



December 9, 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
Groner Elementary School, Room 11
23405 SW Scholls Ferry Road
Hillsboro, Oregon
PBS Project No. 25009991 / 0012

Dear Mr. Wenzloff:

On December 3, 2025, Apex Companies LLC (Apex) collected non-viable fungal air samples from Rooms 10 and 11 at Groner Elementary School in Hillsboro, Oregon. The testing was conducted after moisture-impacted drywall was removed from portions of Room 11. The sample from Room 10 was collected as an indoor comparison sample. Two additional samples were collected from outdoors as baseline comparison samples.

In addition to the non-viable fungal air samples, two air clearance samples were collected from Room 11 and analyzed for asbestos.

Laboratory analysis indicates that airborne fungal spore concentrations in the indoor samples were quite low and give no evidence of an airborne fungal amplification condition in the indoor test areas. The asbestos air samples were well below clearance levels.

Fungal Sampling

The non-viable fungal 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. Laboratory analytical reports are attached.

Table 1. Air Sample Laboratory Results

Sample	Location	Fungal Spore Concentration*	Predominant Spore Types
001	Room 11	330	<i>Penicillium/aspergillus types; cladosporium</i>
002	Room 10	53	<i>Penicillium/aspergillus types</i>
003	Outdoors – South Side	2,200	<i>Basidiospores; ascospores; penicillium/aspergillus types; cladosporium</i>
004	Outdoors – South Side	2,100	<i>Basidiospores; ascospores; penicillium/aspergillus types</i>

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

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.

Asbestos Air Sampling

The drywall and joint compound that was removed from Room 11 contains 0.07% asbestos, as measured by gravimetric reduction composite point count analysis. The Oregon Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA) regulate asbestos at concentrations of 1% or greater. However, OSHA regulates asbestos at any detectable concentration. The drywall and joint compound was removed in a negative pressure enclosure with high efficiency particulate air (HEPA) filtered fans. After removal was complete, Apex collected two air clearance samples that were analyzed for asbestos by phase contrast microscopy (PCM). The analysis showed that airborne fiber concentrations in Room 11 were below the analytical method limit of detection.

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: 2025.12.09
14:39:57 -08'00'

Dale Voeller, CHMM, CSP
Senior Project Manager

Attachment: Laboratory Analytical Reports
Asbestos Air Sample Inventory

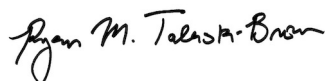
Report for:

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

Regarding: Eurofins Built Environment Testing West, LLC
Project: HIL028-0418019-25009991 T12; Groner ES
EML ID: 4331551

Approved by:

Dates of Analysis:
Spore trap analysis: 12-08-2025



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: John Yuly
Re: HIL028-0418019-25009991 T12; Groner ES

Date of Sampling: 12-03-2025
Date of Receipt: 12-04-2025
Date of Report: 12-08-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	1-6576649: Rm 11, NE Subroom			2-6576646: Rm 10		
Comments (see below)	None			None		
Lab ID-Version‡:	21692252-1			21692253-1		
Analysis Date:	12/08/2025			12/08/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores						
Basidiospores						
Botrytis						
Chaetomium						
Cladosporium	2	25	110			
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†	4	25	210	1	25	53
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	100	13			
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	3+			1+		
Hyphal fragments/m3	< 13			< 13		
Pollen/m3	< 13			< 13		
Skin cells (1-4+)	1+			1+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			330			53

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: John Yuly
Re: HIL028-0418019-25009991 T12; Groner ES

Date of Sampling: 12-03-2025
Date of Receipt: 12-04-2025
Date of Report: 12-08-2025

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	3-6576526: Outdoors, South Parking Lot			4-6576204: Outdoors, South Parking Lot		
Comments (see below)	None			None		
Lab ID-Version‡:	21692254-1			21692255-1		
Analysis Date:	12/08/2025			12/08/2025		
	raw ct.	% read	spores/m3	raw ct.	% read	spores/m3
Ascospores	5	25	270	11	25	590
Basidiospores	32	25	1,700	27	25	1,400
Botrytis						
Chaetomium						
Cladosporium	2	25	110			
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†	3	25	160	2	25	110
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)	3+			3+		
Hyphal fragments/m3	27			13		
Pollen/m3	< 13			< 13		
Skin cells (1-4+)	< 1+			< 1+		
Sample volume (liters)	75			75		
§ TOTAL SPORES/m3			2,200			2,100

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.

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Client: PBS Engineering and Environmental: Portland
C/O: John Yuly
Re: HIL028-0418019-25009991 T12; Groner ES

Date of Sampling: 12-03-2025
Date of Receipt: 12-04-2025
Date of Report: 12-08-2025

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".

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

WEATHER		Fog	Rain	Snow	Wind	Clear
LEVEL	None					
	Light					
	Moderate					
	Heavy					

REQUESTED SE



004331551

Non-Culturable		Culturable
Spore Trap	Tape, Swab, Bulk	BioCassette™, Anders Swab, Water, Bulk, D Contact Plate

CONTACT INFORMATION

Company:	Apex Cos.	Address:	4412 S Corbett, PDX
Contact:	John Y. W.	Special Instructions:	
Phone:	503-308-3807		

PROJECT INFORMATION

TURN AROUND TIME CODES - (TAT)

PROJECT INFORMATION				TURNAROUND TIME	
Project ID:	HIL028-0418019-25009991 T12			STD - Standard (Default)	Rushes received after 2pm on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Project Description:	Groner ES			ND - Next Business Day	
Project Zip Code:	97123	Sampling Date/Time:	12/3 3:30 PM	SD - Same Business Day	
PO Number:		Sampled By:		WH - Weekend/Holiday/ASAP	

[illegible]

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

John G. G. 

12/4 10:05

RECEIVED BY

DATE & TIME

Byron Tuckwell

12-4-24
10:10

AIR SAMPLE ASBESTOS ANALYSIS

Client: Hillsboro School District

Report Date: 12/04/2025

Date Received: 12/03/2025

Project: Groner Elementary School

Apex Project No.:

HIL028-0418019-25009991

Task 0012

Page No.: 1 of 1

APEX LAB ID/ CLIENT ID	DATE, LOCATION WORKER NAME, ACTIVITY, PPE, ETC.	MINUTES SAMPLED	AVE. FLOW RATE (LPM)	AIR VOLUME (L)	FIBERS/ FIELDS	FIBERS PER cc (f/cc)
A25009991-0001	12/3/2025 - Clearance Room 11 C: 5.5 fibers/100 fields	80	15 LPM	1200 L	0/100	<LOD
A25009991-0002	12/3/2025 - Clearance Room 11 C: 5.5 fibers/100 fields	80	15 LPM	1200 L	5/100	<LOD

REVIEWED BY

Digitally signed by Dale Voeller,
CHMM, CSP
Date: 2025.12.09 14:39:20
-08'00'

Approved Signatory

Date

Dale Voeller

Name

L: Liters of air

LPM: Liters per minute

A: Interlaboratory 95% Upper Confidence Limit

B: Intralaboratory 95% Upper Confidence Limit

C: Limit of detection (LOD)

<LOD: Below the limit of detection

FILTER AREA (Square millimeters): 385

4412 S CORBETT AVENUE
PORTLAND, OR 97239 503.248.1939
FAX 866.727.0140