

Asbestos Survey Report

Riverdale Grade School
11733 SW Breyman Ave
Portland, OR 97219

Prepared for:

Riverdale School District

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Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered



January 2024

Project No.: 27638.000 Phase No.: 0001

4412 S Corbett Avenue, Portland, OR 97239
503.248.1939 Main
866.727.0140 Fax
888.248.1939 Toll-Free
PBSUSA.COM

GENERAL INFORMATION

BUILDING DATA

Riverdale Grade School
11733 SW Breyman Ave
Portland, OR 97219

CLIENT DATA

Riverdale School District
11733 SW Breyman Ave
Portland, OR 97219

BACKGROUND INFORMATION

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a general asbestos survey of accessible interior building areas in accordance with OSHA in 29 CFR 1910.1001 and compiled a report with the following information:

- The type, location, and approximate quantity of suspect asbestos-containing materials
- Bulk sampling of selected suspect building materials
- Inspection summary
- Laboratory analytical data of bulk material sampled

With regard to asbestos, PBS endeavored to locate all the suspect asbestos-containing materials inside the building; however, suspect asbestos-containing materials may be present and concealed within wall, ceiling, or floor spaces. If suspect materials are uncovered during demolition activities that are not identified in this report, testing should be performed prior to impact.

PBS has conducted a physical inspection of the building, compiled this report consistent with the survey scope, and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

Sean Grabiner
Project Manager/Prime Inspector
Accreditation #: IRO-22-4508B

 Digitally signed by Sean Grabiner
Date: 2024.01.17 15:19:08 -08'00'

Signature

Date

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INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
10/30/2023	Sean Grabiner	Begin Survey
11/22/2023	Sean Grabiner	Complete Survey

PBS has investigated accessible areas inside of the building(s) to locate suspect asbestos-containing building materials (ACBM). Suspect materials may be present in concealed areas (e.g., behind walls and under carpet). The findings are listed below.

ASBESTOS MATERIALS

The following materials either tested positive, or, based on the experience of PBS field personnel, were not tested and should be considered asbestos-containing. Materials that had mixed results are considered positive. Materials not sampled may contain asbestos and should be tested to verify asbestos content prior to impact through demolition, renovation, etc.
(+) Tested Positive, (M) Mixed Results, (P) Presumed Positive, (T) Previously Tested Positive.

See sample inventory for specific results.

<u>Results</u>	<u>Material Description</u>	<u>Location</u>	<u>Details</u>
(M) 4%	Wall and Ceiling Plaster	Gym/Commons Building; Multiple Locations	NOT QUANTIFIED Non-friable Good Response Action: Repair Damage. Manage in place.
(P)	Grout Associated with Ceramic Wall and Floor Tiles	Gym/Commons Building and Main Building; Restrooms	NOT QUANTIFIED Non-friable Good Response Action: Manage in place.

INSPECTION SUMMARY

MATERIALS THAT TESTED NEGATIVE FOR ASBESTOS

The following materials tested negative based on ASHARA sampling minimums and testing by NVLAP participating laboratories. Although no asbestos was detected, it is possible that further sampling could indicate asbestos content. It may be prudent to test prior to impact through demolition, renovation, etc.

<u>Material (type)</u>	<u>Location</u>
Gypsum Wallboard and Associated Joint Compound	District Offices; Throughout
Carpet Mastics (Various Colors)	District Offices; Throughout
Grey Marbled Sheet Floor Covering and Associated Yellow Mastic	District Offices; Throughout
6-inch Black Covebase and Associated Cream Mastic	District Offices; Throughout
Grey and White Sink Undercoating	District Offices; Kitchenette
Tan and Grey Carpet Mastic	Music Building; Throughout
Green Sheet Floor Covering and Associated Tan Mastic	Music Building; Restroom
6-inch Grey Covebase and Associated White Mastic	Music Building; Multiple Locations
6-inch Black Covebase and Associated White Mastic	Music Building; Multiple Locations
Gypsum Wallboard and Associated Joint Compound	Music Building; Throughout
Black Sink Undercoating	Music Building; Band Room
1' x 1' Pin and Fissure White Ceiling Tile and Associated Brown Mastic	Music Building; Throughout
12" x 12" White Floor Tile and Associated Tan Mastic	Music Building; Band Room Storage
White Fire Door Insulation	Gym/Commons Building; Basement
Gypsum Wallboard and Associated Joint Compound	Gym/Commons Building; Throughout
Black Residual Flooring Mastic	Gym/Commons Building; Basement
"Orange Peel" Textured Wall Material	Gym/Commons Building; Throughout
Brown Duct Seam Sealant	Gym/Commons Building; Stage ADA Access
Blue/Grey Sheet Floor Covering and Associated Mastic	Gym/Commons Building; Locker Rooms
6-inch Black Base and Associated Cream Mastic	Gym/Commons Building; Locker Rooms
Tan Mastic Associated with FRP Wall Panels	Gym/Commons Building; Locker Rooms

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Brown/Black Sheet Floor Covering and Associated Tan Mastic	Gym/Commons Building; Multiple Locations
4-inch Black Covebase and Associated Tan Mastic	Gym/Commons Building; Multiple Locations
Tan Carpet Mastic	Gym/Commons Building; Multiple Locations
2' x 4' White and Yellow Fiberglass Lay-in Ceiling Tile	Gym/Commons Building; Multiple Locations
2' x 4' White and Yellow Fiberglass Lay-in Ceiling Tile	Gym/Commons Building; Multiple Locations
Gypsum Wallboard and Associated Joint Compound	Main Building; Throughout
12" x 12" Brown Vinyl Floor Tile and Associated Cream Mastic	Main Building; Multiple Locations
12" x 12" Grey Vinyl Floor Tile and Associated Cream Mastic	Main Building; Multiple Locations
Yellow/Orange Sheet Floor Covering and Associated Grey Mastic	Main Building; Multiple Locations
Carpet Mastics (Various Colors)	Main Building; Multiple Locations
6-inch Brown Covebase and Associated Cream Mastic	Main Building; Multiple Locations
Grey Sink Undercoating	Main Building; Multiple Locations
4' x 4' White and Yellow Fiberglass Lay-in Ceiling Tile	Main Building; Throughout
Gray Duct Seam Sealant	Main Building; Multiple Locations

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BACKGROUND

Between October 30 and November 22, 2023, PBS performed a general asbestos survey of all structures on the Riverdale Grade School campus located at 11733 SW Breyman Ave in Portland, Oregon. The survey was requested by Riverdale School District.

The purpose of the survey was to locate, identify, and quantify accessible friable and non-friable asbestos-containing building materials to aid in the creation of new Asbestos Hazard Emergency Response Act (AHERA) documents.

The survey is also intended to satisfy Occupational Safety and Health Administration (OSHA) hazard communication requirements as well as requirements by the Department of Environmental Quality (DEQ) to perform an asbestos inspection prior to renovation or demolition activities under Oregon Administrative Rule (OAR) 340-248-0270.

ASBESTOS SUMMARY

The campus was inspected by a PBS AHERA accredited inspector to determine the presence, location, and approximate quantity of asbestos-containing materials (ACM). 118 bulk samples of building materials, suspected of containing asbestos, were collected and submitted under chain of custody to Lab/Cor Portland Inc. of Portland, Oregon, for polarized light microscopy (PLM) analysis. The following materials were found to contain asbestos:

- Wall and ceiling plaster in the original parts of the gym/commons building. Results were mixed. Until additional sampling can be performed to narrow extent of the material, all plaster in the original parts of the gym/commons building should be presumed to be asbestos containing.
- Grout associated with ceramic wall and floor tiles. Due to sampling budget constraints, this material was not sampled and is presumed to contain asbestos.

At the time of this survey, most asbestos-containing building materials were observed to be in good condition. Damaged plaster was observed in the storage area below the stage as well as the stage stairs leading to an upper storage area.

Please refer to the asbestos bulk sample inventory for more sample details.

Asbestos Regulations

DEQ, Environmental Protection Agency (EPA), and OSHA regulations require proper removal and handling of ACM by licensed and trained asbestos abatement contractors prior to building renovations or demolition.

EPA, DEQ, and OSHA all define ACM as any material containing more than 1% asbestos. Although materials equal to or less than 1% are not considered by regulatory agencies to be an ACM, they still have some asbestos content, and Oregon OSHA has specific requirements for situations in which workers may encounter, disturb, or remove materials containing any level of asbestos. For the sake of hazard communication, these materials are included in the asbestos-containing materials section of this report.

In 1995, Oregon OSHA adopted 29 Code of Federal Regulations (CFR) Part 1926.1101 governing asbestos under OAR 437-003-1926.1101. The regulation has made significant changes in work procedures and how asbestos materials are managed. OSHA believes that the single biggest risk of asbestos exposure is to workers who unknowingly or improperly disturb ACM. Hazard communication, training, personal protection, work practices,

INSPECTION SUMMARY

exposure monitoring, and recordkeeping are all major components of the regulation.

DEQ's OAR 340, Division 248 also covers asbestos abatement requirements, removal notifications, licensing, and certifications for contractors.

