MOLD ASSESSMENT & AIR QUALITY REPORT

1. Executive Summary

A Kitsap County homeowner contacted Lavalyn Inspections after months of smelling a persistent musty odor in her home. While she experienced ongoing health concerns and believed mold was present, other family members were unable to smell anything unusual and questioned whether a problem existed at all.

Professional air-quality testing later revealed severe hidden mold contamination in the home's attic spaces, validating the homeowner's concerns and identifying a significant indoor environmental hazard. Laboratory testing found airborne mold levels that exceeded outdoor baseline conditions by hundreds of times in some locations.

2. Trust Your Instincts: The Warning Nobody Else Could Detect

Many homeowners assume that if mold exists, everyone in the house will smell it. That is not always true.

Some individuals are naturally more sensitive to mold-related odors and microbial volatile organic compounds (MVOCs). In this case, one homeowner repeatedly reported a musty smell despite family members insisting they couldn't detect anything unusual. Because her concerns persisted, she requested professional mold testing. What the laboratory discovered was eye-opening.

3. The Mold Testing Process

Lavalyn Inspections performed a comprehensive mold assessment that included:

- Outdoor baseline sampling
- Lower attic sampling
- Upper attic sampling
- Lower bedroom sampling
- Game room sampling
- Primary bedroom/bath sampling

All samples were analyzed by Sporecyte Laboratories under Lab ID AQ-53854.

4. Initial Findings: Areas Without Mold Amplification

The game room and primary bedroom/bathroom showed mold levels similar to outdoor conditions and were classified as having no airborne mold issue. These charts demonstrate what "normal" indoor air looks like when compared to outdoor baseline conditions.

🥏 Game Room Results

The laboratory concluded: *"There is no indication of an airborne mold issue in this area."*

🥏 Primary Bedroom/Bath Results

The laboratory reached the same conclusion for the primary suite. Mold concentrations were entirely consistent with outdoor control samples.

5. The Discovery: Severe Mold Amplification Hidden in the Attics

While occupied living spaces appeared relatively normal, attic testing told a very different story.

🥏 Lower Attic Results

The lower attic produced the most significant findings. The laboratory officially classified the lower attic as a **MAJOR MOLD ELEVATION.**

- Aspergillus/Penicillium: 36,573 spores/m³ (vs. 0 spores/m³ Outdoors)
- Cladosporium: 2,227 spores/m³ (vs. 67 spores/m³ Outdoors)
- Total Spores: 38,933 spores/m³ (vs. 173 spores/m³ Outdoors)

CRITICAL LABORATORY NOTE: *"Particulate trace overloaded; sample results should be considered underreported."* This means actual contamination levels may have been significantly higher than laboratory calculations could accurately measure. Notable organisms identified via Sporecyte imagery included multiple *Aspergillus/Penicillium* structures and *Cladosporium*.

🥏 Upper Attic Results

Testing of the upper attic revealed another substantial mold reservoir. The laboratory also classified this area as a MAJOR MOLD ELEVATION and stated the findings strongly indicated moisture or mold-related conditions within the structure.

- Aspergillus/Penicillium: 4,800 spores/m³
- Cladosporium: 613 spores/m³
- Total Spores: 5,480 spores/m³

Laboratory imaging confirmed the presence of *Aspergillus/Penicillium* spores, hyphae, and other indicators commonly associated with indoor mold amplification.

6. Mold Migration Into the Living Space

🟢 Lower Bedroom Results

Although much of the mold growth was concealed in attic spaces, testing revealed evidence that spores were actively migrating downward into living areas.

- Aspergillus/Penicillium: 11,773 spores/m³
- Total Spores: 12,000 spores/m³

The assessment concluded that these elevated counts were likely caused by migration from the contaminated lower attic. This finding demonstrated that contamination was no longer isolated and was beginning to impact occupied portions of the home.

7. Data Comparison Summary Table

The following table summarizes the airborne spore concentrations across all sampled locations compared to the outdoor baseline control:

Location / Sample Area	Aspergillus/Penicillium (spores/m³)	Cladosporium (spores/m³)	Total Airborne Spores (spores/m³)	Status Classification
Outdoor Control	0	67	173	Baseline Standard
Game Room	0	0	0	🟢 Normal / Clear
Primary Suite	40	13	67	🟢 Normal / Clear
Upper Attic	4,800	613	5,480	🟢 Major Elevation

Location / Sample Area	Aspergillus/Penicillium (spores/m^3)	Cladosporium (spores/m^3)	Total Airborne Spores (spores/m^3)	Status Classification
Lower Bedroom	11,773	227	12,000	Elevated (Migration)
Lower Attic	36,573	2,227	38,933	Major Elevation (Overloaded)

8. Assessment Conclusions

- Significant mold amplification was present in both attic spaces.
- The lower attic represented a high-concern area requiring remediation.
- The upper attic represented a moderate-to-high concern area requiring remediation.
- The lower bedroom showed clear evidence of downward spore migration.
- Game room and primary suite testing were acceptable at the time of inspection.
- Professional mold remediation was strongly recommended.

9. Professional Remediation Scope

Based on the laboratory findings, Lavalyn Inspections has outlined a remediation scope covering both the Lower Attic and Upper Attic due to confirmed amplification:

- Insulation Removal: Extraction of all mold-contaminated insulation.
- HEPA Vacuuming: Deep HEPA vacuuming of framing, joists, and sheathing.
- Mechanical Cleaning: Physical, mechanical cleaning of affected wooden surfaces.
- Antimicrobial Treatment: Application of an EPA-registered antimicrobial treatment.
- Engineering Controls: Establishment of full containment procedures and negative-air pressure controls.
- Penetration Sealing: Sealing of all attic floor penetrations to halt living space migration.

- Clearance Testing: Post-remediation clearance testing to ensure air quality returns to baseline normal standards.

10. Final Takeaway

This homeowner trusted her instincts when nobody else did. Despite skepticism from other occupants, laboratory testing confirmed extensive hidden mold contamination, including more than 38,000 spores per cubic meter in the lower attic and over 5,400 spores per cubic meter in the upper attic.

The lesson is simple: If something smells wrong, investigate it. Hidden mold often develops in attics, crawlspaces, wall cavities, and other concealed areas long before visible evidence appears. Professional testing transforms uncertainty into objective facts, helping homeowners make informed decisions about their health, indoor air quality, and property protection.