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DELAWARE VALLEY
ENVIRONMENTAL

Mold Assessment Report

1140 Wendover Court, Media PA 19063

Inspection Date: July 16, 2026

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Executive Summary

Active fungal growth involving Chaetomium, Aspergillus/Penicillium-like organisms, and Stachybotrys chartarum was identified in the attic and Bedroom 3 at 1140 Wendover Court, Media, PA, attributable to repeated overflow of the HVAC secondary condensate pan serving the attic air handler. The overflow pathway ran from the secondary pan through the CDX plywood platform decking and ceiling joist bays, into the blown cellulose insulation, through the second-floor ceiling assembly, and down the west partition wall cavity of Bedroom 3 to the bottom plate and carpet pad. The tape-lift sample collected from the attic-side ceiling drywall paper returned Chaetomium sp. and Aspergillus/Penicillium-like organisms at a heavy (4+) rating and Stachybotrys chartarum at a moderate (3+) rating. The attic air sample recorded Aspergillus/Penicillium-like organisms at 23 times the same-day outdoor control, with Chaetomium and Stachybotrys both absent outdoors. The Bedroom 3 air sample showed Aspergillus/Penicillium-like organisms at approximately 7 times the outdoor control, with Chaetomium present and absent outdoors. Platform decking at the northeast corner of the secondary pan measured 26.4% MC; ceiling joists below the platform measured 19.6% MC; the top plate at the hallway/Bedroom 3 partition measured 17.1% MC.

The underlying deficiency — a capped secondary pan drain stub and no float shutoff — was documented in the pre-purchase inspection by Fenwick Property Inspections, LLC (Report FPI-24-2207, June 11, 2024) and remained uncorrected at the time of this inspection. Brandywine Heating & Air, LLC cleared the blocked primary condensate drain on June 30, 2026 (invoice BHA-40912); the secondary pan drain stub and float switch absence were not addressed. Remediation encompassing the five affected zones totaling approximately 160 sq ft (150 sq ft of Condition 3 plus the 10 sq ft hallway, condition not determined) should proceed promptly under IICRC S520-2024 protocols, with the secondary pan drain and float shutoff corrected by a licensed HVAC contractor before remediation begins.

Building Condition Severity: High

- Active fungal growth (Condition 3) confirmed by tape-lift and air sampling in the attic equipment platform area, approximately 55 sq ft of affected materials including CDX plywood decking, SPF ceiling joists, top plate, blown cellulose insulation, and attic-side ceiling drywall paper facing
- Condition 3 in Bedroom 3 confirmed by visual observation and air sampling: approximately 40 sq ft of painted gypsum ceiling board below the attic platform, 22 sq ft of west partition wall assembly (gypsum board, SPF framing and bottom plate, fiberglass batt insulation, baseboard), and 33 sq ft of carpet and pad at the west wall base
- Hallway ceiling-wall junction adjacent to Bedroom 3, approximately 10 sq ft of painted gypsum ceiling board, assessed visually with tide-line staining on the same migration path as the Bedroom 3 ceiling and west partition wall

- Secondary pan drain stub remains capped with no drainage termination; no float shutoff is installed — the structural deficiency documented in 2024 that allowed repeated overflow is still present
- Layered tide-mark banding in the Bedroom 3 wall cavity indicates multiple discrete wet-dry cycles, not a single overflow event; onset could not be dated from available physical evidence

Scope of Work

Initial mold assessment requested by property owner Priya Whitcomb in response to a musty odor originating from the second-floor bedroom and ceiling discoloration first noted approximately mid-May 2026. The inspection was conducted on July 16, 2026 to identify the extent of microbial growth, characterize moisture conditions, identify the intrusion pathway, and provide a basis for remediation scope.

Visual inspection of accessible areas throughout the structure; moisture survey using pin-type and pinless (Tramex) moisture meters; spore-trap air sampling at four indoor locations and one outdoor control location; tape-lift surface sampling at one location in the attic; IICRC S520-2024 condition classification applied to each affected area. The HVAC system was shut down at 08:35 on the day of inspection and remained off throughout all air sampling. All air sampling was completed before any invasive wall investigation was conducted.

Areas Inspected

- Exterior (front and side elevations)
- Basement
- Living room (first floor, below Bedroom 3)
- Hallway (second floor)
- Primary bedroom (second floor)
- Bedroom 3 (second floor, affected room)
- Attic (air handler equipment platform and surrounding joist bays)

Sampling Methods

- Spore-trap air sampling (Zefon Air-O-Cell or equivalent) — 4 indoor locations, 1 outdoor control, 75 L each
- Tape-lift surface sample — 1 location, attic-side ceiling drywall paper at stain margin
- Field blank collected in the living room following air sample S-202
- Pin-type moisture meter readings on solid wood substrates (framing, plywood decking)
- Pinless (non-invasive) moisture meter readings on painted gypsum surfaces

Property Description

1140 Wendover Court, Media, PA 19063 is a two-story colonial-style single-family residence constructed in 1994 with a full basement. The structure is clad in tan vinyl lap siding with asphalt shingle roofing. An attached two-car garage is present. The attic contains a forced-air air handler unit mounted on a plywood service platform; a separate forced-air furnace and air handler are located in the basement mechanical room. A central air conditioning condenser is installed on a concrete pad at the exterior foundation. A portable dehumidifier was observed operating in the basement at the time of inspection. Blown cellulose insulation covers the attic floor between joists. Ridge and soffit vents were open and unobstructed at the time of inspection.

- Attic air handler mounted on CDX plywood platform above the second-floor hallway and Bedroom 3
- Galvanized secondary condensate pan beneath attic air handler — drain stub capped, no drainage termination, no float shutoff device
- Pre-purchase inspection (Fenwick Property Inspections, FPI-24-2207, June 2024) documented the capped drain stub and absent float switch as deficiencies
- HVAC service (Brandywine Heating & Air, BHA-40912, June 30, 2026) cleared blocked primary condensate drain; secondary pan was full at arrival; secondary pan drain stub and float switch not corrected
- Blown cellulose insulation in attic — matted and darkened beneath the platform northeast corner at time of inspection
- Basement dehumidifier present and operating; basement sill plate moisture within normal range

Environmental Conditions

Ambient conditions were recorded at four interior locations and one exterior location on July 16, 2026. Outdoor conditions reflected the prior night's rainfall: overcast skies, wet ground surfaces, and a light wind from the SSW at approximately 5 mph. Indoor conditions across the sampled rooms were consistent with a residence with HVAC off: temperatures ranged from approximately 73°F to 79°F and relative humidity ranged from approximately 54% to 68%. The attic, measured at the platform at 10:20, was the warmest and most humid interior location recorded. Dew points are reported as the approximate values printed on the moisture survey log.