For more information regarding the removal of asbestos-containing materials, please refer to the following:

1. Oregon Occupational Safety and Health Administration, OAR 437-003-1926.1101
2. Department of Environmental Quality, OAR-340, Division 248

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0001	Mastic	District office, business manager office; white rubbery mastic under carpet squares		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, tan/yellow	Analysis: No Asbestos Detected
27638.000-0002	Mastic	District office, main entrance; tan mastic on leveling compound under walk off mat		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, tan/gray	Analysis: No Asbestos Detected
27638.000-0003	Mastic	District office, back south office; tan mastic on leveling compound under brown carpet		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, tan	Analysis: No Asbestos Detected
27638.000-0004	Mastic	District office, back south office; tan mastic on leveling compound under brown carpet		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose mastic particulate with fibers, tan/red	Analysis: No Asbestos Detected
27638.000-0005	Gypsum Wallboard/Joint Compound	District office, north corner; white gypsum joint compound		Eurofins LabCor PDX
		Layer: Layer 01	Description: fine compact powder with paint, white/gray	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: compact chalky material with paper, white	Analysis: No Asbestos Detected
27638.000-0006	Gypsum Wallboard/Joint Compound	District office, restroom; white gypsum joint compound		Eurofins LabCor PDX
		Layer: Layer 01	Description: fine compact powder with paint, white/gray	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: compact chalky material with paper, white	Analysis: No Asbestos Detected
27638.000-0007	Gypsum Wallboard/Joint Compound	District office, storage room; white gypsum joint compound		Eurofins LabCor PDX
		Layer: Layer 01	Description: fine compact powder with paint, off-white/white	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: compact chalky material with paper, white	Analysis: No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0008	Sheet Floor Covering	District office, under kitchenette; gray marbled sheet floor on leveling compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	vinyl, gray/black	No Asbestos Detected	
	Layer 02	woven fibers with mastic, tan/gray/white	No Asbestos Detected	
	Layer 03	granular compact powder, gray	No Asbestos Detected	
27638.000-0009	Sheet Floor Covering	District office, main entry storage closet; sheet floor on leveling compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	vinyl, gray, with woven fibers, yellow	No Asbestos Detected	
27638.000-0010	Sheet Floor Covering	District office, restroom; sheet floor on leveling compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	vinyl, gray, with woven fibers, yellow	No Asbestos Detected	
27638.000-0011	Covebase/Mastic	District office, restroom; 6" black covebase with white/tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with paper, tan/off-white	No Asbestos Detected	
27638.000-0012	Covebase/Mastic	District office, main storage room; 6" black covebase with white/tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with coating, tan/white	No Asbestos Detected	
27638.000-0013	Covebase/Mastic	District office, main storage room; 6" black covebase with white/tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with coating, tan/white	No Asbestos Detected	
27638.000-0014	Sink Undercoating	District office, kitchenette, gray spray-on sink undercoating on white tape		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	thin flexible material with powder, white/gray	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0015	Mastic	Business office; white/yellow rubbery mastic under carpet squares		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, tan	Analysis: No Asbestos Detected
27638.000-0016	Mastic	Business office; white/yellow rubbery mastic under carpet squares		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, tan	Analysis: No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0001	Mastic	Music building, in front of double doors and office entrance; tan mastic on gray leveling compound		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, tan/gray	Analysis: No Asbestos Detected
27638.000-0002	Mastic	Music building, in front of restroom and main entrance; tan mastic on gray leveling compound		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, tan/gray/black	Analysis: No Asbestos Detected
27638.000-0003	Mastic	Music building, auditorium; tan mastic on gray leveling compound		Eurofins LabCor PDX
		Layer: Layer 1	Description: flexible mastic material, tan/yellow	Analysis: No Asbestos Detected
27638.000-0004	Sheet Floor Covering	Music building, restroom; green vinyl sheet flooring with tan mastic on leveling compound		Eurofins LabCor PDX
		Layer: Layer 01	Description: flexible vinyl, off-white/gray	Analysis: No Asbestos Detected
		Layer 02	powdery backing with woven fibers, gray/tan	No Asbestos Detected
27638.000-0005	Sheet Floor Covering	Music building, restroom; green vinyl sheet flooring with tan mastic on leveling compound		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate with fibers, off-white/gray/brown	Analysis: No Asbestos Detected
27638.000-0006	Sheet Floor Covering	Music building, restroom; green vinyl sheet flooring with tan mastic on leveling compound		Eurofins LabCor PDX
		Layer: Layer 01	Description: vinyl, off-white/gray/green	Analysis: No Asbestos Detected
		Layer 02	powdery backing with woven fibers, gray/tan	No Asbestos Detected
27638.000-0007	Covebase/Mastic	Music building, near office and auditorium entrance; 6" gray covebase and white mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: thin flexible material with paper, gray/tan	Analysis: No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0008	Covebase/Mastic	Music building, near back storage room; 6" gray covebase and white mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, gray	No Asbestos Detected	
	Layer 02	mastic with paper, tan	No Asbestos Detected	
27638.000-0009	Covebase/Mastic	Music building, office; 6" gray covebase and white mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, gray	No Asbestos Detected	
	Layer 02	mastic with paper, tan/off-white	No Asbestos Detected	
27638.000-0010	Covebase/Mastic	Music building, restroom by door; 6" black covebase with white mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	flexible particulate with paper, gray/off-white/tan	No Asbestos Detected	
27638.000-0011	Covebase/Mastic	Music building, restroom by door; 6" black covebase with white mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic material, tan	No Asbestos Detected	
27638.000-0012	Covebase/Mastic	Music building, restroom back storage; 6" black covebase with white mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	rubbery material, black/brown	No Asbestos Detected	
27638.000-0013	Gypsum Wallboard/Joint Compound	Music building, northwest corner of storage; white gypsum and joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	fine compact powder with coating, off-white/tan	No Asbestos Detected	
	Layer 02	compact chalky material with paper, white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0014	Gypsum Wallboard/Joint Compound	Music building, auditorium by exit; white gypsum and joint compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	fine compact powder with paint, off-white/white	
		Layer 02	compact chalky material with paper, white	No Asbestos Detected
27638.000-0015	Gypsum Wallboard/Joint Compound	Music building, restroom storage; white gypsum and joint compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	fine compact powder with paint, off-white/white	
		Layer 02	compact chalky material with paper, tan	No Asbestos Detected
27638.000-0016	Sink Undercoating	Music building, kitchenette in auditorium; black textured sink undercoating		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 1	loose particulate, black	No Asbestos Detected
27638.000-0017	Glued-on Ceiling Tiles	Music building, entry near restroom; 1'x1' pinhole and fissure tile with brown mastic		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	loose fibrous material, gray/white	
		Layer 02	mastic, brown	No Asbestos Detected
27638.000-0018	Glued-on Ceiling Tiles	Music building, office; 1'x1' pinhole and fissure tile with brown mastic		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	loose powder with paint, gray/tan/white	
		Layer 02	mastic, brown	No Asbestos Detected
27638.000-0019	Vinyl Floor Tile/Mastic	Music building, back storage room under carpet; 12"x12" white tile with tan mastic		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	vinyl, gray/yellow	
		Layer 02	mastic, tan	No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0020	Vinyl Floor Tile/Mastic	Music building, back storage room under carpet; 12"x12" white tile with tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	vinyl, gray/yellow	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
27638.000-0021	Vinyl Floor Tile/Mastic	Music building, back storage room under carpet; 12"x12" white tile with tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	vinyl, gray/yellow	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
27638.000-0022	Glued-on Ceiling Tiles	Music building, band room; 1'x1' pin and fissure tile with brown mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	fibrous powder with particulate, gray/white	No Asbestos Detected	
	Layer 02	mastic, brown	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0001	Fire Door	Entry to boiler room; white crumbly fire door insulation		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, white	Analysis: No Asbestos Detected
27638.000-0002	Fire Door	Entry to boiler room office; white crumbly fire door insulation		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, white	Analysis: No Asbestos Detected
27638.000-0003	Fire Door	Entry to boiler room office; white crumbly fire door insulation		Eurofins LabCor PDX
		Layer: Layer 1	Description: compact granular material, white	Analysis: No Asbestos Detected
27638.000-0004	Wall and Ceiling Plaster	Stage stairs; white and gray plaster wall		Eurofins LabCor PDX
		Layer: Layer 01	Description: paint, off-white with granular compact powder, off-white	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: granular compact powder, gray	Analysis: No Asbestos Detected
27638.000-0005	Wall and Ceiling Plaster	Boiler room office; white plaster wall		Eurofins LabCor PDX
		Layer: Layer 1	Description: granular compact powder, white with paint, tan	Analysis: No Asbestos Detected
27638.000-0006	Gypsum Wallboard/Joint Compound	Gym; stage front; gypsum wall with joint compound and wall texture		Eurofins LabCor PDX
		Layer: Layer 01	Description: fine compact powder, white with paint, white	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: compact chalky material with paper, white	Analysis: No Asbestos Detected
27638.000-0007	Mastic	Stage stairs to boiler room; black residual flooring mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, black/red	Analysis: No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0008	Gypsum Wallboard/Joint Compound	Gym; west wall; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	fine compact powder, white	No Asbestos Detected	
	Layer 02	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0009	Gypsum Wallboard/Joint Compound	Gym; east wall; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	fine compact powder, white with paint, white	No Asbestos Detected	
	Layer 02	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0010	Textured Ceiling Material	Gym; west wall; white "orange peel" wall texture on gypsum		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
27638.000-0011	Textured Ceiling Material	Gym; east wall; white "orange peel" wall texture on gypsum		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose powder with paint, off-white/white	No Asbestos Detected	
27638.000-0012	Textured Ceiling Material	Gym; north wall; white "orange peel" wall texture on gypsum		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose powder with paint, off-white/white	No Asbestos Detected	
27638.000-0013	Gypsum and Plaster	Stage electrical room; plaster on gypsum		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose granular powder, gray/off-white	No Asbestos Detected	
