
<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21600.045-0001	Vinyl Floor Tile/Mastic	Room 1 and 2 entrances; black floor tile		Eurofins LabCor PDX
	Layer: Layer 1	Description: wet vinyl material, brown, with thin mastic, off-white	Analysis: No Asbestos Detected	

PLM - Visual Estimate Extended Final Report

Job Number: 232256

Client: PBS Engineering and Environmental

**Address: 4412 S Corbett Avenue
Portland, OR 97239**

Project Name:

Project No.: 21600.045 Phase 0003

PO Number:

Sub Project:

Reference No.:

Report Number: 232256R01

Report Date: 8/22/2023

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Eurofins Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
232256 - S1	21600.045-0001 -	PLM - Visual Estimate Extended		8/21/2023

PLM - Visual Estimate Extended The submitted sample(s) were analyzed according to the EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials and EPA - 40CFR App. E to Subpart E of Part 763. The sample(s) were analyzed with a digital microscope in order to determine homogeneity, the presence of fibers, and make a preliminary estimate of any asbestos fibers present in the sample. The sample(s), and any observed layers, were then homogenized through techniques appropriate to that material and prepared for analysis by polarized light microscopy (PLM).

Three slide mount preparations were made from random subsamples of the homogenized material. This material was then mounted in the suitable refractive index liquid needed to perform a full optical characterization of the observed fibers. When necessary, dilute HCl, instead of RI liquids, were used to remove cementitious binders to facilitate analysis. The entirety of the slide mount preparations were then analyzed by PLM. Any observed fibers were reported and their optical characteristics recorded according to the EPA 600-R-93-116 method.

Disclaimer This report, and the data contained therein, cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. The results found in this report are based only on the submitted sample(s). LabCor has no control over sampling procedures. This report is only valid when signed by an analyst.

NAD is No Asbestos Detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

Additional gravimetric, point-count or TEM analysis may be recommended for samples testing at < or = 1% asbestos, or those with material binders that prevent the detection of small diameter fibers.

The following estimate of error for this method by visual estimation of asbestos percent are as follows:

1% asbestos: >0-3% error,
5% asbestos: 1-9% error,
10% asbestos: 5-15% error,
20% asbestos: 10-30% error.

Sincerely,



Tim Cammann
Eurofins - LabCor Portland

BULK SAMPLE ASBESTOS ANALYSIS

Client: PBS Engineering and Environmental
4412 S Corbett Avenue
Portland, OR 97239

Report Number: 232256R01
Report Date: 08/22/2023

Job Number: 232256

P.O. No: n/a

Project Name:

Project Number: 21600.045 Phase 0003

Project Notes:


Client Sample ID: 21600.045-0001		Sample ID: S1			Date Analyzed: 08/22/2023	
Client Sample Description:		Analyst: Tim Cammann				
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
wet vinyl material, brown, with thin mastic, off-white	100 %	-	-	-	NAD	
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	8 %	-	-	-	92 %

Comments: Sample in standing water; unnecessary amounts of moisture greatly add to analysis time.

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials and EPA - 40CFR App. E to Subpart E of Part 763, PLM. This report and the data contained therein cannot be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

- "NAD" is No Asbestos Detected.
- Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
- Material binders, such as those found in vinyl floor tiles, may prevent the detection of small diameter asbestos fibers. A gravimetric preparation and point-count is recommended for such samples.
- Quantitative analysis by PLM point count or TEM may be recommended for samples testing at < or = to 1% asbestos.
- The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: >0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
- This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:


X
Tim Cammann
Eurofins - LabCor Portland



232256

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 21600.045 Phase 0003

Individuals signing this form warrant that the information provided is correct and complete. The Sender should keep a copy and send the original. The Receiver should complete the form, keep a copy and return the original to the Sender. Receiver shall report damage of package immediately to Sender.

SENDER

Date Sent: August 21, 2023

PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939, Fax: 866.727.0140

Name



Authorized Signature

8/21/23 1:30

Date

Time

Sender's ID No.

Brief Description

21600.045-0001

RECEIVER

Date Received: 8/21/23

Company: Eurofins LabCor PDX
Address: 4321 S Corbett Avenue
Portland, OR 97239
(503) 224-5055

Name



Authorized Signature

8/21/23 1:3

Date

Time

Receiver's ID No.

Please analyze the enclosed 1 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____ Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:

48 Hour

SPECIAL INSTRUCTIONS:

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