Indoor: Bedroom 3 (09:15, HVAC off): 74°F, 58% RH, dew point approximately 59°F. Primary bedroom (09:55, HVAC off): 73°F, 55% RH, dew point approximately 56°F. Attic at the platform (10:20, ridge and soffit vents open): 79°F, 68% RH, dew point approximately 68°F. Living room (11:30, HVAC off): 73°F, 54% RH, dew point approximately 56°F.

Outdoor: Outdoor baseline (front yard, 08:55): 68°F, 71% RH, dew point approximately 58°F. Overcast following overnight rainfall; ground surfaces wet; wind approximately 5 mph SSW.

ASHRAE Zone: Media, PA (ZIP 19063) falls within ASHRAE Climate Zone 4A, classified as mixed-humid. The inspection was conducted in mid-July, the peak of the summer cooling season when outdoor spore counts — particularly Aspergillus/Penicillium-like organisms and Cladosporium — are at annual highs and air conditioning condensate generation is at its peak. Indoor-to-outdoor comparisons in this report are read against the same-day outdoor control collected on the same date under the same conditions.

Attic

The attic air handler is mounted on a CDX plywood service platform positioned above the second-floor hallway and Bedroom 3. A galvanized secondary condensate pan is installed beneath the unit. At the time of inspection the pan was dry; however, a prominent tide line and active rust staining at the northeast corner of the pan document prior standing water. The drain stub at the pan terminates capped approximately 8 inches above the pan floor with no connection to a drainage point. No float switch or automatic shutoff device is installed. These two deficiencies were first documented by Fenwick Property Inspections in June 2024 (Report FPI-24-2207) and were not corrected prior to the current moisture events. The Brandywine Heating & Air service visit on June 30, 2026 (invoice BHA-40912) cleared a blocked primary condensate drain but did not address the capped secondary drain stub or the absent float switch.

Pin-type moisture meter readings on solid wood substrates followed ASTM D7438. The CDX plywood platform decking at the northeast corner of the secondary pan measured 26.4% MC, which is saturated by the bands applied in this assessment. The ceiling joist in bay 3 directly below the platform measured 19.6% MC (elevated). The top plate at the hallway/Bedroom 3 partition measured 17.1% MC (elevated). A dry-standard reading taken at the north gable rafter tie — the accessible framing member at the greatest distance from the air handler — measured 9.8% MC; that reading serves as the comparative dry standard for wood framing in this structure per IICRC S500. The platform decking reading of 26.4% MC is substantially above that dry standard.

Blown cellulose insulation beneath the platform at the northeast corner was matted, darkened, and damp to the touch at the time of inspection, consistent with sustained moisture retention against the underlying wood substrate.

Visual inspection of the platform decking identified darkened discoloration and surface fungal growth on the decking boards adjacent to the secondary pan. The photograph of the platform decking shows dark grayish-brown discoloration with what appears to be white surface growth along the edges of the affected boards, consistent with fungal amplification on wood substrate. A tape-lift sample (S-206) was collected from the attic-side ceiling drywall paper facing at the visible stain margin.

Air sample S-205, collected 3 feet from the platform at 4 feet above the ceiling joists, recorded Aspergillus/Penicillium-like organisms at 6,480 ct/m³ — 23 times the same-day outdoor control of 280 ct/m³. Chaetomium was detected at 550 ct/m³ and Stachybotrys at 90 ct/m³; both were absent from the outdoor control. The attic total spore count of 8,190 ct/m³ was 2.1 times the outdoor total of 3,890 ct/m³. Total count exceeding twice the outdoor control is commonly used as a screening indicator for indoor amplification; it is not a threshold established by any standards body. The combination of the tape-lift results and the air sample confirms active growth on the equipment platform assembly. The attic equipment platform, decking, and joist bays 2 through 4 are classified as Condition 3 per IICRC S520-

2024, affecting approximately 55 sq ft of CDX plywood decking, SPF ceiling joists and top plate, blown cellulose insulation, and attic-side ceiling drywall paper facing.



Secondary condensate pan beneath the attic air handler, northeast corner. The galvanized steel pan shows a prominent mineral tide line along the perimeter indicating prior standing water, with active corrosion along the upper right quadrant. No standing water was present at the time of inspection. The drain stub visible in this area is capped with no drainage termination.



Platform decking adjacent to the secondary pan showing dark grayish-brown discoloration and what appears to be white surface growth along the edges of the affected boards, consistent with fungal amplification on the CDX plywood substrate.



Pin-type moisture meter reading on the CDX plywood platform decking at the northeast corner of the secondary pan, recorded at 26.4% MC. The wood substrate at the probe insertion point shows dark staining consistent with elevated moisture and the growth observed on the adjacent decking surface.

Concerns

- Active fungal growth (Condition 3) on platform decking, ceiling joists, top plate, cellulose insulation, and attic-side ceiling drywall paper — approximately 55 sq ft
- Platform decking at 26.4% MC (saturated); ceiling joist bay 3 at 19.6% MC (elevated); top plate at hallway/Bedroom 3 partition at 17.1% MC (elevated)
- Aspergillus/Penicillium-like organisms at 23 times outdoor control in attic air; Chaetomium at 550 ct/m³ and Stachybotrys at 90 ct/m³, both absent outdoors
- Secondary pan drain stub capped with no drainage termination — deficiency documented since June 2024 and unresolved
- No float switch or automatic shutoff installed on secondary pan

- Cellulose insulation matted, darkened, and damp beneath platform at northeast corner

IICRC S520 Condition: Equipment platform, decking and joist bays 2–4 — Condition 3

Bedroom 3

Bedroom 3 is located on the second floor and identified as the son's former room. The attic equipment platform is positioned directly above the west portion of this room, with the attic access hatch in the adjacent hallway. The inspector documented the following observations on July 16, 2026.

Ceiling: A water stain measuring approximately 20 inches by 14 inches was identified on the ceiling in the rear left (west) corner. The stain presented with an irregular perimeter, brownish-tan discoloration with darker layering toward the center, and concentric tide-line banding consistent with repeated or recurrent moisture intrusion rather than a single event. Paint delamination and surface cracking consistent with prolonged or recurrent moisture exposure were observed within the affected area. Pinless moisture meter readings on the painted gypsum ceiling at the stain location were elevated relative to the in-room reference reading taken approximately 4 feet to the east on the same ceiling plane; that reference area registered dry. No numeric values are assigned to these pinless gypsum readings, as the meter's wood-scale output on non-wood substrate is meaningful only in relation to a same-material reference. The ceiling directly below this area in the living room registered dry on the pinless meter, indicating that moisture from the ceiling assembly above did not penetrate through the floor to the first-floor level. The ceiling is assessed visually and by comparative pinless meter; the affected area recorded for this ceiling zone is approximately 40 sq ft of painted gypsum ceiling board. This sub-area is classified as Condition 3 per IICRC S520-2024.

