

Asbestos and Lead Paint Survey Report

Maintenance and Administration Buildings
16250 SW Merlo Road
Beaverton, OR 97003

Prepared for:

TriMet

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Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered



March 2017

Project No.: 21857.024 Phase No.: 0001

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GENERAL INFORMATION

BUILDING DATA

Maintenance and Administration Buildings
16250 SW Merlo Road
Beaverton, OR 97003

CLIENT DATA

TriMet
1800 SW First Avenue, Suite 300
Portland, OR 97201

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a general asbestos survey of accessible 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
- Lead paint sampling
- Inspection summary
- Laboratory analytical data of bulk material sampled

With regard to asbestos, PBS endeavored to locate all the suspect asbestos-containing materials in the buildings; 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 buildings, 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.

Steve Dilling
Senior Reviewer
Accreditation #: IR-16-0931A

Joel McCarthy
Prime Inspector
Accreditation #: IMR-16-2771B

 03.20.2017

 Signature Date

 03.20.2017

 Signature Date

INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
3/3/2017	Joel McCarthy	Sampling

PBS has investigated accessible areas inside of the buildings 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 not 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.

<u>Result</u>	<u>Material (type)</u>	<u>Location</u>	<u>Approx. Quantity</u>
(+)	Gray caulk around exterior door frames	Maintenance Building, exterior	100 LF
(P)	Mechanical isolation cloth	Administration Building mechanical room	1 EA
(P)	Gaskets	Maintenance Building sprinkler room	20 EA

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>
Carpet Mastic	Administration Building
Caulk on Wainscotting	Administration Building, sprinkler room
Ceramic Tile Mastic	Administration Building, bathrooms
Mastic under Rubber Flooring Type 1	Administration Building, sprinkler room
Mastic under Rubber Flooring Type 2	Administration Building, north, south, & west entrances
Residual Flooring Mastic under Carpet	Administration Building, by north entrance
Sheet Floor Covering, speckled gray	Administration Building, coffee area
Sink Undercoating	Administration Building, north office
Ceramic Tile Grout	Administration Building & Maintenance Building, bathrooms
Covebase/Mastic, various colors	Administration Building, Maintenance Building
Gypsum Wallboard/Joint Compound	Administration Building, Maintenance Building
Insulating Cement/Fiberglass	Administration Building, Maintenance Building
Lay-in Ceiling Tile	Administration Building, Maintenance Building
Building Seam Sealant, brown	Maintenance Building, exterior
Building Seam Sealant, dark gray	Maintenance Building, exterior
Cinderblock Mortar	Maintenance Building
Red Fire Stop	Maintenance Building, above paint booth
Sheet Floor Covering, black	Maintenance Building, second floor bathrooms
Sheet Floor Covering, gray speckled	Maintenance Building, second floor

INSPECTION SUMMARY

BACKGROUND

On March 3, 2017, PBS performed a general asbestos and lead paint survey of the Administration and Maintenance Buildings located at 16250 SW Merlo Road in Beaverton, Oregon. The survey was requested by Kristin Rawson in anticipation of an exterior painting project.

The purpose of the survey was to locate, identify, and quantify accessible friable and non-friable asbestos-containing building materials and lead-based paint. 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

A PBS Asbestos Hazard Emergency Response Act (AHERA) accredited inspector inspected the Administration and Maintenance Buildings to determine the presence, location, and approximate quantity of asbestos-containing materials (ACM). Twenty-eight 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. Only one material, light gray caulk around exterior doors of the Maintenance Building, was found to contain asbestos. The following materials could not be sampled without destroying them, and are presumed to contain asbestos:

- Mechanical isolation cloth on the air handling unit located in the Administration Building mechanical room.
- Gaskets on pipe flanges located in the Maintenance Building sprinkler room.

Please refer to the asbestos Bulk Sample Inventory for more sample details.

Asbestos Regulations

Oregon 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.

