September 19, 2025

Will Wenzloff
Hillsboro School District
4901 SE Witch Hazel Road
Hillsboro, Oregon 97123

Via email: wenzlofw@hsd.k12.or.us

Regarding: Indoor Air Quality Report
Hillsboro High School, Room LA6A
3285 SE Rood Bridge Road
Hillsboro, Oregon 97123
PBS Project No. 25009991 / 0005

Dear Mr. Wenzloff:

On September 16, 2025, Apex Companies LLC (Apex) collected non-viable fungal air samples from two rooms in the Language Arts Building at Hillsboro High School in Hillsboro, Oregon. The testing was conducted in response to staff concerns of a possible fungal amplification condition in Room LA6A. Apex collected air samples from Room LA6A, Room LA1A, and two additional samples from outdoors. The outdoor samples were used as baseline comparison samples. In addition to the air samples, Apex collected one tape-lift sample from the air diffuser at the west end of Room LA6A and one bulk sample of apparent fungal growth from a potted plant in the same room.

Rooms LA6A and LA1A are similarly configured office spaces with classrooms on either side. Neither room has windows that open to the outside. Interior finishes include polished concrete floors, gypsum wallboard walls, and lay-in ceiling panels. Conditioned air is provided by ceiling-mounted supply and return vents. Both rooms were free of unusual odors, pets, food waste, and staining that would indicate current or historic water intrusion. Room LA6A contains 13 potted house plants and at least two of those plants exhibited apparent fungal growth on the potting soil.

Airborne fungal spore concentrations in both indoor samples were quite low and give no evidence of an airborne fungal amplification condition. No mold growth was detected on the tape-lift sample from the supply air diffuser and showed only typical fungal spore trapping. Fungal growth was identified on the sample of soil from one houseplant, but this does not appear to be a significant source of airborne fungal spores.

The air samples were collected using Allergenco-D impactor cassettes and a high-volume vacuum pump. Each sample was collected at a flow rate of 15 liters per minute for five minutes from an elevation of approximately four feet above floor level. The samples were submitted to Eurofins Built Environment Testing in Portland, Oregon, for non-viable fungal spore identification.

The airborne fungal concentrations and predominant spore types from each air sample are shown in the following table.

Table 1. Air Sample Laboratory Results

Sample	Location	Fungal Spore Concentration*	Predominant Spore Types
001	Room LA6A	160	*Ascospores; basidiospores; cladosporium*
002	Room LA1A	110	*Ascospores; cladosporium*
003	Outdoors – West Side	4,600	*Cladosporium; basidiospores; ascospores; penicillium/aspergillus types; smuts, periconia, myxomycetes*
004	Outdoors - West Side	2,400	*Ascospores; basidiospores; cladosporium; smuts, periconia, myxomycetes; penicillium/aspergillus types*

**Spore concentrations are reported in total spores per cubic meter.*

Laboratory analysis of tape lift and bulk samples provide a qualitative visual estimate of miscellaneous fungal spores, mold growth, and the extent of mold growth. The following table summarizes the results of the tape lift and bulk sample analysis.

Table 2. Tape Lift and Bulk Sample Laboratory Results

Sample	Location	Misc. Spores Present	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures	Lab Comments and General Impression
005	Rm LA6A – Tape lift from supply air diffuser	Variety	None	Normal trapping
006	Rm LA6A – Bulk soil sample from potted house plant	Very few	*Cladosporium; ascomycetes (ascospores, hyphae)*	Mold growth

Refer to the attached laboratory analytical reports for additional information.

Airborne fungal spore concentrations fluctuate seasonally and with changing weather conditions. In reviewing airborne fungal spore sample data, the two main points of comparison are the total spore concentrations and the relative proportions of the various spore types. Typically, fungal spore concentrations indoors are expected to be much lower than fungal spore concentrations outdoors. And, in the absence of an indoor fungal amplification condition, the relative proportions of spore types found indoors will generally be similar to the proportions of spore types found outdoors. High spore concentrations indoors, especially of spore types that are not well represented in the outdoor samples, indicate a possible fungal amplification condition.

Based on a review of the laboratory analytical data, the types and relative proportions of the fungal spores identified in the indoor samples were similar to the types and relative proportions of the fungal spores identified in the outdoor samples. Additionally, the overall concentration of fungal spores in the indoor samples was significantly lower than the concentrations observed in the outdoor samples. These two observations are a strong

indication that the fungal spores identified in the indoor samples originated from outdoor sources and that there is not an unusual or elevated fungal condition in the indoor test areas.

LIMITATIONS OF SCOPE

This study was limited to the tests and locations as indicated above. The site as a whole may have other environmental concerns that will not be characterized by this study. The findings and conclusions of this work are not scientific certainties, but probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation.

Please feel free to contact me at 503.515.4726 or dale.voeller@apexcos.com with any questions or comments.