West partition wall: Pinless moisture meter readings at 12 inches above the floor on the west partition wall (hallway side) were elevated relative to the reference. Readings at 48 inches above the floor were comparatively lower but still elevated relative to the reference (damp). At 12:40, following completion of all air sampling, the baseboard on the west wall was removed and an inspection cut approximately 12 inches by 16 inches was made low in the wall cavity in the bay just north of center. Dark microbial growth was observed on the cavity-side face of the drywall extending upward from the bottom of the panel, spanning approximately 14 to 15 inches in height. The bottom plate measured 22.8% MC via pin-type meter (elevated). Insulation within the bay was damp at the lower portion and dry at the upper portion. Staining within the cavity exhibited layered, superimposed tide-mark banding consistent with multiple discrete wet-dry cycles rather than a single intrusion event; this pattern aligns with intermittent condensate overflow during repeated air conditioning operation cycles over an extended period. The west partition wall lower 2 feet over the full wall length is classified as Condition 3, affecting approximately 22 sq ft of gypsum board on both faces, SPF framing and bottom plate, fiberglass batt insulation, and baseboard.

Carpet and pad: The carpet at the base of the west wall was pulled back. The underlying pad was wet. The photograph of this area shows dark brown to black staining on the underside of the carpet and pad consistent with moisture damage and what appears to be microbial growth on the carpet backing and pad.

The subfloor area adjacent to the tack strip showed brownish discoloration. This strip runs the full 11-foot length of the west wall, approximately 33 sq ft of carpet and pad, and is classified as Condition 3.

Air sample S-204, collected at the room center at 4 feet above the floor, recorded Aspergillus/Penicillium-like organisms at 1,910 ct/m³ — approximately 6.8 times the same-day outdoor control. Chaetomium was detected at 40 ct/m³ and was absent from the outdoor control. These results are consistent with fungal amplification within the room, sourced from the growth identified in the ceiling assembly and wall cavity above and behind the stained surfaces.



Inspection opening in the lower west partition wall cavity, revealing dark microbial growth on the cavity-side face of the gypsum board and on the fiberglass batt insulation and SPF framing in the lower portion of the bay. Growth extends upward from the bottom plate, with layered tide-mark banding visible on the wall cavity surfaces consistent with multiple wet-dry cycles.



Carpet pulled back at the base of the west wall, exposing the underside of the carpet and carpet pad with significant dark brown to black staining and discoloration on the pad surface consistent with moisture damage and what appears to be microbial growth. The subfloor area adjacent to the tack strip also shows brownish discoloration.



Painted gypsum ceiling board in the west portion of Bedroom 3 showing multiple concentric tide lines with tan-to-brown mineral staining, paint delamination, and surface cracking consistent with repeated or recurrent moisture intrusion from the assembly above. The affected area is approximately 20 by 14 inches at the stain itself.

Concerns

- Active fungal growth (Condition 3) in west partition wall cavity on cavity-side gypsum, fiberglass insulation, and SPF framing and bottom plate — approximately 22 sq ft
- Condition 3 ceiling stain, approximately 40 sq ft of painted gypsum ceiling board below the attic platform
- Condition 3 carpet and pad at west wall base, full wall length, approximately 33 sq ft
- Bottom plate at 22.8% MC (elevated); west partition wall pinless readings elevated at 12 in AFF relative to reference
- Aspergillus/Penicillium-like at approximately 6.8 times outdoor control; Chaetomium absent outdoors — air sample consistent with active growth in the room assemblies

- Layered tide-mark banding in wall cavity indicates multiple discrete moisture episodes; onset could not be dated from available physical evidence

IICRC S520 Condition: Ceiling, west portion below the attic platform — Condition 3; West partition wall, lower 2 ft over full length — Condition 3; Carpet and pad, strip at west wall base — Condition 3

Hallway

The second-floor hallway contains the attic access hatch and is adjacent to Bedroom 3. Visual inspection of the ceiling at the ceiling-wall junction adjacent to Bedroom 3 identified yellow-brown tannin staining extending bilaterally along both ceiling planes, with characteristic tide lines consistent with repeated or prolonged moisture intrusion from above. Localized paint delamination and bubbling were observed near the apex of the corner. This location is on the same migration pathway as the Bedroom 3 ceiling and west partition wall: secondary pan overflow tracking through the joist bays above the hallway/Bedroom 3 partition. The affected area is assessed visually; no moisture reading was taken at this location. Approximately 10 sq ft of painted gypsum ceiling board is affected.



Hallway ceiling-wall junction adjacent to Bedroom 3 showing yellow-brown tannin staining along the ceiling plane in both directions from the corner, with tide-line banding and localized paint delamination consistent with repeated moisture intrusion from the assembly above.

Concerns

- Tide-line staining at ceiling-wall junction on the same overflow migration path as Bedroom 3 ceiling and west partition wall — approximately 10 sq ft of painted gypsum ceiling board
- No moisture reading taken at this location; assessed visually only
- IICRC S520-2024 condition not established from recorded data; area should be evaluated during remediation

Primary Bedroom

The primary bedroom is located on the second floor at the far end of the upper level from Bedroom 3. Air sample S-203 was collected at the room center at 4 feet above the floor. Aspergillus/Penicillium-like organisms were recorded at 160 ct/m³ — 0.57 times the outdoor control of 280 ct/m³. All other detected species were within proportional outdoor ranges. The primary bedroom air result shows no evidence of indoor amplification. A pinless moisture meter reading was taken on the painted gypsum west exterior wall at 12 inches above the floor; that reading was dry. Visual inspection identified no staining, microbial growth, or moisture anomalies. The room is assessed as Condition 1.



Primary bedroom at the time of air sampling, showing air sampling equipment deployed at room center. No staining, moisture damage, or microbial growth was observed on walls, ceiling, or floor surfaces during visual inspection.