The EPA, DEQ, and OSHA all define ACM as any material containing more than one percent asbestos. Although materials equal to or less than one percent 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, 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 ACM, please refer to the following:

INSPECTION SUMMARY

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

LEAD-BASED PAINT

Paint was sampled for lead content for the sake of hazard communication.

Ten paint chip samples were collected from representative building components from interior and exterior surfaces in both the Administration Building and Maintenance Building, and submitted under chain of custody to RJ Lee Group of Monroeville, Pennsylvania, for analysis of lead content via flame atomic absorption (FLAA). No lead was detected in any of the samples collected.

See the Lead Sample Inventory section for representative building components and corresponding results.

Paint testing for this survey was limited in scope. The report information and testing results are not to be construed as an exhaustive investigation of lead-containing paint on all building surfaces. All paint on painted surfaces not identified in this report should be presumed to contain lead.

Lead-Containing Paint Regulations

The Consumer Product Safety Commission limit for lead in consumer paint products is 0.009 percent or 90 parts per million (ppm) or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5 percent or 5,000 ppm. Under OSHA, any lead concentration in paint that may become airborne during construction operations triggers requirements in the OSHA Lead in Construction Standard 29 CFR 1926.62 to protect employees impacting the paint.

In 1993, Oregon OSHA adopted the federal OSHA Lead Standard for the Construction Industry Title 29 CFR 1926.62 under Oregon Administrative Rule 437 Division 3 1926.62. This standard outlines worker exposure limits, personal protection requirements, and employer responsibility for exposure assessment, training, housekeeping, and recordkeeping. OSHA's lead standard applies to all work where employees may be exposed to lead in construction, alteration, or repair activities. This includes demolition or renovation of structures where lead-containing materials are present.

Disposal

According to Oregon DEQ's *Hazardous Waste/Toxics Reduction Policy Clarification*, disposal of building demolition waste coated with lead-based paint generally will not require a hazardous waste determination (i.e., toxicity characteristic leaching procedures [TCLP] testing) if demolition debris is disposed of at a DEQ-permitted solid waste landfill that meets the current design standards for municipal solid waste disposal facilities of 40 CFR Part 258.

Refer to the DEQ hazardous waste reduction policy and follow all requirements under the Oregon DEQ, Management of Building Demolition Waste, 97-002A for proper disposal of lead-based painted demolition waste.

This report is not suitable as a bid document or an asbestos abatement design. The purpose of this report is risk hazard communication only.

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21857.024-0001	Mastic	Men's room; mastic/backing on ceramic tile		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	paper backing, tan	No Asbestos Detected
		Layer 2	mastic, off-white	No Asbestos Detected
		Layer 3	fine cementitious material, dark gray	No Asbestos Detected
21857.024-0002	Ceramic Tile Grout	Men's room; ceramic tile grout		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	loose granular material, gray	No Asbestos Detected
21857.024-0003	Mastic	Men's room vestibule; carpet mastic		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	mastic, tan	No Asbestos Detected
21857.024-0004	Lay-in Ceiling Tile	Conference room; 2'X4' lay-in ceiling tile		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	compressed fibrous material, tan with paint, white	No Asbestos Detected
21857.024-0005	Covebase/Mastic	Conference room; black covebase		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rubbery material, black	No Asbestos Detected
		Layer 2	mastic, yellow	No Asbestos Detected
		Layer 3	mastic, light brown	No Asbestos Detected
21857.024-0006	Gypsum Wallboard/Joint Compound	Sprinkler room; gypsum wallboard and joint compound		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	fine compact powder, off-white with paint, white	No Asbestos Detected
		Layer 2	compact chalky material with paper, white	No Asbestos Detected
21857.024-0007	Insulating Cement/Fiberglass	Sprinkler room; end cap on fiberglass line		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	woven fibers, brown with paint, white	No Asbestos Detected
		Layer 2	fibrous material, yellow	No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21857.024-0008	Sheet Floor Covering	Sprinkler room; rubber flooring type 1		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	rubbery material, blue	No Asbestos Detected	
	Layer 2	mastic, tan	No Asbestos Detected	
	Layer 3	cementitious material, gray	No Asbestos Detected	
21857.024-0009	Covebase/Mastic	Sprinkler room; gray covebase		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	rubbery material, gray	No Asbestos Detected	
	Layer 2	mastic, brown	No Asbestos Detected	
21857.024-0010	Caulk	Sprinkler room; caulking on wainscoating		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	rubbery material, white	No Asbestos Detected	
21857.024-0011	Mastic	Southwest entrance; mastic under rubber flooring #2		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	woven fibers, white with coating, tan	No Asbestos Detected	
21857.024-0012	Sheet Floor Covering	Coffee area; gray speckled sheet floor covering		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	rubbery material, gray	No Asbestos Detected	
	Layer 2	granular mastic, tan	No Asbestos Detected	
21857.024-0013	Mastic	By north entrance; residual mastic under carpet		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	granular mastic, gray/green	No Asbestos Detected	
21857.024-0014	Sink Undercoating	North office area; sink undercoating		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	mastic, black	No Asbestos Detected	
21857.024-0015	Gypsum Wallboard/Joint Compound	Electrical room; gypsum wallboard and joint compound		Lab Cor
	Layer:	Description:	Analysis:	
	Layer 1	paper backing, off-white with paint, gray	No Asbestos Detected	
	Layer 2	fine compact powder, off-white	No Asbestos Detected	
	Layer 3	paper backing, brown with powder, white	No Asbestos Detected	