27638.000-0014	Sealant	Stage ADA access; gray/brown duct seam sealant		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose mastic, gray	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0015	Mastic	Stage ADA access; black residual flooring mastic		Eurofins LabCor PDX
	Layer: Layer 1	Description: loose particulate, black	Analysis: No Asbestos Detected	
27638.000-0016	Sheet Floor Covering	Boys locker room; blue sheet flooring with yellow mastic		Eurofins LabCor PDX
	Layer: Layer 01	Description: vinyl, blue/gray	Analysis: No Asbestos Detected	
	Layer 02	fibrous backing, gray, with thin mastic, tan	No Asbestos Detected	
27638.000-0017	Sheet Floor Covering	Girls locker room; blue sheet flooring with yellow mastic		Eurofins LabCor PDX
	Layer: Layer 01	Description: vinyl, blue/gray	Analysis: No Asbestos Detected	
	Layer 02	fibrous backing, gray, with thin mastic, tan	No Asbestos Detected	
27638.000-0018	Covebase/Mastic	Girls locker room; 6" black base with cream mastic		Eurofins LabCor PDX
	Layer: Layer 01	Description: rubbery material, black	Analysis: No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
27638.000-0019	Mastic	Boys locker room; tan FRP panel mastic on gypsum		Eurofins LabCor PDX
	Layer: Layer 1	Description: mastic, tan, with powdery coating, white	Analysis: No Asbestos Detected	
27638.000-0020	Mastic	Boys locker room; tan FRP panel mastic on gypsum		Eurofins LabCor PDX
	Layer: Layer 1	Description: mastic, tan, with powdery coating, white	Analysis: No Asbestos Detected	
27638.000-0021	Mastic	Girls locker room; tan FRP panel mastic on gypsum		Eurofins LabCor PDX
	Layer: Layer 1	Description: mastic with thin powdery coating, tan/white	Analysis: No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0022	Gypsum Wallboard/Joint Compound	Janitors closet C4 in kitchen; white gypsum wallboard and joint compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	fine compact powder with paint, off-white/white	
		Layer 02	compact chalky material with paper, off-white	No Asbestos Detected
27638.000-0023	Gypsum Wallboard/Joint Compound	Storage/fire riser room C2 in commons; white gypsum wallboard and joint compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	fine compact powder with paint, off-white/white	
		Layer 02	compact chalky material with paper, off-white	No Asbestos Detected
27638.000-0024	Gypsum Wallboard/Joint Compound	Front storage in commons; white gypsum wallboard and joint compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 1	loose powder with paper and paint, off-white/white	No Asbestos Detected
27638.000-0025	Sheet Floor Covering	Janitors closet 04 in kitchen, entrance; brown and black thick sheet flooring with tan mastic on concrete		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	rubbery material, brown	
		Layer 02	thin fibrous backing with mastic, clear/white/yellow	No Asbestos Detected
27638.000-0026	Sheet Floor Covering	Kitchen, on corner near dishwasher; brown and black thick sheet flooring with tan mastic on concrete		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	rubbery material, brown	
		Layer 02	mastic, tan	No Asbestos Detected
27638.000-0027	Sheet Floor Covering	Near kitchen entrance; brown and black thick sheet flooring with tan mastic on concrete on gray leveling compound		Eurofins LabCor PDX
		Layer:	Description:	
		Layer 01	rubbery material, brown, with thin backing, clear/tan	
		Layer 02	mastic, tan/gray	No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0028	Covebase/Mastic	Gymnasium by boys locker room; 4" black covebase with lip and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
27638.000-0029	Covebase/Mastic	Gymnasium near stage entrance and storage; 4" black covebase with lip and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
27638.000-0030	Covebase/Mastic	Gymnasium, near athletic office; 4" black covebase with lip and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with paper, tan/off-white	No Asbestos Detected	
27638.000-0031	Covebase/Mastic	Gymnasium, exit near athletic office; 6" black covebase and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic material with powder, tan	No Asbestos Detected	
27638.000-0032	Covebase/Mastic	Gymnasium entrance near mechanical room; 6" black covebase and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, gray	No Asbestos Detected	
	Layer 02	mastic with powder, tan	No Asbestos Detected	
27638.000-0033	Covebase/Mastic	Gymnasium, old locker room north corner; 4" black covebase with cream and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with paper, off-white/tan/brown	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0034	Covebase/Mastic	Gymnasium, outside old locker rooms in north corner; 4" black covebase with cream and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with paper, off-white/tan/brown	No Asbestos Detected	
27638.000-0035	Covebase/Mastic	Gymnasium, storage closet west of athletic office; 4" black covebase with cream and tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	mastic with paper, tan	No Asbestos Detected	
27638.000-0036	Sheet Floor Covering	Gymnasium, girls locker room; blue sheet floor with tan mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	vinyl particulate, blue/gray/multicolored	No Asbestos Detected	
	Layer 02	loose fibrous material, gray	No Asbestos Detected	
27638.000-0037	Mastic	Handicapped stage entry; residual black mastic on concrete		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, black	No Asbestos Detected	
27638.000-0038	Mastic	Near G1 entrance on stair landing; tan mastic on concrete under carpet		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, tan/gray	No Asbestos Detected	
27638.000-0039	Mastic	Carpet in entryway on north end; tan mastic on concrete under carpet		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	mastic material with fibers, tan/white	No Asbestos Detected	
27638.000-0040	Mastic	Entryway to café at bottom of stairs; tan mastic on concrete under carpet		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, gray/off-white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0041	Wall and Ceiling Plaster	Stage ADA entrance; white and gray plaster wall		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	compact powder with paint, white	4% Chrysotile	
	Layer 02	granular compact powder with paint, gray/green	No Asbestos Detected	
27638.000-0042	Lay-in Ceiling Tile	Gym; southwest entrance corridor; 2'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	
27638.000-0043	Lay-in Ceiling Tile	Gym; southwest entrance corridor; 2'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	
27638.000-0044	Lay-in Ceiling Tile	commons storage C2; 2'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	
27638.000-0045	Lay-in Ceiling Tile	Commons main corridor; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	
27638.000-0046	Lay-in Ceiling Tile	Commons main corridor; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	
27638.000-0047	Lay-in Ceiling Tile	Commons main corridor; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	coating, white	No Asbestos Detected	
	Layer 02	loose fibrous material, yellow	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0001	Gypsum Wallboard/Joint Compound	Staff lounge 122; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0002	Gypsum Wallboard/Joint Compound	Classroom 101; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0003	Gypsum Wallboard/Joint Compound	Classroom 136; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white, with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0004	Gypsum Wallboard/Joint Compound	Janitor 230A; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white, with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0005	Gypsum Wallboard/Joint Compound	Library workroom; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white, with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0006	Gypsum Wallboard/Joint Compound	Room 203; gypsum wallboard with joint compound		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	paint, off-white with fine compact powder, off-white	No Asbestos Detected	
	Layer 02	fine compact powder, off-white, with paper, white	No Asbestos Detected	
	Layer 03	compact chalky material with paper, white	No Asbestos Detected	
27638.000-0007	Vinyl Floor Tile/Mastic	Janitor 230A; 12"x12" brown vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, brown	No Asbestos Detected	
	Layer 02	mastic, brown	No Asbestos Detected	
	Layer 03	woven material with coating, white	No Asbestos Detected	
27638.000-0008	Vinyl Floor Tile/Mastic	Staff workroom 233; 12"x12" brown vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, brown	No Asbestos Detected	
	Layer 02	mastic, brown	No Asbestos Detected	
	Layer 03	woven material with coating, white	No Asbestos Detected	
27638.000-0009	Vinyl Floor Tile/Mastic	Commons area at room 127; 12"x12" brown vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, brown	No Asbestos Detected	
	Layer 02	mastic, brown	No Asbestos Detected	
	Layer 03	woven material with coating, white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0010	Vinyl Floor Tile/Mastic	Classroom 232; 12"x12" gray vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, gray	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
	Layer 03	woven material with coating, white	No Asbestos Detected	
27638.000-0011	Vinyl Floor Tile/Mastic	Classroom 106; 12"x12" gray vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, gray	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
	Layer 03	woven material with coating, white	No Asbestos Detected	
27638.000-0012	Vinyl Floor Tile/Mastic	Room 130; 12"x12" gray vinyl floor tile with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard compact material, gray	No Asbestos Detected	
	Layer 02	mastic, tan	No Asbestos Detected	
	Layer 03	woven fibers, white	No Asbestos Detected	
27638.000-0013	Sheet Floor Covering	Commons area at room 205; yellow/orange sheet floor with jute back and gray mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard vinyl, green	No Asbestos Detected	
	Layer 02	mastic, green	No Asbestos Detected	
	Layer 03	woven fibers, brown	No Asbestos Detected	
27638.000-0014	Sheet Floor Covering	Commons area at room 105; yellow/orange sheet floor with jute back and gray mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard vinyl, green	No Asbestos Detected	
	Layer 02	mastic, green	No Asbestos Detected	
	Layer 03	woven fibers, brown	No Asbestos Detected	
27638.000-0015	Sheet Floor Covering	Commons area at room 135; yellow/orange sheet floor with jute back and gray mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	hard vinyl, green	No Asbestos Detected	
	Layer 02	mastic, green	No Asbestos Detected	
	Layer 03	woven fibers, brown	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0016	Mastic	Library; dark gray carpet mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, black	Analysis: No Asbestos Detected
27638.000-0017	Mastic	Classroom 105; dark gray carpet mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, black	Analysis: No Asbestos Detected
27638.000-0018	Mastic	Classroom 136; dark gray carpet mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: mastic, black	Analysis: No Asbestos Detected
27638.000-0019	Mastic	Entrance at MDF room; gray and yellow walk-off mat mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, gray/tan	Analysis: No Asbestos Detected
27638.000-0020	Mastic	Entrance at room 135; gray and yellow walk-off mat mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, gray/tan	Analysis: No Asbestos Detected
27638.000-0021	Mastic	Main entrance; gray and yellow walk-off mat mastic		Eurofins LabCor PDX
		Layer: Layer 1	Description: loose particulate, brown/tan	Analysis: No Asbestos Detected
27638.000-0022	Covebase/Mastic	Classroom 206; 6" brown base with cream mastic		Eurofins LabCor PDX
		Layer: Layer 01	Description: rubbery material, black	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: fibrous material, white with mastic, tan	Analysis: No Asbestos Detected
27638.000-0023	Covebase/Mastic	Janitor 230A; 6" brown base with cream mastic		Eurofins LabCor PDX
		Layer: Layer 01	Description: rubbery material, black	Analysis: No Asbestos Detected
		Layer: Layer 02	Description: fibrous material, white with mastic, tan	Analysis: No Asbestos Detected