IICRC S520 Condition: Condition 1

Living Room

The living room is located on the first floor directly beneath Bedroom 3. The inspector identified the ceiling below Bedroom 3 as a critical evaluation area given the documented water intrusion activity above. Pinless moisture meter readings were obtained across the ceiling area beneath Bedroom 3; readings were dry across the entirety of the evaluated area. Based on these readings, water from the assembly above does not appear to have penetrated through the floor to the first-floor ceiling. Air sample S-202, collected at room center at 4 feet above the floor, recorded all species at levels proportional to or below the outdoor control: Aspergillus/Penicillium-like at 110 ct/m³ (0.39 times outdoor), Cladosporium at 510 ct/m³ (0.32 times outdoor), Basidiospores at 280 ct/m³ (0.28 times outdoor). No significant elevations were identified. Visual inspection found no staining, microbial growth, or moisture anomalies on walls, ceiling, or flooring. The living room is assessed as Condition 1.



Living room during air sampling, with sampling equipment deployed at room center. No staining, moisture damage, or microbial growth was observed on walls, ceiling, or flooring during visual inspection.

IICRC S520 Condition: Condition 1

Basement

The basement is unfinished with a poured concrete slab floor and poured concrete foundation walls. At the time of inspection the space was dry, with no efflorescence on the walls, no staining at the base of the walls, and no malodors. Pin-type moisture meter readings on the SPF sill plate at the north wall measured 11.4% MC, which is normal by the bands applied in this assessment and 1.6 percentage points above the 9.8% MC dry standard recorded at the north gable rafter tie. A portable dehumidifier was present and appeared to have been operating continuously. No visible microbial growth was identified on any surface. Given the absence of visible growth, normal moisture readings, and no occupant complaints associated with the space, air sampling of the basement was not conducted. The basement is assessed as Condition 1.



Sill plate and rim joist assembly at the north foundation wall, showing SPF framing that appeared clean and free of staining or microbial growth at the time of inspection. Pin-type moisture reading at this location measured 11.4% MC.



Basement mechanical room showing gas furnace, air handler plenum, water heater, and a portable dehumidifier with drain hose routed to a floor drain. Foundation walls and slab showed no staining or visible growth at the time of inspection.

IICRC S520 Condition: Condition 1

Exterior

The exterior inspection was conducted at 08:35 on July 16, 2026. The property is a two-story colonial with tan vinyl lap siding and asphalt shingle roofing. Exterior surfaces were wet following overnight rainfall. The central air conditioning condenser is installed on a concrete pad at the foundation with refrigerant and electrical line sets running to the wall penetration. Roof shingles showed dark algae or biological surface staining (Gloeocapsa magma or similar) across much of the surface; no missing shingles or obvious structural damage were identified at this vantage. Gutters and downspouts were present. No siding damage, efflorescence, or grading deficiencies were identified from accessible vantage points. Outdoor baseline air sample S-201 was collected in the front yard at 4 feet above grade.



Front elevation of the subject property at the time of inspection. Concrete driveway and sidewalk surfaces are wet consistent with overnight rainfall. No siding damage, efflorescence, or notable moisture intrusion was identified at this vantage point.



Gable peak area showing asphalt shingle roofing with dark algae/biological surface staining across much of the visible surface. White vinyl fascia, soffit, and gutters visible at the eave. No missing shingles or obvious structural damage were identified.

Concerns

- Biological surface staining (algae) on asphalt shingle roofing — not a moisture intrusion concern at this time but warrants monitoring

Moisture Survey

Moisture readings were collected on July 16, 2026 using a pin-type meter on solid wood substrates (CDX plywood decking, SPF framing, SPF sill plate) and a pinless (Tramex non-invasive) meter on painted gypsum surfaces and carpet pad. Pin readings on solid wood are reported as percent moisture content (% MC). Pinless readings on painted gypsum and carpet pad are comparative only; the meter's wood-scale output on non-wood substrates is meaningful only in relation to a same-material reference reading, so those results are reported qualitatively as elevated relative to reference or dry rather than as numeric values. Status flags apply to the absolute bands used in this assessment on the wood-moisture-equivalent scale: Normal is below 17% MC; Elevated is 17% to below 25% MC; Saturated is 25% MC or above. These are fixed bands, not thresholds relative to this job's dry standard — a reading can sit above the dry standard and still fall within Normal.

Location	Reading	Status
Attic		
Attic — platform decking, NE corner of secondary pan	26.4%	Saturated
Attic — ceiling joist below platform, bay 3	19.6%	Elevated
Attic — top plate, hallway / Bedroom 3 partition	17.1%	Elevated
Attic — north gable rafter tie — DRY STANDARD	9.8%	Normal
Bedroom 3		
Bedroom 3 — ceiling, center of stain	*Elevated vs reference*	Qualitative
Bedroom 3 — ceiling, 4 ft east of stain	*Dry — in-room reference*	Qualitative
Bedroom 3 — west partition wall @ 12 in AFF	*Elevated vs reference (wet)*	Qualitative
Bedroom 3 — west partition wall @ 48 in AFF	*Elevated vs reference (damp)*	Qualitative
Bedroom 3 — carpet pad at west wall base	*Wet (non-numeric)*	Qualitative
Bedroom 3 — west wall bottom plate (post-opening)	22.8%	Elevated
Primary Bedroom		
Primary bedroom — west exterior wall @ 12 in AFF	*Dry*	Qualitative

Location	Reading	Status
Living Room		
Living room — ceiling directly below Bedroom 3	*Dry*	Qualitative
Basement		
Basement — north sill plate	11.4%	Normal

Laboratory Analysis

Sample ID	Location	Volume (L)	Flow Rate (LPM)	Method	Cassette Type
S-201	Outdoor baseline, front yard, 4 ft AFF	75	15	Spore trap (ASTM D7391)	Air-O-Cell
S-202	Living room, center, 4 ft AFF	75	15	Spore trap (ASTM D7391)	Air-O-Cell
S-203	Primary bedroom, center, 4 ft AFF	75	15	Spore trap (ASTM D7391)	Air-O-Cell
S-204	Bedroom 3, center, 4 ft AFF	75	15	Spore trap (ASTM D7391)	Air-O-Cell
S-205	Attic, 3 ft from platform, 4 ft above ceiling joists	75	15	Spore trap (ASTM D7391)	Air-O-Cell

Four indoor air samples and one outdoor control were collected on July 16, 2026 and analyzed by Chestnut Ridge Analytical, Inc. (project DVE-2609-0417, report CRA-26-31882) by optical microscopy per ASTM D7391. Each indoor result is read against the same-day outdoor control (S-201, front yard, 3,890 ct/m³ total).