Sincerely,

Digitally signed by Dale Voeller, CHMM, CSP
Date: 2025.09.19 18:37:16 -07'00'

Dale Voeller, CHMM, CSP
Senior Project Manager

Attachment: Laboratory Analytical Reports

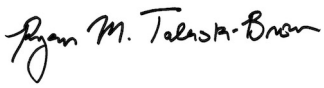
eurofins | Built Environment Testing

Report for:

Dale Voeller
PBS Engineering and Environmental: Portland
4412 S Corbett Ave.
Portland, OR 97239

Regarding: Eurofins Built Environment Testing West, LLC
Project: 25009991/0005; Hillsbord HS Language Arts
EML ID: 4232355

Approved by:



Technical Manager
Ryan Talaski-Brown

Dates of Analysis:
Spore trap analysis: 09-19-2025

Service SOPs: Spore trap analysis (EB-MY-S-1038)
AIHA LAP, LLC accredited service, Lab ID #1122031

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Information supplied by the client which can affect the validity of results: sample air volume.

Eurofins Built Environment Testing West, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.
Eurofins Built Environment Testing West, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Eurofins Built Environment Testing West, LLC
4321 S. Corbett Ave. Suite A, Portland, OR 97239
(833) 465-5857 www.eurofinsus.com/Built

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller
Re: 25009991/0005; Hillsbord HS Language Arts

Date of Sampling: 09-16-2025
Date of Receipt: 09-17-2025
Date of Report: 09-19-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	001: Room LA6A			002: Room LA1A		
Comments (see below)	None			None		
Lab ID-Version‡:	21167226-1			21167227-1		
Analysis Date:	09/19/2025			09/19/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Alternaria						
Ascospores	1	25	53	1	25	53
Basidiospores	1	25	53			
Botrytis						
Chaetomium						
Cladosporium	1	25	53	1	25	53
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	< 1+			< 1+		
Hyphal fragments/m3	13			< 13		
Pollen/m3	< 13			< 13		
Skin cells (1-4+)	< 1+			< 1+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			160			110

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m^3 divided by the raw count, expressed in spores/m^3, per spore and per sample.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Eurofins Built Environment Testing West, LLC
4321 S. Corbett Ave. Suite A, Portland, OR 97239
(833) 465-5857 www.eurofinsus.com/Built

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller
Re: 25009991/0005; Hillsbord HS Language Arts

Date of Sampling: 09-16-2025
Date of Receipt: 09-17-2025
Date of Report: 09-19-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	003: Outdoors-West			004: Outdoors-West		
Comments (see below)	A			None		
Lab ID-Version‡:	21167228-1			21167229-1		
Analysis Date:	09/19/2025			09/19/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Alternaria	1	100	13	2	100	27
Ascospores	14	25	750	14	25	750
Basidiospores	20	25	1,100	14	25	750
Botrytis				1	100	13
Chaetomium						
Cladosporium	38	25	2,000	10	25	530
Curvularia						
Epicoccum	1	100	13			
Fusarium						
Myrothecium						
Nigrospora						
Other colorless	1	100	13			
Penicillium/Aspergillus types†	3/31	25/100	570	1	25	53
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	12	100	160	22	100	290
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	1+			1+		
Hyphal fragments/m3	40			80		
Pollen/m3	< 13			13		
Skin cells (1-4+)	< 1+			< 1+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			4,600			2,400

Comments: A) 31 of the raw count *Penicillium/Aspergillus* type spores were present as a single clump.

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample, indicating a raw count of <1 spore.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m^3 divided by the raw count, expressed in spores/m^3, per spore and per sample.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Eurofins Built Environment Testing West, LLC
4321 S. Corbett Ave. Suite A, Portland, OR 97239
(833) 465-5857 www.eurofinsus.com/Built

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller
Re: 25009991/0005; Hillsbord HS Language Arts

Date of Sampling: 09-16-2025
Date of Receipt: 09-17-2025
Date of Report: 09-19-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Meghanne Burns

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by AIHA LAP, LLC, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

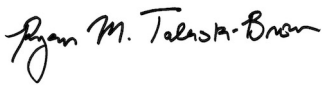
eurofins | Built Environment Testing

Report for:

Dale Voeller
PBS Engineering and Environmental: Portland
4412 S Corbett Ave.
Portland, OR 97239

Regarding: Eurofins Built Environment Testing West, LLC
Project: 25009991/0005; Hillsbord HS Language Arts
EML ID: 4232355

Approved by:



Technical Manager
Ryan Talaski-Brown

Dates of Analysis:
Direct microscopic exam (Qualitative): 09-19-2025

Service SOPs: Direct microscopic exam (Qualitative) (EM-MY-S-1039)
AIHA LAP, LLC accredited service, Lab ID #1122031

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins Built Environment Testing West, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.
Eurofins Built Environment Testing West, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Eurofins Built Environment Testing West, LLC
4321 S. Corbett Ave. Suite A, Portland, OR 97239
(833) 465-5857 www.eurofinsus.com/Built

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller
Re: 25009991/0005; Hillsbord HS Language Arts

Date of Sampling: 09-16-2025
Date of Receipt: 09-17-2025
Date of Report: 09-19-2025