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0024	Covebase/Mastic	Classroom 110; 6" brown base with cream mastic		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	rubbery material, black	No Asbestos Detected	
	Layer 02	fibrous material, white with mastic, tan	No Asbestos Detected	
27638.000-0025	Sink Undercoating	Classroom 232; gray sink undercoat		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, gray	No Asbestos Detected	
27638.000-0026	Sink Undercoating	Classroom 101; gray sink undercoat		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, gray	No Asbestos Detected	
27638.000-0027	Sink Undercoating	Classroom 105; gray sink undercoat		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 1	loose particulate, gray	No Asbestos Detected	
27638.000-0028	Lay-in Ceiling Tile	Library workroom; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	loose fibrous material, yellow	No Asbestos Detected	
	Layer 02	fine compact powder, off-white	No Asbestos Detected	
27638.000-0029	Lay-in Ceiling Tile	Main office; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	loose fibrous material, yellow	No Asbestos Detected	
	Layer 02	fine compact powder, off-white	No Asbestos Detected	
27638.000-0030	Lay-in Ceiling Tile	Staff room 122; 4'x4' fiberglass ceiling tile		Eurofins LabCor PDX
	Layer:	Description:	Analysis:	
	Layer 01	loose fibrous material, yellow	No Asbestos Detected	
	Layer 02	fine compact powder, off-white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
27638.000-0031	Duct Sealant	Corridor at room 203; gray duct seam sealant		Eurofins LabCor PDX
		Layer: Layer 1	Description: soft compact material, gray	Analysis: No Asbestos Detected
27638.000-0032	Duct Sealant	Corridor at room 210; gray duct seam sealant		Eurofins LabCor PDX
		Layer: Layer 1	Description: soft compact material, gray	Analysis: No Asbestos Detected
27638.000-0033	Duct Sealant	Corridor at room 230A; gray duct seam sealant		Eurofins LabCor PDX
		Layer: Layer 1	Description: soft compact material, gray	Analysis: No Asbestos Detected

PLM - Visual Estimate Extended Final Report**Job Number: 233228****Client: PBS Engineering and Environmental****Address: 4412 S Corbett Avenue**
Portland, OR 97239**Project Name:****Project No.:** 27638.000 Phase 0001 Task 001**PO Number:****Sub Project:****Reference No.:****Report Number: 233228R01****Report Date: 12/13/2023**

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:
233228 - S1	27638.000-0001 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S2	27638.000-0002 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S3	27638.000-0003 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S4	27638.000-0004 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S5	27638.000-0005 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S6	27638.000-0006 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S7	27638.000-0007 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S8	27638.000-0008 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S9	27638.000-0009 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S10	27638.000-0010 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S11	27638.000-0011 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S12	27638.000-0012 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S13	27638.000-0013 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S14	27638.000-0014 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S15	27638.000-0015 -	PLM - Visual Estimate Extended		12/8/2023
233228 - S16	27638.000-0016 -	PLM - Visual Estimate Extended		12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233228

Client: PBS Engineering and Environmental

Project Name:

Report Number: 233228R01

Report Date: 12/13/2023

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.

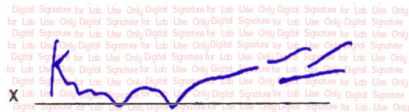
NAD is No Asbestos Detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

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,



Kyle DeBow
Analyst

BULK SAMPLE ASBESTOS ANALYSIS

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

Report Number: 233228R01
Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

Client Sample ID: 27638.000-0001	Sample ID: S1				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous mastic, tan/yellow	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0002	Sample ID: S2				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous loose particulate, tan/gray	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	15 %	-	3 %	-	82 %
Client Sample ID: 27638.000-0003	Sample ID: S3				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous loose particulate, tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	Trace	-	-	-	100 %
Client Sample ID: 27638.000-0004	Sample ID: S4				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous loose mastic particulate with fibers, tan/red	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	10 %	-	90 %

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

Report Number: 233228R01

Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

Client Sample ID: 27638.000-0005		Sample ID: S5			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
fine compact powder with paint, white/gray	20 %	-	-	-		NAD
Layer 02						
compact chalky material with paper, white	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	3 %	-	-	-	97 %
Layer 02	2 %	2 %	-	-	-	96 %

Client Sample ID: 27638.000-0006		Sample ID: S6			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
fine compact powder with paint, white/gray	20 %	-	-	-		NAD
Layer 02						
compact chalky material with paper, white	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	Trace	-	-	-	100 %
Layer 02	Trace	3 %	-	-	-	97 %

Client Sample ID: 27638.000-0007		Sample ID: S7			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
fine compact powder with paint, off-white/white	20 %	-	-	-		NAD
Layer 02						
compact chalky material with paper, white	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	2 %	-	-	-	98 %
Layer 02	-	2 %	-	-	-	98 %

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

Report Number: 233228R01
Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

Client Sample ID: 27638.000-0008		Sample ID: S8			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
vinyl, gray/black	40 %	-	-	-	NAD	
Layer 02						
woven fibers with mastic, tan/gray/white	20 %	-	-	-	NAD	
Layer 03						
granular compact powder, gray	40 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	30 %	-	-	-	70 %

Client Sample ID: 27638.000-0009		Sample ID: S9			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
vinyl, gray, with woven fibers, yellow	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	30 %	-	-	-	70 %

Client Sample ID: 27638.000-0010		Sample ID: S10			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
vinyl, gray, with woven fibers, yellow	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	30 %	-	-	-	70 %

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

Report Number: 233228R01
Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

Client Sample ID: 27638.000-0011		Sample ID: S11			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, black	60 %	-	-	-		NAD
Layer 02						
mastic with paper, tan/off-white	40 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	15 %	-	-	-	85 %
Client Sample ID: 27638.000-0012		Sample ID: S12			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, black	85 %	-	-	-		NAD
Layer 02						
mastic with coating, tan/white	15 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	3 %	-	-	-	97 %
Client Sample ID: 27638.000-0013		Sample ID: S13			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, black	50 %	-	-	-		NAD
Layer 02						
mastic with coating, tan/white	50 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	5 %	-	-	-	95 %

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

Report Number: 233228R01
Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

Client Sample ID: 27638.000-0014	Sample ID: S14				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
thin flexible material with powder, white/gray	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	8 %	-	-	-	92 %
Client Sample ID: 27638.000-0015	Sample ID: S15				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
mastic, tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	2 %	-	-	-	98 %
Client Sample ID: 27638.000-0016	Sample ID: S16				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
mastic, tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	Trace	-	-	-	100 %

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

Report Number: 233228R01

Report Date: 12/13/2023

Job Number: 233228

P.O. No: n/a

Project Name:

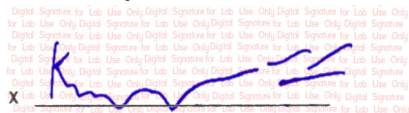
Project Number: 27638.000 Phase 0001 Task 001

Project Notes:

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:



Kyle DeBow
Analyst



233228

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 27638.000 Phase 0001 Task 001

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: December 08, 2023

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

John Guly
Name[Signature]
Authorized Signature12/8/23 9:38
Date Time

RECEIVER

Date Received: 12/8/23

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

Mark Donahue
Name[Signature]
Authorized Signature12/8/23 10:40
Date Time

Sender's ID No.

Brief Description

Receiver's ID No.