The living room (S-202) and primary bedroom (S-203) both returned total spore counts and all per-species counts within proportional outdoor range. In the living room, Aspergillus/Penicillium-like organisms were 0.39 times the outdoor control; in the primary bedroom, 0.57 times. No species in either sample exceeded twice the outdoor count, and neither sample contained organisms absent from the outdoor control. These results are consistent with normal indoor conditions in both rooms relative to the outdoor baseline, as evaluated using the comparative approach described in AIHA Recognition, Evaluation, and Control of Indoor Mold.

Bedroom 3 (S-204) showed a pronounced elevation of Aspergillus/Penicillium-like organisms at 1,910 ct/m³, approximately 6.8 times the outdoor control of 280 ct/m³. Chaetomium was detected at 40 ct/m³ and was absent from the outdoor control. All other species in S-204 were within outdoor range. The

presence of Chaetomium without an outdoor counterpart, combined with the Aspergillus/Penicillium-like elevation, is consistent with an indoor amplification source in or communicating with Bedroom 3.

The attic sample (S-205) produced the most significant findings in this assessment. Aspergillus/Penicillium-like organisms were recorded at 6,480 ct/m³, approximately 23 times the outdoor control. Chaetomium was detected at 550 ct/m³ and Stachybotrys at 90 ct/m³; both were absent from the outdoor control. The attic total spore count of 8,190 ct/m³ was 2.1 times the outdoor total. Using the commonly applied screening convention that an indoor-to-outdoor ratio above 2 times is suggestive of indoor amplification — this convention reflects common industry practice and is not a threshold established by any standards body — the attic total count crossed that threshold. The per-species elevations, particularly the co-detection of Chaetomium and Stachybotrys without outdoor counterparts, are the more probative indicators. Together, the S-205 results confirm active fungal amplification in the attic equipment platform area.

Indoor vs. Outdoor Spore Comparison

Species	Source	Indoor (ct/m3)	Outdoor (ct/m3)	Ratio	Significant
Aspergillus/ Penicillium-like	S-205 (Attic, 3 ft from platform, 4 ft above ceiling joists)	6480	280	23.14x	Yes
Chaetomium	S-205 (Attic, 3 ft from platform, 4 ft above ceiling joists)	550	*absent in outdoor control*	*absent in outdoor control*	Yes
Stachybotrys	S-205 (Attic, 3 ft from platform, 4 ft above ceiling joists)	90	*absent in outdoor control*	*absent in outdoor control*	Yes
Alternaria	S-202 (Living room, center, 4 ft AFF)	10	50	0.20x	No
Ascospores	S-202 (Living room, center, 4 ft AFF)	230	880	0.26x	No
Basidiospores	S-202 (Living room, center, 4 ft AFF)	280	990	0.28x	No

Species	Source	Indoor (ct/m3)	Outdoor (ct/m3)	Ratio	Significant
Cladosporium	S-205 (Attic, 3 ft from platform, 4 ft above ceiling joists)	590	1570	0.38x	No
Curvularia	—	0	80	*n/a*	No
Epicoccum	—	0	40	*n/a*	No

Surface Sampling: Tape-lift sample S-206 was collected from the attic-side ceiling drywall paper facing at the visible stain margin and analyzed by Chestnut Ridge Analytical on a semi-quantitative basis. The sample returned Chaetomium sp. at a heavy (4+) rating, Aspergillus/Penicillium-like organisms at a heavy (4+) rating, and Stachybotrys chartarum at a moderate (3+) rating. Hyphal fragments were observed; the laboratory recorded no density rating for that category. Surface tape-lift results are semi-quantitative and are not expressed as spore counts per cubic meter. The heavy (4+) ratings for Chaetomium and Aspergillus/Penicillium-like, and the moderate (3+) rating for Stachybotrys chartarum, indicate substantial fungal growth on the sampled drywall paper substrate. These ratings, combined with the attic air sample results, confirm active growth on the ceiling assembly materials beneath the equipment platform.

Surface Sample Analysis

Sample ID	Location	Method	Species	Rating	Significance
S-206	Attic-side ceiling drywall, paper facing, at stain margin	Tape Lift	Chaetomium sp.	Heavy (4+)	Significant
S-206	Attic-side ceiling drywall, paper facing, at stain margin	Tape Lift	Aspergillus/ Penicillium-like	Heavy (4+)	Significant
S-206	Attic-side ceiling drywall, paper facing, at stain margin	Tape Lift	Stachybotrys chartarum	Moderate (3+)	Significant

Sample ID	Location	Method	Species	Rating	Significance
S-206	Attic-side ceiling drywall, paper facing, at stain margin	Tape Lift	Hyphal fragments	Present	Significant

Species Significance

- Chaetomium sp.: Chaetomium is a cellulose-degrading ascomycete that requires sustained high water activity to establish and grow. Its presence on the attic-side ceiling drywall paper — a cellulose-based substrate — at a heavy (4+) tape-lift rating, and in the attic air at 550 ct/m³ and Bedroom 3 air at 40 ct/m³ with no outdoor counterpart, indicates active growth on water-damaged cellulosic materials at the site. Chaetomium is commonly regarded as an indicator of water-damaged cellulosic materials (see ACGIH, Bioaerosols: Assessment and Control, Ch. 19); its detection in this context is consistent with prolonged or recurrent wetting of the ceiling paper and the insulation and decking above it.

- Stachybotrys chartarum: Stachybotrys chartarum is a slow-growing, highly water-dependent fungus that colonizes cellulosic materials held at very high moisture content over extended periods. Its recovery from the attic-side ceiling drywall paper at a moderate (3+) tape-lift rating, and from the attic air at 90 ct/m³ with no outdoor counterpart, indicates active growth on the drywall paper substrate consistent with the sustained elevated moisture conditions documented in the platform assembly. Stachybotrys chartarum is commonly regarded as an indicator of water-damaged cellulosic materials (see ACGIH, Bioaerosols: Assessment and Control, Ch. 19); its presence points to prolonged or recurrent saturation of the substrate rather than brief or incidental wetting. Its spores are sticky and not easily aerosolized under undisturbed conditions, so airborne detection at 90 ct/m³ indicates a meaningful reservoir on nearby surfaces.

- Aspergillus/Penicillium-like: Aspergillus/Penicillium-like organisms were present at all sampling locations including the outdoor control. The outdoor control reading of 280 ct/m³ is consistent with peak summer season in the mixed-humid Mid-Atlantic region. Indoor counts in the living room and primary bedroom were below the outdoor count and show no amplification. The Bedroom 3 count of 1,910 ct/m³ and the attic count of 6,480 ct/m³ represent approximately 6.8 and 23 times the outdoor control respectively, indicating substantial indoor amplification in those areas. The heavy (4+) tape-lift rating from the attic-side drywall paper confirms a growth reservoir in the attic assembly that is the likely source of the elevated airborne counts in both the attic and Bedroom 3. Many Aspergillus and Penicillium species readily colonize wet building materials, although they are also common outdoors and are not by themselves specific indicators of water damage.

