomics, Inc
Because Health Matters

ENVIRONMENTAL INTERPRETATION REPORT

Report Reference Number:	617551
Client Name:	Jastin Batts
Property Address:	Not provided
Project Name:	ERMI and HERTSMI-2 Environmental Interpretation Report
Sample Location:	Basement
Sample Type:	Swiffer Kit
Status:	Significant
Date of Sampling:	Aug 12, 2026
Date of Report:	Aug 12, 2026

INCLUDED LABORATORY RECORDS

Sample / Report	Test	Location / Sample Type
617551	ERMI	Basement · Swiffer Kit
617551	HERTSMI-2	Basement · Swiffer Kit

EXECUTIVE ENVIRONMENTAL DASHBOARD

Metric	Result	Assessment
ERMI Score	42.3	Significant · The reported ERMI value is in the highest relative distribution category and reflects a strongly elevated mold profile in the sampled basement dust.
HERTSMI-2 Score	42	Significant · The reported HERTSMI-2 score is well above the elevated threshold and is driven by multiple indicator species in the highest relative distribution category.
Water-Damage Signature	Multiple Q4 water-damage indicators detected	Strongly Present · The basement dust profile contains several taxa commonly associated with water-damaged or moisture-impacted building materials.
Dust-Reservoir Burden	Multiple Q4 reservoir-associated taxa detected	Elevated · The sample shows a substantial burden of reservoir-associated fungi that can accumulate in settled dust and low-cleanability building areas.
Fungal Amplification	Supported by elevated Group 1 and Group 2 profiles	Elevated · The relative distribution of organisms indicates a pronounced fungal burden in the sampled dust, with notable differences between water-damage and common indoor taxa.
Bacterial or Actinomycete Amplification	Not provided	Insufficient Data · No bacterial or actinomycete laboratory data were supplied in the source record.
Endotoxin Burden	Not provided	Insufficient Data · No endotoxin result was supplied in the source record.

LABORATORY QUARTILE SCALE

Q1 lower

Q2 lower-middle

Q3 upper-middle

Q4 upper

Executive Summary

This basement dust sample shows a strongly elevated mold profile. The ERMI score of 42.3 and HERTSMI-2 score of 42 are both well into the highest relative range and are supported by numerous Q4 organisms, including several taxa commonly associated with water-damaged building materials and dust reservoirs. The profile is especially notable for *Aspergillus versicolor*, *Chaetomium globosum*, *Stachybotrys chartarum*, *Trichoderma viride*, *Wallemia sebi*, and multiple *Penicillium* species. From a building-science perspective, the findings are consistent with a substantial fungal burden in settled basement dust and warrant professional inspection for moisture-related sources and reservoirs. Because only one basement sample was supplied, the laboratory data cannot identify the exact source location or confirm active intrusion; onsite investigation is needed to determine the underlying building conditions.

INTEGRATED LABORATORY FINDINGS

Indicator / Analyte	Result	Q	Source Sample	Environmental Significance
<i>Aspergillus flavus/oryzae</i>	10 · SE/mg	Q3	617551	Significance Requires Context
<i>Aspergillus fumigatus</i>	17 · SE/mg	Q3	617551	Significance Requires Context
<i>Aspergillus niger</i>	282 · SE/mg	Q3	617551	Significance Requires Context
<i>Aspergillus ochraceus</i>	189 · SE/mg	Q4	617551	Strong Water-Damage Indicator
<i>Aspergillus penicillioides</i>	7007 · SE/mg	Q4	617551	Dust-Reservoir Indicator
<i>Aspergillus restrictus</i>	138 · SE/mg	Q4	617551	Dust-Reservoir Indicator
<i>Aspergillus sclerotiorum</i>	466 · SE/mg	Q4	617551	Moisture Indicator
<i>Aspergillus sydowii</i>	5325 · SE/mg	Q4	617551	Moisture Indicator

Environmental Interpretation

- The laboratory profile supports a strong water-damage signature in the sampled basement dust. Multiple Q4 taxa commonly associated with moisture-impacted or previously damp building materials were detected, including *Aspergillus versicolor*, *Chaetomium globosum*, *Stachybotrys chartarum*, and *Trichoderma viride*.
- The sample supports a significant moisture-related fungal burden, but laboratory data alone cannot confirm active water intrusion, identify the exact source, or determine the age of the condition. Onsite inspection is needed to evaluate whether the signal reflects historical water damage, an active moisture problem, or both.
- The sample contains a substantial reservoir-associated fungal burden, including multiple Q4 *Penicillium*, *Aspergillus*, *Eurotium*, and *Wallemia* findings. This pattern is consistent with accumulated settled dust and/or hidden low-cleanability reservoirs in the basement environment.
- The reservoir pattern suggests that fungal material has accumulated in the basement environment over time. This does not by itself prove a specific reservoir, but it supports targeted inspection of dust-prone and hard-to-clean areas.