27638.000-0001

27638.000-0002

27638.000-0003

27638.000-0004

27638.000-0005

27638.000-0006

27638.000-0007

27638.000-0008

27638.000-0009

27638.000-0010

27638.000-0011

27638.000-0012

27638.000-0013

27638.000-0014



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

27638.000-0015

27638.000-0016

Please analyze the enclosed 16 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: **7 Day**

SPECIAL INSTRUCTIONS:

05

PLM - Visual Estimate Extended Final Report

Job Number: 233227

Client: PBS Engineering and Environmental

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

Project Name:

Project No.: 27638.000 Phase 0001 Task 002

PO Number:

Sub Project:

Reference No.:

Report Number: 233227R01

Report Date: 12/14/2023

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:
233227 - S1	27638.000-0001 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S2	27638.000-0002 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S3	27638.000-0003 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S4	27638.000-0004 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S5	27638.000-0005 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S6	27638.000-0006 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S7	27638.000-0007 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S8	27638.000-0008 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S9	27638.000-0009 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S10	27638.000-0010 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S11	27638.000-0011 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S12	27638.000-0012 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S13	27638.000-0013 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S14	27638.000-0014 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S15	27638.000-0015 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S16	27638.000-0016 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S17	27638.000-0017 - Progressive Analysis Group: 1	PLM - Visual Estimate Extended		12/8/2023
233227 - S18	27638.000-0018 - Progressive Analysis Group: 1	PLM - Visual Estimate Extended		12/8/2023
233227 - S19	27638.000-0019 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S20	27638.000-0020 -	PLM - Visual Estimate Extended		12/8/2023
233227 - S21	27638.000-0021 -	PLM - Visual Estimate Extended		12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233227

Client: PBS Engineering and Environmental

Report Number: 233227R01

Report Date: 12/14/2023

Project Name:

233227 - S22

27638.000-0022 - Progressive
Analysis Group: 1

PLM - Visual Estimate
Extended

12/8/2023

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.

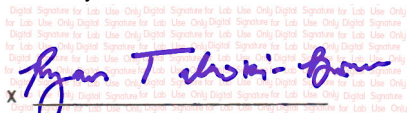
NAD is No Asbestos Detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

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,



Ryan Talaski-Brown
Eurofins - LabCor Portland

BULK SAMPLE ASBESTOS ANALYSIS

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

Report Number: 233227R01
Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0001		Sample ID: S1			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous mastic, tan/gray		100 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
		-	5 %	-	2 %	-
						Matrix 93 %
Client Sample ID: 27638.000-0002		Sample ID: S2			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous loose particulate, tan/gray/black		100 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
		-	5 %	-	-	-
						Matrix 95 %
Client Sample ID: 27638.000-0003		Sample ID: S3			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous flexible mastic material, tan/yellow		100 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
		-	8 %	-	-	-
						Matrix 92 %
Client Sample ID: 27638.000-0004		Sample ID: S4			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01 flexible vinyl, off- white/gray		60 %	-	-	-	NAD
Layer 02 powdery backing with woven fibers, gray/tan		40 %	-	-	-	NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other
Layer 01		-	40 %	-	-	-
Layer 02		-	60 %	-	-	-
						Matrix 60 % 40 %

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

Report Number: 233227R01
Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0005	Sample ID: S5				Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate with fibers, off- white/gray/brown	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	30 %	-	-	-	70 %
Client Sample ID: 27638.000-0006	Sample ID: S6				Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
vinyl, off- white/gray/green	60 %	-	-	-		NAD
Layer 02						
powdery backing with woven fibers, gray/tan	40 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	25 %	-	-	-	75 %
Layer 02	-	50 %	-	-	-	50 %
Client Sample ID: 27638.000-0007	Sample ID: S7				Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
thin flexible material with paper, gray/tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	10 %	-	-	-	90 %

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

Report Number: 233227R01

Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0008		Sample ID: S8			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, gray	35 %	-	-	-		NAD
Layer 02						
mastic with paper, tan	65 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	60 %	-	-	-	40 %
Client Sample ID: 27638.000-0009		Sample ID: S9			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, gray	30 %	-	-	-		NAD
Layer 02						
mastic with paper, tan/off-white	70 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	50 %	-	-	-	50 %
Client Sample ID: 27638.000-0010		Sample ID: S10			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
flexible particulate with paper, gray/off-white/tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	15 %	-	-	-	85 %

Comments: Entire sample processed; further analyses will require a new sample be submitted.

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

Report Number: 233227R01
Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0011		Sample ID: S11			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	40 %	-	-	-	NAD	
Layer 02						
mastic material, tan	60 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	Trace	-	-	-	100 %

Client Sample ID: 27638.000-0012		Sample ID: S12			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
rubbery material, black/brown	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

Client Sample ID: 27638.000-0013		Sample ID: S13			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder with coating, off-white/tan	15 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, white	85 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	Trace	Trace	-	-	-	100 %

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

Report Number: 233227R01

Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0014		Sample ID: S14			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder with paint, off-white/white	35 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, white	65 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	Trace	-	-	-	100 %
Layer 02	-	2 %	-	-	-	98 %

Client Sample ID: 27638.000-0015		Sample ID: S15			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder with paint, off-white/white	15 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, tan	85 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	Trace	-	-	-	100 %
Layer 02	Trace	3 %	-	-	-	97 %

Client Sample ID: 27638.000-0016		Sample ID: S16			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, black	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	Trace	-	-	-	100 %

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

Report Number: 233227R01
Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0017		Sample ID: S17			Date Analyzed: 12/14/2023	
Client Sample Description:		Progressive Analysis Group: 1			Analyst: Tim Cammann	
<u>Asbestos Mineral Fibers</u>	Layer					Percent Asbestos:
	Percent:	Chrysotile	Amosite	Crocidolite		
Layer 01						
loose fibrous material, gray/white	94 %	-	-	-		NAD
Layer 02						
mastic, brown	6 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	40 %	40 %	-	-	20 %
Layer 02	-	Trace	Trace	-	-	100 %

Client Sample ID: 27638.000-0018		Sample ID: S18			Date Analyzed: 12/14/2023	
Client Sample Description:		Progressive Analysis Group: 1			Analyst: Tim Cammann	
<u>Asbestos Mineral Fibers</u>	Layer					Percent Asbestos:
	Percent:	Chrysotile	Amosite	Crocidolite		
Layer 01						
loose powder with paint, gray/tan/white	90 %	-	-	-		NAD
Layer 02						
mastic, brown	10 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	65 %	15 %	-	-	20 %
Layer 02	-	2 %	Trace	-	-	98 %

Client Sample ID: 27638.000-0019		Sample ID: S19			Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
<u>Asbestos Mineral Fibers</u>	Layer					Percent Asbestos:
	Percent:	Chrysotile	Amosite	Crocidolite		
Layer 01						
vinyl, gray/yellow	75 %	-	-	-		NAD
Layer 02						
mastic, tan	25 %	-	-	-		NAD
<u>Other Fibers</u>	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	Trace	-	5 %	-	95 %

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

Report Number: 233227R01
Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

Client Sample ID: 27638.000-0020	Sample ID: S20				Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
vinyl, gray/yellow	80 %	-	-	-		NAD
Layer 02						
mastic, tan	20 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	4 %	-	96 %

Client Sample ID: 27638.000-0021	Sample ID: S21				Date Analyzed: 12/14/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
vinyl, gray/yellow	80 %	-	-	-		NAD
Layer 02						
mastic, tan	20 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	Trace	-	Trace	-	100 %

Client Sample ID: 27638.000-0022	Sample ID: S22				Date Analyzed: 12/14/2023	
Client Sample Description:	Progressive Analysis Group: 1				Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
fibrous powder with particulate, gray/white	90 %	-	-	-		NAD
Layer 02						
mastic, brown	10 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	60 %	-	-	20 %
Layer 02	-	Trace	Trace	-	-	100 %

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

Report Number: 233227R01

Report Date: 12/14/2023

Job Number: 233227

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 002

Project Notes:

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:

Ryan Talaski-Brown
Eurofins - LabCor Portland



233227

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 27638.000 Phase 0001 Task 002

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: December 08, 2023

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

John T. [Signature]
Name

[Signature] 12/8/23 9:33
Authorized Signature Date Time

RECEIVER

Date Received: 12/8/23

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

MAIK DONAGUE
Name

[Signature] 12/8/23 10:40
Authorized Signature Date Time

Sender's ID No.

Brief Description

Receiver's ID No.