Conclusions and Recommendations

The building conditions at 1140 Wendover Court are severe. Active fungal growth involving Chaetomium, Aspergillus/Penicillium-like organisms, and Stachybotrys chartarum is confirmed across approximately 150 sq ft spanning the attic equipment platform assembly, the Bedroom 3 ceiling, the Bedroom 3 west partition wall lower assembly, and the Bedroom 3 carpet and pad at the west wall base. All affected areas in the attic and Bedroom 3 meet the criteria for Condition 3 under IICRC S520-2024. The hallway ceiling-wall junction (approximately 10 sq ft) is on the same migration pathway and shows visual staining; its condition has not been established from recorded data and requires evaluation during the remediation scope investigation. The water source — the secondary condensate pan overflow at the attic air handler — is assessed as inactive at the time of inspection based on the dry pan observed and the June 30 drain clearing documented in Brandywine Heating & Air invoice BHA-40912; however, the structural deficiencies that permitted the overflow (capped drain stub, absent float switch) remain in place and the source cannot be considered controlled until both are corrected. The banded tide-mark pattern in the Bedroom 3 wall cavity indicates the moisture events were intermittent and repeated over an extended period, consistent with the two-year gap between the 2024 inspection deficiency documentation and the current presentation. Onset could not be dated from the available physical evidence.

Urgency: urgent

Recommendations

1. IMMEDIATE — Engage a licensed HVAC contractor to install a properly terminated secondary condensate drain line and a float shutoff switch on the attic air handler before remediation begins. These two items were documented as deficiencies in the 2024 pre-purchase inspection (Fenwick Property Inspections, FPI-24-2207) and were not corrected by the June 2026 HVAC service visit (Brandywine Heating & Air, BHA-40912). Remediation cannot proceed safely until the moisture source is verifiably controlled. The corroded secondary pan observed at this inspection should also be evaluated for replacement; a pan that has held standing water and shows active corrosion is a recurrence risk regardless of whether the drain is reconnected.

2. IMMEDIATE — Restrict occupant access to Bedroom 3 and limit time in the second-floor hallway until containment is established. The Bedroom 3 air sample confirmed airborne Chaetomium and elevated Aspergillus/Penicillium-like organisms consistent with active growth in the room assemblies.

3. PROMPT — Engage a qualified remediation contractor working to IICRC S520-2024 to remediate all Condition 3 areas under full containment per IICRC S520-2024. Affected scope includes: (1) attic equipment platform CDX plywood decking, SPF ceiling joists and top plate at joist bays 2 through 4, blown cellulose insulation, and attic-side ceiling drywall paper facing — approximately

55 sq ft; (2) Bedroom 3 painted gypsum ceiling board on the west side below the platform — approximately 40 sq ft; (3) Bedroom 3 west partition wall lower 2 feet, both faces of gypsum board, SPF framing and bottom plate, fiberglass batt insulation, and baseboard — approximately 22 sq ft; (4) Bedroom 3 carpet and pad at the west wall base, full wall length — approximately 33 sq ft. The hallway ceiling-wall junction (approximately 10 sq ft) should be incorporated into the remediation scope investigation to establish its condition before the remediation contractor closes that area.

4. PROMPT — Before closing the hallway area, the remediation contractor should probe the hallway ceiling-wall junction staining to determine whether the condition of that assembly has been affected by the same overflow pathway. Visual findings at that location are consistent with the migration path; physical assessment will confirm whether drywall or framing behind the stain requires remediation.

5. SHORT-TERM — Following remediation and HVAC correction, conduct post-remediation verification air sampling and, where applicable, surface sampling in accordance with IICRC S520-2024 post-remediation verification criteria and AIHA Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings, 2nd edition (2021). Clearance criteria should be established in the remediation protocol before work begins.

6. SHORT-TERM — Replace the blown cellulose insulation disturbed and wetted in the attic northeast corner beneath the equipment platform. Cellulose insulation that has been repeatedly wetted and matted retains moisture and organic material that supports continued fungal activity; it cannot be dried in place to a clean condition.

7. LONG-TERM — Evaluate the attic air handler installation for condensation management overall. In a mixed-humid climate (ASHRAE Zone 4A), an attic-installed air handler operating during peak summer humidity generates substantial condensate. Confirming that the primary drain is clear and slopes correctly, and verifying that the newly terminated secondary drain discharges to a visible location, will reduce the recurrence risk of a future undetected overflow.

Follow-Up Actions

- Confirm HVAC contractor correction of secondary pan drain termination and float shutoff installation before remediation begins
- Evaluate the secondary condensate pan for replacement given the documented corrosion and history of standing water
- Obtain post-remediation verification clearance sampling results following remediation contractor completion

- Provide the remediation contractor with this assessment report and the Chestnut Ridge Analytical lab report CRA-26-31882 as part of the remediation project file

Standards Referenced

- IICRC S520-2024 Standard for Professional Mold Remediation: Condition 1, 2, and 3 classifications applied to each affected area; remediation scope and containment requirements basis
- IICRC S500 Standard for Professional Water Damage Restoration: Dry standard methodology — comparative reference reading at the north gable rafter tie (9.8% MC) used as the basis for interpreting elevated and saturated readings in the affected attic framing and decking
- AIHA Recognition, Evaluation, and Control of Indoor Mold: Comparative indoor-vs-outdoor approach applied to interpret air sampling results; same-day outdoor control (S-201) used as the reference for each interior sample
- AIHA Assessment, Remediation, and Post-Remediation Verification of Mold in Buildings, 2nd edition (2021): Post-remediation verification criteria; referenced for clearance sampling protocol to be established in the remediation project
- ACGIH Bioaerosols Assessment and Control - Chapter 19: Background on Chaetomium and Stachybotrys chartarum as organisms commonly associated with water-damaged materials in the context of the attic equipment platform findings
- ASTM D7391 Standard Test Method for Categorization and Quantification of Airborne Fungal Structures in an Inertial Impaction Sample by Optical Microscopy: Laboratory analytical method for spore-trap air samples S-201 through S-205
- ASTM D7438 Standard Practice for Field Calibration and Application of Hand-Held Moisture Meters: Applied to pin-type moisture meter readings on solid wood substrates: CDX plywood platform decking, SPF ceiling joists, SPF top plate, SPF sill plate, and SPF bottom plate
- EPA Mold Remediation in Schools and Commercial Buildings (EPA 402-K-01-001): General remediation guidance applicable to residential mold assessment and remediation planning in Pennsylvania, where no state mold assessor licensing requirement exists

Limitations and Disclaimer

Scope of Inspection and Limitations. This report reflects the conditions observable at the property on the date of inspection within the visible and readily-accessible portions of the building. Except where this report expressly describes an invasive opening, lifted flooring or other destructive investigation, the inspector did not dismantle building systems, lift carpeting or padding, move stored items, perform destructive testing, or otherwise inspect concealed cavities. Conditions in areas not opened or otherwise accessed — including but not limited to wall, ceiling and floor cavities, areas behind built-in furniture, locked spaces, and locations otherwise not visible at the time of inspection — are excluded from the scope of this report.