INTEGRATED SOURCE AND PATHWAY ASSESSMENT

Potential Source / Pathway	Why It Matters
<i>Aspergillus versicolor</i> · Damp or previously damp building materials, Moisture-impacted dust reservoirs, Hidden wall or finish cavities	This high Q4 result is commonly associated with water-damaged materials or concealed moisture-impacted reservoirs and should be interpreted as a strong building-science signal, not as proof of an active leak. · Inhalation of airborne spores and dust, Disturbance of settled dust during cleaning or occupant activity, Contact with contaminated surfaces and contents
<i>Chaetomium globosum</i> · Water-damaged drywall or paper-backed materials, Damp wall cavities, Previously wet building assemblies	Q4 detection is a strong indicator of water-damaged building materials or a hidden moisture reservoir, but source location must be verified onsite. · Inhalation of disturbed dust and spores, Direct contact with impacted surfaces
<i>Stachybotrys chartarum</i> · Heavily water-impacted cellulose-containing materials, Damp wall cavities, Flood-affected or persistently wet building materials	This Q4 result supports a water-damage-associated fungal signal and warrants onsite review of moisture-sensitive materials, especially in concealed or low-visibility areas. · Inhalation of disturbed dust or spores, Occupational or maintenance disturbance of impacted materials
<i>Aspergillus penicillioides</i> · Settled dust, Stored contents, HVAC-associated dust reservoirs, Porous materials and surfaces	This is a classic reservoir-associated dust organism and suggests long-term accumulation in settled dust or other low-cleanability areas. · Inhalation of resuspended dust, Disturbance of stored items or furnishings
<i>Eurotium</i> (Asp.) <i>amstelodami</i> · Settled dust, Stored contents, Dry reservoir conditions, Poorly cleaned surfaces	Q4 detection is consistent with a reservoir or stored-dust pattern and may reflect long-standing accumulation in a dry or intermittently dry environment. · Inhalation of resuspended particulate matter, Contact with contaminated contents
<i>Penicillium chrysogenum</i> · Settled dust, Stored contents, Porous or neglected surfaces, Moisture-affected reservoirs	This extremely elevated Q4 result supports a strong reservoir burden in the sampled dust and merits onsite evaluation of storage, cleaning, and potential source areas. · Inhalation of disturbed dust, Contact with contaminated contents and surfaces
<i>Scopulariopsis brevicaulis/fusca</i> · Moisture-impacted dust, Damp materials, Low-cleanability surfaces	Q4 detection is environmentally notable and may occur in moisture-impacted dust or materials; onsite inspection is needed to determine whether it reflects a reservoir or a past water event. · Inhalation of disturbed dust, Contact with contaminated materials

KEY FINDINGS INTERPRETATION

- ERM score reported by the laboratory: 42.3.
- HERTSMI-2 score reported by the laboratory: 42.
- Multiple Q4 water-damage-associated organisms were detected, including *Aspergillus versicolor*, *Chaetomium globosum*, *Stachybotrys chartarum*, and *Trichoderma viride*.
- Multiple Q4 dust-reservoir-associated organisms were detected, including *Aspergillus penicillioides*, *Eurotium* (Asp.) *amstelodami*, *Penicillium chrysogenum*, and *Wallemia sebi*.
- The sample was collected from the basement and represents that location only.

INTERPRETATION NOTES

The basement likely contains a substantial settled-dust fungal burden that merits professional review. The organism pattern is consistent with past moisture impact and/or concealed reservoirs in low-cleanability basement areas. Some of the detected taxa may reflect accumulation on contents, finishes, or HVAC-adjacent surfaces if those features are present. Whether there is active moisture intrusion versus a historical moisture event Whether a hidden reservoir exists in wall cavities, finishes, or other concealed assemblies Whether HVAC components, returns, or ducts are contributing to distribution of settled fungal material Whether storage contents or basement materials are serving as the primary reservoir Whether other areas of the property show a similar or different profile

BUILDING SCIENCE ASSESSMENT

The laboratory data support a strongly elevated fungal profile in basement dust, with both water-damage indicators and dust-reservoir organisms appearing prominently. The results are most consistent with a building environment that has experienced moisture impact and/or long-term accumulation of fungal material in a basement reservoir. Because the sample is limited to one location, the laboratory findings cannot identify the exact source, determine whether moisture is active, or specify the age of the condition.

