



November 5, 2025

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

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

Regarding: Fungal Air Sampling Report
Orenco Elementary School
7050 Northeast Birch Street
Hillsboro, OR 97124
Apex Project No. 25009991 / 0008

Dear Mr. Wenzloff:

On October 29, 2025, Apex Companies LLC (Apex) collected non-viable fungal air samples from several areas at Orenco Elementary School in Hillsboro, Oregon. The testing was conducted to demonstrate the effectiveness of drying and cleanup efforts after a broken fitting in the mechanical room caused flooding in office areas, hallways, and classrooms to the south and west of the mechanical room. The cleanup and drying work was completed by Premier Restoration Partners of Portland, Oregon.

Eight air samples were collected from areas inside the building. Two additional samples were collected from outdoors as baseline comparison samples.

The sample results indicate that there is not an elevated or unusual fungal condition in the areas of the building where the flooding occurred.

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	Office Work Room	170	<i>Basidiospores</i>

002	Staff Lounge	1,100	<i>Ascospores; penicillium/aspergillus types; basidiospores</i>
003	Counselor Office	280	<i>Basidiospores; penicillium/aspergillus types</i>
004	Hall north of Media Center	750	<i>Basidiospores</i>
005	Media Center, north end	330	<i>Basidiospores; penicillium/aspergillus types</i>
006	Small Group Office 1	490	<i>Basidiospores; ascospores</i>
007	Room 101	590	<i>Basidiospores; ascospores</i>
008	Room 102	910	<i>Basidiospores; cladosporium</i>
009	Outdoors – North Side	14,000	<i>Basidiospores; ascospores; cladosporium; penicillium/aspergillus types</i>
010	Outdoors - North Side	13,000	<i>Basidiospores; ascospores; cladosporium; penicillium/aspergillus types; smuts, periconia, myxomycetes</i>

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

Laboratory analytical reports are attached.

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@apexc.com with any questions or comments.

Sincerely,



Digitally signed by
Dale Voeller, CHMM,
CSP
Date: 2025.11.05
15:31:20 -08'00'

Dale Voeller, CHMM, CSP
Senior Project Manager

Attachment: Laboratory Analytical Reports

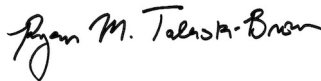
Report for:

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

Regarding: Eurofins Built Environment Testing West, LLC
Project: 25009991 / 0008; Orenco ES. IAQ
EML ID: 4291249

Approved by:

Dates of Analysis:
Spore trap analysis: 11-04-2025



Technical Manager
Ryan Talaski-Brown

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.

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	001: Work Room			002: Staff Lounge		
Comments (see below)	None			None		
Lab ID-Version‡:	21476955-1			21476956-1		
Analysis Date:	11/04/2025			11/04/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores				7	25	370
Basidiospores	2	25	110	5	25	270
Botrytis						
Chaetomium						
Cladosporium	1	25	53	1	25	53
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown				1	100	13
Other colorless						
Penicillium/Aspergillus types†				7	25	370
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	100	13			
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	1+			2+		
Hyphal fragments/m3	< 13			27		
Pollen/m3	< 13			13		
Skin cells (1-4+)	2+			2+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			170			1,100

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/m³ divided by the raw count, expressed in spores/m³, 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.

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	003: Counselor Office			004: Hall at Media Center		
Comments (see below)	None			A		
Lab ID-Version‡:	21476957-1			21476958-1		
Analysis Date:	11/04/2025			11/04/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores	1	25	53			
Basidiospores	2	25	110	1	25	53
Botrytis						
Chaetomium						
Cladosporium						
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†	2	25	110	9/16	25/100	690
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	100	13			
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	2+			1+		
Hyphal fragments/m3	< 13			< 13		
Pollen/m3	27			< 13		
Skin cells (1-4+)	2+			2+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			280			750

Comments:A) 16 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.

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§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	005: Media Center, North End			006: Small Group, Office		
Comments (see below)	None			None		
Lab ID-Version‡:	21476959-1			21476960-1		
Analysis Date:	11/04/2025			11/04/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores				3	25	160
Basidiospores	3	25	160	5	25	270
Botrytis				1	100	13
Chaetomium						
Cladosporium	1	25	53	1	25	53
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†	2	25	110			
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	100	13			
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+			2+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			330			490

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/m³ divided by the raw count, expressed in spores/m³, per spore and per sample.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.

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§ Total Spores/m³ has been rounded to two significant figures to reflect analytical precision.