Hidden and Future Conditions. Mold growth, moisture intrusion, or other conditions hidden behind finishes or otherwise not visible at the time of inspection are not within the scope of this assessment. The inspector makes no representation regarding conditions that may exist outside the inspected areas, may have existed prior to the inspection and since changed, or may develop after the inspection date. Findings reflect a point-in-time snapshot only; environmental conditions can change rapidly with changes in moisture, ventilation, or occupancy.

Limitation of Liability. Liability arising from any error, omission, or claim related to this report is limited to the fee paid for the inspection and analytical work described herein. This limitation applies to the inspector, the inspecting firm, and any affiliated parties, regardless of the legal theory under which the claim is brought. Acceptance of this report constitutes acknowledgement of this limitation. Nothing in this paragraph waives any non-waivable rights or duties under applicable state law.

Health Effects and Medical Opinion. The inspector is not a medical professional and this report does not constitute medical advice, diagnosis, or treatment. The presence, absence, or quantity of mold spores reported here cannot be used to predict whether any individual will or will not experience health effects from indoor mold exposure. Occupants with health concerns related to indoor air quality should consult a qualified medical provider. Recommendations in this report address building conditions, not human health outcomes.

Inspector Certification

I, **Daniel Marchetti**, hereby certify that this assessment report reflects my professional opinion based on the inspection conducted on July 16, 2026 and laboratory analysis dated July 21, 2026. The findings, conclusions, and recommendations herein are based on the data collected during the site visit and the laboratory reports referenced in this document.

Daniel Marchetti

Daniel Marchetti

IICRC AMRT #1176420 • IICRC WRT #1176419 • ACAC CIEC #8814

Date: October 16, 2026

Appendices

The following supporting material is appended on subsequent pages:

1. Complete Photographic Record
2. lab-report-CRA-26-31882.pdf
3. lab-chain-of-custody.pdf

Appendix: Complete Photographic Record

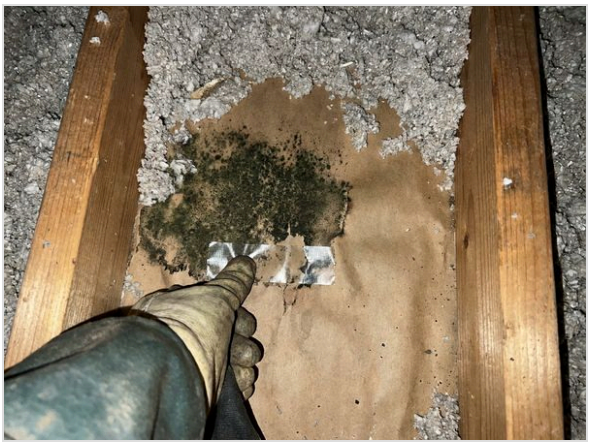
Photographs taken during this assessment that are not reproduced in the body of this report. Each is identified by the location recorded at capture.



Attic — air handler unit base, condensate drain line



Attic — attic floor insulation between joists



Attic — attic floor decking between joists



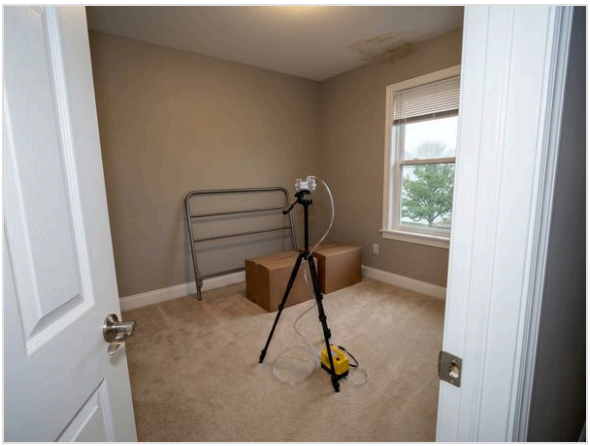
Attic — attic access hatch opening, central attic area



Attic — attic floor near rafter/truss member



Attic — center of attic floor, air handler platform



Bedroom 3 — ceiling, upper right quadrant near window wall



Bedroom 3



Bedroom 3 — baseboard and lower wall



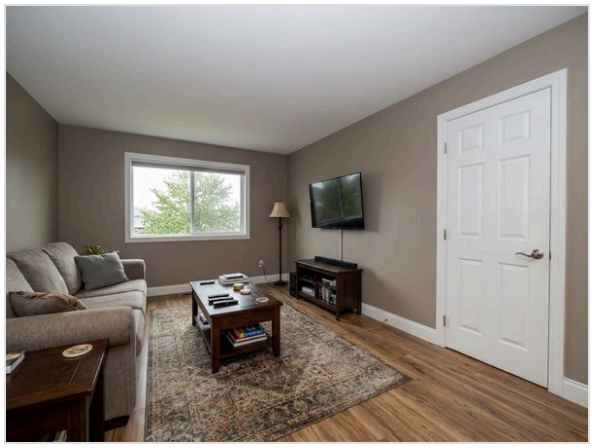
Bedroom 3 — ceiling, center



Exterior — rear/side wall with AC condenser unit



Hallway



Living Room



Primary Bedroom

Chestnut Ridge Analytical, Inc.

640 Quarry Road, Allentown, PA 18103 · (610) 555-0192
AIHA-LAP, LLC — EMLAP Laboratory ID 194728

Analytical Report — Fungal Spore Trap and Surface Analysis

Report No.	CRA-26-31882
Client	Delaware Valley Environmental LLC — Project DVE-2609-0417
Site	1140 Wendover Court, Media, PA 19063
Collected by	Daniel Marchetti, ACAC CIEC, IICRC AMRT, IICRC WRT
Date collected	July 16, 2026
Date received	July 17, 2026, 09:40
Date reported	July 21, 2026
Analyst	K. Osei, Analytical Microbiologist

Method

Air samples collected on Air-O-Cell spore trap cassettes at 15 L/min for 5 minutes (75 L; 0.075 m³ per cassette). Analysis by direct microscopic examination in accordance with ASTM D7391. Reporting limit 13 ct/m³ at the stated volume. Counts are reported to the nearest 10 ct/m³; sample totals are the sum of the reported rows.