- Whether there is active moisture intrusion versus a historical moisture event
- Whether a hidden reservoir exists in wall cavities, finishes, or other concealed assemblies
- Whether HVAC components, returns, or ducts are contributing to distribution of settled fungal material
- Whether storage contents or basement materials are serving as the primary reservoir
- Whether other areas of the property show a similar or different profile

POTENTIAL AREAS OF INVESTIGATION

- Basement finishes and concealed assemblies · Multiple strong water-damage indicators support review of walls, trim, insulation, and other moisture-sensitive basement materials. · High
- Foundation interfaces and slab-adjacent conditions · Basement fungal patterns often relate to moisture migration at foundation edges, slab interfaces, or penetrations. · High
- Historical leak or flood locations · The Q4 moisture-associated profile is compatible with prior water intrusion that may have left a residual reservoir. · High
- Plumbing penetrations · Localized leaks or intermittent condensation at penetrations can support hidden moisture conditions and fungal reservoirs. · Medium
- HVAC equipment and ductwork serving the basement · Reservoir-associated fungi in settled dust can accumulate in or be distributed by HVAC components if they are present in the area. · Medium
- Stored contents and basement storage zones · High *Penicillium*, *Aspergillus*, and *Wallemia* signals may reflect dust accumulation on contents or items transferred from previously affected spaces. · High
- Carpeted or upholstered materials if present · Porous materials can retain settled fungal debris and may contribute to dust-reservoir readings. · Medium

RISK ASSESSMENT BOX

Environmental Indicator	Assessment
Water-Damage Signature	Strongly Present
Dust-Reservoir Burden	Elevated
Fungal Amplification	Elevated
Bacterial or Actinomycete Amplification	Insufficient Data
Endotoxin Burden	Insufficient Data
Mycotoxin Findings	Insufficient Data
Overall Environmental Concern	Significant
Occupancy Consideration	Further Evaluation Recommended

RECOMMENDATIONS

- 1 · Moisture Investigation · Perform a targeted onsite moisture assessment of the basement and adjacent building assemblies to determine whether an active or intermittent moisture source is present. · High
- 2 · Source Identification · Identify the most likely fungal source areas by reviewing basement materials, concealed cavities, storage zones, and any prior leakage history. · High
- 3 · Building-Envelope Evaluation · Evaluate below-grade walls, foundation interfaces, window assemblies, and other exterior-envelope features that could contribute to basement dampness. · High
- 4 · HVAC Evaluation · Inspect any HVAC components serving the basement or connected zones for dust accumulation, moisture influence, or distribution of settled fungal material. · Medium
- 5 · Targeted Additional Testing · Consider follow-up sampling at additional locations if needed to better distinguish between a localized reservoir and a broader building-wide condition. · Medium
- 6 · Professional Remediation Assessment · Have a qualified professional evaluate whether corrective work is warranted based on onsite findings, moisture conditions, and material impact. · High
- 8 · Detailed HEPA Cleaning · Implement thorough HEPA-based cleaning of basement dust and accessible surfaces after any identified source conditions are addressed or controlled. · Medium
- 9 · Contents Evaluation · Review basement storage items and contents for visible mold, moisture impact, or persistent dust loading that may be contributing to the reservoir signal. · Medium

CONCLUSION

This ERMI/HERTSMI-2 basement dust sample shows a strongly elevated fungal profile with substantial evidence of both water-damage-associated fungi and dust-reservoir organisms. The most notable findings are the ERMI score of 42.3, the HERTSMI-2 score of 42, and multiple Q4 taxa including *Aspergillus versicolor*, *Chaetomium globosum*, *Stachybotrys chartarum*, *Trichoderma viride*, *Aspergillus penicillioides*, *Eurotium amstelodami*, *Penicillium chrysogenum*, and *Wallemia sebi*. From a building-science perspective, the findings are consistent with a basement environment that merits focused investigation for moisture influence, concealed reservoirs, and dust accumulation. The laboratory data alone do not confirm active water intrusion or identify a specific source location, so onsite inspection is required to resolve the building conditions. Because only one sample was supplied, no sample-to-sample comparison is possible. A qualified Indoor Environmental Professional should review the space, and corrective steps should be guided by the onsite findings and verification results.

LABORATORY QUARTILE SCALE

Q1 lower

Q2 lower-middle

Q3 upper-middle

Q4 upper

Quartiles describe the result's position within the laboratory comparison distribution. A higher quartile is not, by itself, a diagnosis of toxicity, active growth, or unsafe occupancy. HERTSMI-2 uses its own weighted score and must not be color-coded as a quartile.

Disclaimer:
This Environmental Interpretation Report is designed to provide educational insight into the laboratory findings and is not intended to replace the recommendations, diagnosis, or professional judgment of a qualified Indoor Environmental Professional (IEP) or healthcare practitioner. Because every environment and individual health situation is unique, a comprehensive assessment by the appropriate professional is recommended before making any environmental or medical decisions.