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	007: Room 101			008: Room 102		
Comments (see below)	None			None		
Lab ID-Version‡:	21476961-1			21476962-1		
Analysis Date:	11/04/2025			11/04/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores	2	25	110	2	25	110
Basidiospores	7	25	370	11	25	590
Botrytis						
Chaetomium						
Cladosporium	1	25	53	3	25	160
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†	1	25	53	1	25	53
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+)	2+			2+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			590			910

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/m³ divided by the raw count, expressed in spores/m³, 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.

Client: PBS Engineering and Environmental: Portland
C/O: Dale Voeller, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	009: Outdoors - North			010: Outdoors - North		
Comments (see below)	B			None		
Lab ID-Version‡:	21476963-1			21476964-1		
Analysis Date:	11/04/2025			11/04/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores	49	25	2,600	60	25	3,200
Basidiospores	188	25	10,000	177	25	9,400
Botrytis						
Chaetomium						
Cladosporium	10/28	25/100	910	3	25	160
Curvularia						
Epicoccum	1	100	13			
Fusarium						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†	3	25	160	3	25	160
Pithomyces						
Rusts	1	100	13	1	100	13
Smuts, Periconia, Myxomycetes				3	100	40
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	1+			1+		
Hyphal fragments/m3	< 13			13		
Pollen/m3	< 13			27		
Skin cells (1-4+)	< 1+			< 1+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			14,000			13,000

Comments: B) 28 of the raw count *Cladosporium* 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/m³ divided by the raw count, expressed in spores/m³, 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, John Yuly
Re: 25009991 / 0008; Orenco ES. IAQ

Date of Sampling: 10-29-2025
Date of Receipt: 10-31-2025
Date of Report: 11-04-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Alys Bos

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".

East: (866) 871-1964
Central: (800) 651-4602
West: (866) 888-6653

WEATHER	Fog	Rain	Snow	Wind	Clear
None					
Light					
Moderate					
Heavy					

CONTACT INFORMATION

Company: APEX COMPANIES

Address: 4412 S. CORBETT AVE, PERRYLAND

Contact: DALE VOELLER

Special Instructions:
Email Results to:

Phone: 503 515-4726

DALE.VOELLER@APEXCO.COM

PROJECT INFORMATION

Project ID: 2500991/0008

STD - Standard (Default)

Project Description: ORENCO ES. 1A2

ND - Next Business Day

Project Zip Code: 97124

Sampling Date/Time: 10/29/25

SD - Same Business Day

PO Number:

By: Voeller

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.

TURN AROUND TIME CODES - (TAT)

REQUESTED SERVICES

Non-Culturable

Culturable

Spore Trap

Tape, Swab, Bulk

BioCassette™ And Swab, Water, Bulk

Contact P

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.)
Gram Stain and Counts (Culturable Air and Surface Bacteria)
Legionella culture
Total Coliform, E.coli (Presence/Absence)
QuantTray-Sewage Screen
OTHER: (please specify test)
Asbestos in Air - PCM Airborne Fiber Count (NI)
Asbestos Bulk - PLM
Lead (Pb) - Flame AA
PCR (please specify test)
Allergens (please specify test)

004291249



SAMPLE ID

DESCRIPTION

Sample Type (Below)

TAT (Above)

Total Volume/Area (as applicable)

NOTES (Time of day, Temp, RH, etc.)

001

WORK ROOM

ST

STD

75 LITERS

3:45 PM

002

STAFF LOUNGE

ST

STD

75 LITERS

3:45 PM

003

COUNSELOR OFFICE

ST

STD

75 LITERS

3:45 PM

004

HALL AT MEDIA CENTER

ST

STD

75 LITERS

3:45 PM

005

MEDIA CENTER, NORTH END

ST

STD

75 LITERS

3:45 PM

006

SMALL GROUP OFFICE

ST

STD

75 LITERS

3:45 PM

007

ROOM 101

ST

STD

75 LITERS

3:45 PM

008

ROOM 102

ST

STD

75 LITERS

3:45 PM

009

OUTDOORS - NORTH

ST

STD

75 LITERS

3:45 PM

010

OUTDOORS - NORTH

ST

STD

75 LITERS

3:45 PM

SAMPLE TYPE CODES

BC - BioCassette™

CP - Contact Plate

T - Tape

O - Other:

A15 - 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

NSV 10/30/25

@ 8:29 PM

DATE & TIME

RECEIVED BY

10/31/25 10:10

DATE & TIME