Aspergillus and Penicillium cannot be differentiated by spore morphology in direct examination and are reported throughout as the combined category "Aspergillus/Penicillium-like". Speciation of this group requires culture or molecular identification, neither of which was requested for this project.

S-201 — Outdoor, front yard, 4 ft AFF

Total spore concentration **3,890 ct/m³** · — (outdoor reference)

Organism	Raw count	ct/m³	% of total
Cladosporium	118	1,570	40.4 %
Basidiospores	74	990	25.4 %
Ascospores	66	880	22.6 %
Aspergillus/Penicillium-like	21	280	7.2 %
Curvularia	6	80	2.1 %
Alternaria	4	50	1.3 %
Epicoccum	3	40	1.0 %
Total	**292**	**3,890**	**100.0 %**

S-202 — Living room, center, 4 ft AFF

Total spore concentration **1,140 ct/m³** · 0.29× outdoor

Organism	Raw count	ct/m³	% of total
Cladosporium	38	510	44.7 %
Basidiospores	21	280	24.6 %
Ascospores	17	230	20.2 %
Aspergillus/Penicillium-like	8	110	9.6 %
Alternaria	1	10	0.9 %
Total	**85**	**1,140**	**100.0 %**

S-203 — Primary bedroom, center, 4 ft AFF

Total spore concentration **1,000 ct/m³** · 0.26× outdoor

Organism	Raw count	ct/m³	% of total
Cladosporium	31	410	41.0 %
Basidiospores	18	240	24.0 %
Ascospores	14	190	19.0 %
Aspergillus/Penicillium-like	12	160	16.0 %
Total	**75**	**1,000**	**100.0 %**

S-204 — Bedroom 3, center, 4 ft AFF

Total spore concentration **2,700 ct/m³** · 0.69× outdoor

Organism	Raw count	ct/m³	% of total
Aspergillus/Penicillium-like	143	1,910	70.7 %
Cladosporium	29	390	14.4 %
Basidiospores	15	200	7.4 %
Ascospores	12	160	5.9 %
Chaetomium	3	40	1.5 %
Total	**202**	**2,700**	**100.0 %**

S-205 — Attic, 3 ft from air-handler platform

Total spore concentration **8,190 ct/m³** · 2.11× outdoor

Organism	Raw count	ct/m³	% of total
Aspergillus/Penicillium-like	486	6,480	79.1 %
Cladosporium	44	590	7.2 %
Chaetomium	41	550	6.7 %
Basidiospores	20	270	3.3 %
Ascospores	16	210	2.6 %
Stachybotrys	7	90	1.1 %
Total	**614**	**8,190**	**100.0 %**

S-FB-201 — Field blank

Cassette opened and resealed on site without drawing air. All categories below the 13 ct/m³ reporting limit. No evidence of field or transit contamination.

S-206 — Surface sample (tape lift)

Attic-side ceiling drywall, paper facing, at the margin of the visible stain. Reported semi-quantitatively by relative abundance of fungal structures observed. **Surface results are not expressed as airborne concentrations and are not comparable to the air samples above.**

Organism	Relative abundance
Chaetomium sp.	Heavy (4+)
Aspergillus / Penicillium-like	Heavy (4+)
Stachybotrys chartarum	Moderate (3+)
Hyphal fragments	Present

Interpretive note

Interpretation of airborne fungal data is comparative: indoor results are evaluated against a concurrent outdoor reference sample collected under the same conditions, considering both total concentration and the distribution of individual genera. No published numeric airborne concentration constitutes a health-based standard, and none is applied here. Interpretation in the context of the building is the responsibility of the assessing consultant.

Seasonal note: outdoor fungal concentrations in this region are seasonally elevated through the summer months, which compresses indoor-to-outdoor total-count ratios. Genus-level comparison is accordingly more informative than total counts at this time of year.

Analyzed and reported by — K. Osei, Analytical Microbiologist

Date

_____

_____

Results relate only to the samples as received. This report shall not be reproduced except in full without the written approval of the laboratory.

Delaware Valley Environmental LLC

18 Chandler Street, Suite 2B, West Chester, PA 19380 · (610) 555-0148

Chain of Custody — Air and Surface Samples

Project	DVE-2609-0417
Site	1140 Wendover Court, Media, PA 19063
Client	Priya Whitcomb
Sampled by	Daniel Marchetti, ACAC CIEC, IICRC AMRT, IICRC WRT
Date sampled	July 16, 2026
Laboratory	Chestnut Ridge Analytical, Inc., 640 Quarry Road, Allentown, PA 18103
Analysis requested	Fungal spore trap, direct examination (ASTM D7391); surface tape lift, semi-quantitative
Turnaround	Standard
Pump / calibration	Air-O-Cell @ 15 L/min · calibrated 2026-07-07, certificate on file

Sample collection log

Time	Sample	Detail
08:55–09:00	S-201	Outdoor baseline, front yard, 4 ft AFF. 68 °F / 71 % RH, overcast
09:15–09:20	S-204	Bedroom 3, center, 4 ft AFF. HVAC off since 08:35; door and window closed
09:55–10:00	S-203	Primary bedroom, center, 4 ft AFF. HVAC off
10:20–10:25	S-205	Attic, 3 ft from platform, 4 ft above ceiling joists
10:52	S-206	Tape lift — attic-side ceiling drywall, paper facing, at stain margin
11:30–11:35	S-202	Living room, center, 4 ft AFF. HVAC off
11:40	S-FB-201	Field blank — opened and resealed on site
12:40	—	**DESTRUCTIVE OPENING BEGINS — baseboard removal and inspection cut, Bedroom 3 west wall**

Sequencing

All air sampling was completed before any destructive opening. The final air cassette (S-202) was collected 11:30–11:35 and the field blank sealed at 11:40. The Bedroom 3 west wall cavity was not opened until 12:40. No airborne result in this set is affected by disturbance of concealed materials.

Custody transfer

	Name	Date / time	Signature
Relinquished by	Daniel Marchetti	2026-07-16 13:55	_____
Received by (courier)	R. Delgado	2026-07-16 16:20	_____
Received at laboratory	K. Osei	2026-07-17 09:40	_____

Samples transported at ambient temperature, upright, in a rigid container. Cassette seals intact at receipt.