DIRECT MICROSCOPIC EXAMINATION REPORT

Background Debris and/or Description	Miscellaneous Spores Present*	MOLD GROWTH: Molds seen with underlying mycelial and/or sporulating structures†	Other Comments††	General Impression
Lab ID-Version‡: 21167224-1, Analysis Date: 09/19/2025: Bulk sample 006: "White mold" on plant soil				
Soil	Very few	1+ *Cladosporium* species (spores, hyphae) < 1+ ascomycetes (ascospores, hyphae)	None	Mold growth
Lab ID-Version: 21167225-1, Analysis Date: 09/19/2025: Tape sample 005: Tape Lift-West Air Vent				
Moderate	Variety	None	None	Normal trapping

* Indicative of normal conditions, i.e. seen on surfaces everywhere. Includes basidiospores (mushroom spores), myxomycetes, plant pathogens such as ascospores, rusts and smuts, and a mix of saprophytic genera with no particular spore type predominating. Distribution of spore types seen mirrors that usually seen outdoors.

† Quantities of molds seen growing are listed in the MOLD GROWTH column and are graded <1+ to 4+, with 4+ denoting the highest numbers.

†† Some comments may refer to the following: Most surfaces collect a mix of spores which are normally present in the outdoor environment. At times it is possible to note a skewing of the distribution of spore types, and also to note "marker" genera which may indicate indoor mold growth. Marker genera are those spore types which are present normally in very small numbers, but which multiply indoors when conditions are favorable for growth.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
The limit of detection is < 1+ when mold growth is detected.

For additional information necessary for the interpretation of the results, all readers are advised to refer to the document "Direct Exam Details Page" which is available on our website at:
www.emlab.com/services/mold-testing/direct-microscopic-exam-qualitative/

Eurofins Built Environment Testing West, LLC
4321 S. Corbett Ave. Suite A, Portland, OR 97239
(833) 465-5857 www.eurofinsus.com/Built

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller
Re: 25009991/0005; Hillsbord HS Language Arts

Date of Sampling: 09-16-2025
Date of Receipt: 09-17-2025
Date of Report: 09-19-2025

DIRECT MICROSCOPIC EXAMINATION REPORT

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Meghanne Burns

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by AIHA LAP, LLC, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

CHAIN OF CUSTODY eurofins

Built Environment Testing

www.eurofinsus.com/Built

East: (866) 871-1984
Central: (800) 651-4802
West: (866) 888-6653

004232355

WEATHER	Fog	Rain	Snow	Wind	Clear
LEVEL None					X
Light				X	
Moderate					
Heavy					

CONTACT INFORMATION

Company:	APEX COMPANIES	Address:	4412 S. CORBETT AVE, PORTLAND
Contact:	DALE VOELLER	Special Instructions:	EMAIL RESULTS TO:
Phone:	503 515-4726		DALE.VOELLER@APEXCOS.COM

PROJECT INFORMATION

Project ID:	25009991/0005		
Project Description:	HILLSBORO HS LANGUAGE ARTS		
Project Zip Code:	97123	Sampling Date/Time:	9/16/25 @ 4:15PM
PO Number:		Sampled By:	VOELLER

TURN AROUND TIME CODES - (TAT)

STD - Standard (Default)
ND - Next Business Day
SD - Same Business Day
WH - Weekend/Holiday/ASAP

Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.

REQUESTED SERVICES

Non-Culturable: Spore Trap; Tape, Swab, Bulk
Culturable: BioCassette™, Andersen, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plate
Other Requests

SAMPLE ID	DESCRIPTION	Sample Type (Below)	TAT (Above)	Total Volume/Area (as applicable)	NOTES (Time of day, Temp, RH, etc.)	Spore Trap Analysis	Other biological particles - supplement	Direct Microscopic Exam (Qualitative)	Quantitative spore count direct exam	Dust Characterization	1-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Grain Stain and Counts (Culturable Air and Surface Bacteria)	Legionella culture	Total Coliform, E.coli (Presence/Absence)	QuantiTray-Sewage Screen	OTHER: (please specify test)	Asbestos in Air - PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Bulk - PLM	Lead (Pb) - Flame AA	PCR (please specify test)	Allergens (please specify test)
001	ROOM LA6A	ST	STD	75 LITERS		X																
002	ROOM LA1A	ST				X																
003	OUTDOORS - WEST	ST				X																
004	OUTDOORS - WEST	ST				X																
005	TAPE LIFT - WEST AIR VENT	T						X														
006	"WHITE MOLD" ON PLANT SOIL	B						X														

SAMPLE TYPE CODES

BC - BioCassette™	CP - Contact Plate	T - Tape	O - Other:
A1S - Andersen	ST - Spore Trap	SW - Swab	
SAS - Surface Air Sampler	B - Bulk	SO - Soil	
NP - Non-potable Water	P - Potable Water	D - Dust	

RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
DV 9/16/25	6:17 PM	Alys Bos	~~9/16~~ AS 9/17 9/17/25 9:13 AM

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at: https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-and-forms

©COPYRIGHT 2022 EUROFINS EPK BUILT ENVIRONMENT TESTING, LLC