27638.000-0001

27638.000-0002

27638.000-0003

27638.000-0004

27638.000-0005

27638.000-0006

27638.000-0007

27638.000-0008

27638.000-0009

27638.000-0010

27638.000-0011

27638.000-0012

27638.000-0013

27638.000-0014



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

27638.000-0015

27638.000-0016

27638.000-0017 } **Progressive Analysis Group: 1**

27638.000-0018 } " 1

27638.000-0019

27638.000-0020

27638.000-0021

27638.000-0022 } **Progressive Analysis Group: 1**

Please analyze the enclosed 22 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: 7 Day

SPECIAL INSTRUCTIONS:

05
For each progressive group defined above, please stop analysis at the first positive result over 1%.

PLM - Visual Estimate Extended Final Report

Job Number: 233226

Client: PBS Engineering and Environmental

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

Project Name:

Project No.: 27638.000 Phase 0001 Task 003

PO Number:

Sub Project:

Reference No.:

Report Number: 233226R01

Report Date: 12/15/2023

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:
233226 - S1	27638.000-0001 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S2	27638.000-0002 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S3	27638.000-0003 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S4	27638.000-0004 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S5	27638.000-0005 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S6	27638.000-0006 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S7	27638.000-0007 - Progressive Analysis Group: 1	PLM - Visual Estimate Extended		12/8/2023
233226 - S8	27638.000-0008 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S9	27638.000-0009 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S10	27638.000-0010 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S11	27638.000-0011 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S12	27638.000-0012 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S13	27638.000-0013 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S14	27638.000-0014 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S15	27638.000-0015 - Progressive Analysis Group: 1	PLM - Visual Estimate Extended		12/8/2023
233226 - S16	27638.000-0016 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S17	27638.000-0017 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S18	27638.000-0018 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S19	27638.000-0019 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S20	27638.000-0020 -	PLM - Visual Estimate Extended		12/8/2023
233226 - S21	27638.000-0021 -	PLM - Visual Estimate Extended		12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233226

Client: PBS Engineering and Environmental

Project Name:

Report Number: 233226R01

Report Date: 12/15/2023

233226 - S22	27638.000-0022 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S23	27638.000-0023 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S24	27638.000-0024 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S25	27638.000-0025 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S26	27638.000-0026 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S27	27638.000-0027 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S28	27638.000-0028 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S29	27638.000-0029 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S30	27638.000-0030 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S31	27638.000-0031 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S32	27638.000-0032 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S33	27638.000-0033 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S34	27638.000-0034 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S35	27638.000-0035 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S36	27638.000-0036 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S37	27638.000-0037 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S38	27638.000-0038 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S39	27638.000-0039 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S40	27638.000-0040 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S41	27638.000-0041 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S42	27638.000-0042 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S43	27638.000-0043 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S44	27638.000-0044 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S45	27638.000-0045 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S46	27638.000-0046 -	PLM - Visual Estimate Extended	12/8/2023
233226 - S47	27638.000-0047 -	PLM - Visual Estimate Extended	12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233226

Client: PBS Engineering and Environmental

Project Name:

Report Number: 233226R01

Report Date: 12/15/2023

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.

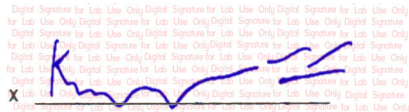
NAD is No Asbestos Detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

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,



Kyle DeBow
Analyst

BULK SAMPLE ASBESTOS ANALYSIS

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0001	Sample ID: S1				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	5 %	5 %	-	-	90 %
Client Sample ID: 27638.000-0002	Sample ID: S2				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	2 %	5 %	5 %	-	-	88 %
Client Sample ID: 27638.000-0003	Sample ID: S3				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
compact granular material, white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	5 %	Trace	-	-	95 %
Client Sample ID: 27638.000-0004	Sample ID: S4				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, off-white with granular compact powder, off-white	20 %	-	-	-		NAD
Layer 02						
granular compact powder, gray	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	Trace	-	-	-	100 %
Layer 02	-	4 %	-	-	-	96 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0005	Sample ID: S5				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
granular compact powder, white with paint, tan	%	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	2 %	-	-	-	98 %
Client Sample ID: 27638.000-0006	Sample ID: S6				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: David Andrews	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
fine compact powder, white with paint, white	30 %	-	-	-		NAD
Layer 02						
compact chalky material with paper, white	70 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	2 %	10 %	-	-	-	88 %
Client Sample ID: 27638.000-0007	Sample ID: S7				Date Analyzed: 12/15/2023	
Client Sample Description:	Progressive Analysis Group: 1				Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, black/red	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	4 %	-	-	-	96 %

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

Report Number: 233226R01

Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID:	27638.000-0008		Sample ID:	S8		Date Analyzed:	12/15/2023	
Client Sample Description:						Analyst:	David Andrews	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01								
fine compact powder, white	15 %	-	-	-				NAD
Layer 02								
compact chalky material with paper, white	85 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other			Matrix
Layer 01	-	-	-	-	-	-	-	100 %
Layer 02	2 %	10 %	-	-	-	-	-	88 %

Client Sample ID:	27638.000-0009		Sample ID:	S9		Date Analyzed:	12/15/2023	
Client Sample Description:						Analyst:	David Andrews	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01								
fine compact powder, white with paint, white	20 %	-	-	-				NAD
Layer 02								
compact chalky material with paper, white	80 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other			Matrix
Layer 01	-	-	-	-	-	-	-	100 %
Layer 02	2 %	10 %	-	-	-	-	-	88 %

Client Sample ID:	27638.000-0010		Sample ID:	S10		Date Analyzed:	12/15/2023	
Client Sample Description:						Analyst:	Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
paint, off-white with fine compact powder, off- white	100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other			Matrix
	-	2 %	-	-	-	-	-	98 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0011	Sample ID: S11				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose powder with paint, off-white/white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	Trace	-	-	-	100 %
Client Sample ID: 27638.000-0012	Sample ID: S12				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose powder with paint, off-white/white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	-	-	97 %
Client Sample ID: 27638.000-0013	Sample ID: S13				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose granular powder, gray/off-white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	-	-	97 %
Client Sample ID: 27638.000-0014	Sample ID: S14				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose mastic, gray	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0015		Sample ID: S15		Date Analyzed: 12/15/2023	
Client Sample Description: Progressive Analysis Group: 1				Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer			Percent Asbestos:
		Percent:	Chrysotile	Amosite	Crocidolite
Homogeneous					
loose particulate, black		100 %	-	-	-
					NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic
		-	3 %	-	-
					Other
					Matrix
					97 %
Client Sample ID: 27638.000-0016		Sample ID: S16		Date Analyzed: 12/15/2023	
Client Sample Description:				Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer			Percent Asbestos:
		Percent:	Chrysotile	Amosite	Crocidolite
Layer 01					
vinyl, blue/gray		60 %	-	-	-
					NAD
Layer 02					
fibrous backing, gray, with thin mastic, tan		40 %	-	-	-
					NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic
		-	-	-	-
Layer 01					
		-	-	-	-
Layer 02					
		-	70 %	-	-
					Matrix
					100 %
					30 %
Client Sample ID: 27638.000-0017		Sample ID: S17		Date Analyzed: 12/15/2023	
Client Sample Description:				Analyst: Tim Cammann	
Asbestos Mineral Fibers		Layer			Percent Asbestos:
		Percent:	Chrysotile	Amosite	Crocidolite
Layer 01					
vinyl, blue/gray		75 %	-	-	-
					NAD
Layer 02					
fibrous backing, gray, with thin mastic, tan		25 %	-	-	-
					NAD
Other Fibers		Fibrous Glass	Cellulose	Mineral Wool	Synthetic
		-	-	-	-
Layer 01					
		-	-	-	-
Layer 02					
		5 %	60 %	-	-
					Matrix
					100 %
					35 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0018		Sample ID: S18			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	80 %	-	-	-	NAD	
Layer 02						
mastic, tan	20 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0019		Sample ID: S19			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, tan, with powdery coating, white	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	Trace	-	-	-	100 %
Client Sample ID: 27638.000-0020		Sample ID: S20			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, tan, with powdery coating, white	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	-	-	97 %
Client Sample ID: 27638.000-0021		Sample ID: S21			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic with thin powdery coating, tan/white	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	-	-	97 %

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

Report Number: 233226R01

Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0022		Sample ID: S22			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder with paint, off-white/white	20 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, off-white	80 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	Trace	2 %	-	-	-	98 %

Client Sample ID: 27638.000-0023		Sample ID: S23			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder with paint, off-white/white	20 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, off-white	80 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	Trace	-	-	-	100 %

Client Sample ID: 27638.000-0024		Sample ID: S24			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose powder with paper and paint, off-white/white	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	2 %	8 %	-	-	-	90 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0025		Sample ID: S25			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, brown	92 %	-	-	-	NAD	
Layer 02						
thin fibrous backing with mastic, clear/white/yellow	8 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	5 %	-	-	-	-	95 %
Layer 02	5 %	5 %	-	-	-	90 %

Client Sample ID: 27638.000-0026		Sample ID: S26			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, brown	88 %	-	-	-	NAD	
Layer 02						
mastic, tan	12 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	10 %	-	-	-	-	90 %
Layer 02	-	Trace	-	-	-	100 %

Client Sample ID: 27638.000-0027		Sample ID: S27			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, brown, with thin backing, clear/tan	90 %	-	-	-	NAD	
Layer 02						
mastic, tan/gray	10 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	10 %	Trace	-	-	-	90 %
Layer 02	Trace	5 %	-	-	-	95 %

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

Report Number: 233226R01

Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0028		Sample ID: S28			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	70 %	-	-	-	NAD	
Layer 02						
mastic, tan	30 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %

Client Sample ID: 27638.000-0029		Sample ID: S29			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	60 %	-	-	-	NAD	
Layer 02						
mastic, tan	40 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %

Client Sample ID: 27638.000-0030		Sample ID: S30			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	55 %	-	-	-	NAD	
Layer 02						
mastic with paper, tan/off-white	45 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0031		Sample ID: S31			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, black	60 %	-	-	-		NAD
Layer 02						
mastic material with powder, tan	40 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	2 %	-	-	-	98 %
Client Sample ID: 27638.000-0032		Sample ID: S32			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, gray	50 %	-	-	-		NAD
Layer 02						
mastic with powder, tan	50 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	2 %	-	-	-	98 %
Client Sample ID: 27638.000-0033		Sample ID: S33			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, black	15 %	-	-	-		NAD
Layer 02						
mastic with paper, off- white/tan/brown	85 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	3 %	-	-	-	97 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0034		Sample ID: S34			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	35 %	-	-	-	NAD	
Layer 02						
mastic with paper, off-white/tan/brown	65 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	5 %	-	-	-	95 %
Client Sample ID: 27638.000-0035		Sample ID: S35			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	55 %	-	-	-	NAD	
Layer 02						
mastic with paper, tan	45 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	8 %	-	-	-	92 %
Client Sample ID: 27638.000-0036		Sample ID: S36			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
vinyl particulate, blue/gray/multicolored	30 %	-	-	-	NAD	
Layer 02						
loose fibrous material, gray	70 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	85 %	-	-	-	15 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0037	Sample ID: S37				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, black	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	-	-	97 %
Client Sample ID: 27638.000-0038	Sample ID: S38				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, tan/gray	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0039	Sample ID: S39				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
mastic material with fibers, tan/white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	8 %	-	-	-	92 %
Client Sample ID: 27638.000-0040	Sample ID: S40				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, gray/off-white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	8 %	-	-	-	92 %

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

Report Number: 233226R01

Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0041		Sample ID: S41			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
compact powder with paint, white	50 %	4 %	-	-		4 %
Layer 02						
granular compact powder with paint, gray/green	50 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	96 %
Layer 02	-	2 %	-	-	-	98 %

Client Sample ID: 27638.000-0042		Sample ID: S42			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
coating, white	50 %	-	-	-		NAD
Layer 02						
loose fibrous material, yellow	50 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	100 %	-	-	-	-	0 %

Client Sample ID: 27638.000-0043		Sample ID: S43			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
coating, white	75 %	-	-	-		NAD
Layer 02						
loose fibrous material, yellow	25 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	100 %	-	-	-	-	0 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0044		Sample ID: S44			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
coating, white	8 %	-	-	-	NAD	
Layer 02						
loose fibrous material, yellow	92 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	100 %	-	-	-	-	0 %

Client Sample ID: 27638.000-0045		Sample ID: S45			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
coating, white	65 %	-	-	-	NAD	
Layer 02						
loose fibrous material, yellow	35 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	100 %	-	-	-	-	0 %

Client Sample ID: 27638.000-0046		Sample ID: S46			Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
coating, white	50 %	-	-	-	NAD	
Layer 02						
loose fibrous material, yellow	50 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	100 %	-	-	-	0 %

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

Report Number: 233226R01
Report Date: 12/15/2023

Job Number: 233226

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 003

Project Notes:

Client Sample ID: 27638.000-0047	Sample ID: S47				Date Analyzed: 12/15/2023	
Client Sample Description:					Analyst: Tim Cammann	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
coating, white	60 %	-	-	-		NAD
Layer 02						
loose fibrous material, yellow	40 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	100 %	-	-	-	-	0 %

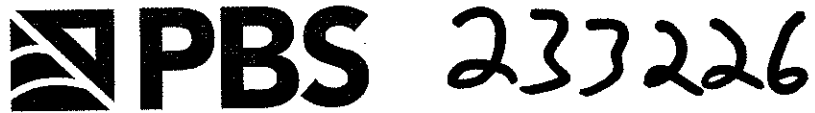
This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials and EPA - 40CFR App. E to Subpart E of Part 763, PLM. This report and the data contained therein 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
Kyle DeBow
Analyst

Reviewed by:
Results Released on:
Invoice Released on:
Verbal Email Physical



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 27638.000 Phase 0001 Task 003

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: December 08, 2023

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

John Guly
Name

[Signature] 12/8/23 9:55
Authorized Signature Date Time

RECEIVER

Date Received: 12/8/23

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

Mark Donatus
Name

[Signature] 12/8/23 10:40
Authorized Signature Date Time

Sender's ID No.	Brief Description	Receiver's ID No.
27638.000-0001		
27638.000-0002		
27638.000-0003		
27638.000-0004		
27638.000-0005		
27638.000-0006		
27638.000-0007	Progressive Analysis Group: 1	
27638.000-0008		
27638.000-0009		
27638.000-0010		
27638.000-0011		
27638.000-0012		
27638.000-0013		
27638.000-0014		



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

27638.000-0015	} Progressive Analysis Group: 1	
27638.000-0016		
27638.000-0017		
27638.000-0018		
27638.000-0019		
27638.000-0020		
27638.000-0021		
27638.000-0022		
27638.000-0023		
27638.000-0024		
27638.000-0025		
27638.000-0026		
27638.000-0027		
27638.000-0028		
27638.000-0029		
27638.000-0030		
27638.000-0031		
27638.000-0032		
27638.000-0033		
27638.000-0034		
27638.000-0035		
27638.000-0036		
27638.000-0037		
27638.000-0038		
27638.000-0039		



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

27638.000-0040	_____	_____
27638.000-0041	_____	_____
27638.000-0042	_____	_____
27638.000-0043	_____	_____
27638.000-0044	_____	_____
27638.000-0045	_____	_____
27638.000-0046	_____	_____
27638.000-0047	_____	_____

Please analyze the enclosed 47 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: 7 Day

SPECIAL INSTRUCTIONS:

05

For each progressive group defined above, please stop analysis at the first positive result over 1%.

PLM - Visual Estimate Extended Final Report**Job Number: 233229****Client: PBS Engineering and Environmental****Address: 4412 S Corbett Avenue
Portland, OR 97239****Project Name:****Project No.: 27638.000 Phase 0001 Task 004****PO Number:****Sub Project:****Reference No.:****Report Number: 233229R01****Report Date: 12/13/2023**

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:
233229 - S1	27638.000-0001 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S2	27638.000-0002 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S3	27638.000-0003 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S4	27638.000-0004 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S5	27638.000-0005 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S6	27638.000-0006 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S7	27638.000-0007 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S8	27638.000-0008 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S9	27638.000-0009 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S10	27638.000-0010 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S11	27638.000-0011 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S12	27638.000-0012 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S13	27638.000-0013 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S14	27638.000-0014 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S15	27638.000-0015 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S16	27638.000-0016 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S17	27638.000-0017 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S18	27638.000-0018 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S19	27638.000-0019 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S20	27638.000-0020 -	PLM - Visual Estimate Extended		12/8/2023
233229 - S21	27638.000-0021 -	PLM - Visual Estimate Extended		12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233229

Client: PBS Engineering and Environmental

Report Number: 233229R01

Report Date: 12/13/2023

Project Name:

233229 - S22	27638.000-0022 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S23	27638.000-0023 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S24	27638.000-0024 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S25	27638.000-0025 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S26	27638.000-0026 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S27	27638.000-0027 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S28	27638.000-0028 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S29	27638.000-0029 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S30	27638.000-0030 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S31	27638.000-0031 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S32	27638.000-0032 -	PLM - Visual Estimate Extended	12/8/2023
233229 - S33	27638.000-0033 -	PLM - Visual Estimate Extended	12/8/2023

PLM - Visual Estimate Extended Final Report

Job Number: 233229

Client: PBS Engineering and Environmental

Project Name:

Report Number: 233229R01

Report Date: 12/13/2023

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.

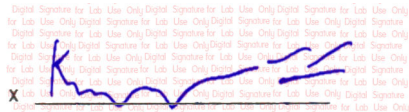
NAD is No Asbestos Detected. Asbestos consists of the six following minerals: chrysotile, amosite, crocidolite, anthophyllite, actinolite, and tremolite.

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,



Kyle DeBow
Analyst

BULK SAMPLE ASBESTOS ANALYSIS

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID:		27638.000-0001		Sample ID:		S1		Date Analyzed:		12/13/2023	
Client Sample Description:				Analyst:		Kyle DeBow					
<u>Asbestos Mineral Fibers</u>		Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:					
Layer 01											
paint, off-white with fine compact powder, off-white		35 %	-	-	-	NAD					
Layer 02											
fine compact powder, off-white with paper, white		35 %	-	-	-	NAD					
Layer 03											
compact chalky material with paper, white		30 %	-	-	-	NAD					
<u>Other Fibers</u>		Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix				
Layer 01	-	4 %	-	-	-	-	96 %				
Layer 02	Trace	25 %	-	-	-	-	75 %				
Layer 03	Trace	10 %	-	-	-	-	90 %				

Client Sample ID: 27638.000-0002		Sample ID: S2			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
paint, off-white with fine compact powder, off-white	25 %	-	-	-	NAD	
Layer 02						
fine compact powder, off-white with paper, white	25 %	-	-	-	NAD	
Layer 03						
compact chalky material with paper, white	50 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	25 %	-	-	-	75 %
Layer 03	Trace	10 %	-	-	-	90 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0003		Sample ID: S3			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, off-white with fine compact powder, off-white	20 %	-	-	-		NAD
Layer 02						
fine compact powder, off-white, with paper, white	5 %	-	-	-		NAD
Layer 03						
compact chalky material with paper, white	75 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	25 %	-	-	-	75 %
Layer 03	Trace	10 %	-	-	-	90 %

Client Sample ID: 27638.000-0004		Sample ID: S4			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, off-white with fine compact powder, off-white	30 %	-	-	-		NAD
Layer 02						
fine compact powder, off-white, with paper, white	5 %	-	-	-		NAD
Layer 03						
compact chalky material with paper, white	65 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	25 %	-	-	-	75 %
Layer 03	Trace	10 %	-	-	-	90 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0005		Sample ID: S5			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, off-white with fine compact powder, off-white	10 %	-	-	-		NAD
Layer 02						
fine compact powder, off-white, with paper, white	3 %	-	-	-		NAD
Layer 03						
compact chalky material with paper, white	87 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	25 %	-	-	-	75 %
Layer 03	Trace	10 %	-	-	-	90 %

Client Sample ID: 27638.000-0006		Sample ID: S6			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
paint, off-white with fine compact powder, off-white	10 %	-	-	-		NAD
Layer 02						
fine compact powder, off-white, with paper, white	10 %	-	-	-		NAD
Layer 03						
compact chalky material with paper, white	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	4 %	-	-	-	96 %
Layer 02	Trace	25 %	-	-	-	75 %
Layer 03	Trace	10 %	-	-	-	90 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0007		Sample ID: S7			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, brown	40 %	-	-	-		NAD
Layer 02						
mastic, brown	40 %	-	-	-		NAD
Layer 03						
woven material with coating, white	20 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	85 %	-	15 %

Client Sample ID: 27638.000-0008		Sample ID: S8			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, brown	35 %	-	-	-		NAD
Layer 02						
mastic, brown	35 %	-	-	-		NAD
Layer 03						
woven material with coating, white	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	85 %	-	15 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0009		Sample ID: S9			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, brown	35 %	-	-	-		NAD
Layer 02						
mastic, brown	35 %	-	-	-		NAD
Layer 03						
woven material with coating, white	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	85 %	-	15 %

Client Sample ID: 27638.000-0010		Sample ID: S10			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, gray	40 %	-	-	-		NAD
Layer 02						
mastic, tan	30 %	-	-	-		NAD
Layer 03						
woven material with coating, white	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	20 %	-	-	-	80 %
Layer 03	-	-	-	85 %	-	15 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0011		Sample ID: S11			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, gray	40 %	-	-	-		NAD
Layer 02						
mastic, tan	30 %	-	-	-		NAD
Layer 03						
woven material with coating, white	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	85 %	-	15 %

Client Sample ID: 27638.000-0012		Sample ID: S12			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard compact material, gray	50 %	-	-	-		NAD
Layer 02						
mastic, tan	25 %	-	-	-		NAD
Layer 03						
woven fibers, white	25 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	20 %	-	-	-	80 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	-	-	85 %	-	15 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0013		Sample ID: S13			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard vinyl, green	80 %	-	-	-		NAD
Layer 02						
mastic, green	10 %	-	-	-		NAD
Layer 03						
woven fibers, brown	10 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	25 %	-	-	-	75 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	95 %	-	-	-	5 %

Client Sample ID: 27638.000-0014		Sample ID: S14			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
hard vinyl, green	35 %	-	-	-		NAD
Layer 02						
mastic, green	35 %	-	-	-		NAD
Layer 03						
woven fibers, brown	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	25 %	-	-	-	75 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	95 %	-	-	-	5 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0015		Sample ID: S15			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
hard vinyl, green	35 %	-	-	-	NAD	
Layer 02						
mastic, green	35 %	-	-	-	NAD	
Layer 03						
woven fibers, brown	30 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	25 %	-	-	-	75 %
Layer 02	-	50 %	-	-	-	50 %
Layer 03	-	95 %	-	-	-	5 %

Client Sample ID: 27638.000-0016		Sample ID: S16			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, black	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	7 %	-	Trace	-	93 %

Client Sample ID: 27638.000-0017		Sample ID: S17			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, black	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	7 %	-	Trace	-	93 %

Client Sample ID: 27638.000-0018		Sample ID: S18			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
mastic, black	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	7 %	-	Trace	-	93 %

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

Report Number: 233229R01

Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0019		Sample ID: S19			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, gray/tan	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	Trace	5 %	-	Trace	-	95 %
Client Sample ID: 27638.000-0020		Sample ID: S20			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, gray/tan	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	Trace	5 %	-	Trace	-	95 %
Client Sample ID: 27638.000-0021		Sample ID: S21			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, brown/tan	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	3 %	-	Trace	-	97 %
Client Sample ID: 27638.000-0022		Sample ID: S22			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	50 %	-	-	-	NAD	
Layer 02						
fibrous material, white with mastic, tan	50 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	50 %	-	Trace	-	50 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0023		Sample ID: S23			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	50 %	-	-	-	NAD	
Layer 02						
fibrous material, white with mastic, tan	50 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	50 %	-	Trace	-	50 %
Client Sample ID: 27638.000-0024		Sample ID: S24			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	30 %	-	-	-	NAD	
Layer 02						
fibrous material, white with mastic, tan	70 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	50 %	-	Trace	-	50 %
Client Sample ID: 27638.000-0025		Sample ID: S25			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, gray	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0026		Sample ID: S26			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
loose particulate, gray	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0027	Sample ID: S27				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
loose particulate, gray	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0028	Sample ID: S28				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
loose fibrous material, yellow	90 %	-	-	-		NAD
Layer 02						
fine compact powder, off- white	10 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	95 %	-	-	-	-	5 %
Layer 02	-	-	-	-	-	100 %
Client Sample ID: 27638.000-0029	Sample ID: S29				Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
loose fibrous material, yellow	70 %	-	-	-		NAD
Layer 02						
fine compact powder, off- white	30 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	95 %	-	-	-	-	5 %
Layer 02	-	-	-	-	-	100 %

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

Report Number: 233229R01
Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

Client Sample ID: 27638.000-0030		Sample ID: S30			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
loose fibrous material, yellow	50 %	-	-	-	NAD	
Layer 02						
fine compact powder, off-white	50 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	95 %	-	-	-	-	5 %
Layer 02	-	-	-	-	-	100 %

Client Sample ID: 27638.000-0031		Sample ID: S31			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
soft compact material, gray	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	Trace	-	100 %

Client Sample ID: 27638.000-0032		Sample ID: S32			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
soft compact material, gray	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	Trace	-	100 %

Client Sample ID: 27638.000-0033		Sample ID: S33			Date Analyzed: 12/13/2023	
Client Sample Description:					Analyst: Kyle DeBow	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
soft compact material, gray	100 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	Trace	-	100 %

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

Report Number: 233229R01

Report Date: 12/13/2023

Job Number: 233229

P.O. No: n/a

Project Name:

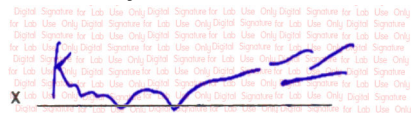
Project Number: 27638.000 Phase 0001 Task 004

Project Notes:

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
Kyle DeBow
Analyst



PBS

233229

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 27638.000 Phase 0001 Task 004

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: December 08, 2023

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

John G. King
Name

12/8/23 10:19
Authorized Signature Date Time

RECEIVER

Date Received: 12/8/23

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

Mark I. Donahue
Name

12/8/23 10:40
Authorized Signature Date Time

Sender's ID No.

Brief Description

Receiver's ID No.

27638.000-0001	
27638.000-0002	
27638.000-0003	
27638.000-0004	
27638.000-0005	
27638.000-0006	
27638.000-0007	
27638.000-0008	
27638.000-0009	
27638.000-0010	
27638.000-0011	
27638.000-0012	
27638.000-0013	
27638.000-0014	



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

27638.000-0015	_____	_____
27638.000-0016	_____	_____
27638.000-0017	_____	_____
27638.000-0018	_____	_____
27638.000-0019	_____	_____
27638.000-0020	_____	_____
27638.000-0021	_____	_____
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27638.000-0023	_____	_____
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27638.000-0027	_____	_____
27638.000-0028	_____	_____
27638.000-0029	_____	_____
27638.000-0030	_____	_____
27638.000-0031	_____	_____
27638.000-0032	_____	_____
27638.000-0033	_____	_____

Please analyze the enclosed 33 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: 7 Day

SPECIAL INSTRUCTIONS:

05

THIS IS TO CERTIFY THAT

SEAN GRABINER

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ONLINE AHERA ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 01/05/2024

Course Location: Online

Certificate: IRO-24-4508B



CCB #SRA0615 4-Hr Training

4-Hour Online AHERA Inspector Refresher Training; AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 01/05/2025

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239

503-248-1939

A handwritten signature in black ink, reading "Andy Fridley", written over a horizontal line.

Andy Fridley, Instructor

THIS IS TO CERTIFY THAT

SEAN GRABINER

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS MANAGEMENT PLANNER REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 01/12/2024

Course Location: Online

Certificate: MPR-24-4508B



AHERA is the Asbestos Hazard Emergency Response Act enacting Title II of Toxic Substance Control Act (TSCA)

Expiration Date: 01/12/2025

For verification of the authenticity of this certificate contact:
PBS Engineering and Environmental Inc.
4412 S Corbett Avenue
Portland, OR 97239
503.248.1939

A handwritten signature in black ink, which appears to read "Andy Fridley", is written over a horizontal line.

Andy Fridley, Instructor