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21857.024-0016	Caulk	Maintenance room; exterior west, building seam sealant		Lab Cor
		Layer: Layer 1	Description: putty, light brown	Analysis: No Asbestos Detected
21857.024-0017	Caulk	Maintenance building; above paint booth, red fire stop		Lab Cor
		Layer: Layer 1	Description: rubbery material, red	Analysis: No Asbestos Detected
21857.024-0018	Mortar	Maintenance building; stairs by bodyshop, cinderblock mortar		Lab Cor
		Layer: Layer 1	Description: loose granular material, gray	Analysis: No Asbestos Detected
21857.024-0019	Covebase/Mastic	Maintenance building; lunch room, black covebase		Lab Cor
		Layer: Layer 1	Description: rubbery material, black	Analysis: No Asbestos Detected
		Layer 2	mastic, off-white	No Asbestos Detected
		Layer 3	mastic, light brown	No Asbestos Detected
21857.024-0020	Sheet Floor Covering	Maintenance building; lunch room, gray sheet floor covering		Lab Cor
		Layer: Layer 1	Description: rubbery material, gray	Analysis: No Asbestos Detected
		Layer 2	mastic, off-white	No Asbestos Detected
21857.024-0021	Covebase/Mastic	Maintenance building; hall by lunch room, tan covebase		Lab Cor
		Layer: Layer 1	Description: rubbery material, tan	Analysis: No Asbestos Detected
		Layer 2	mastic, light brown	No Asbestos Detected
21857.024-0022	Gypsum Wallboard/Joint Compound	Maintenance building; second floor men's room, gypsum wallboard and joint compound		Lab Cor
		Layer: Layer 1	Description: fine compact powder, white with paint, off-white	Analysis: No Asbestos Detected
21857.024-0023	Ceramic Tile Grout	Maintenance building; second floor men's bathroom, ceramic tile grout		Lab Cor
		Layer: Layer 1	Description: loose granular material, gray	Analysis: No Asbestos Detected

BULK SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Location</u>	<u>Results</u>	<u>Lab</u>
21857.024-0024	Insulating Cement/Fiberglass	Maintenance building; second floor mechanical room, cap on fiberglass line		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	woven fibers, white with coating, white	No Asbestos Detected
		Layer 2	fibrous material, yellow	No Asbestos Detected
21857.024-0025	Sheet Floor Covering	Maintenance building; second floor men's room, sheet floor, black		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rubbery material, tan	No Asbestos Detected
21857.024-0026	Lay-in Ceiling Tile	Maintenance building; closet by lunch room, 2'X4' lay-in ceiling tile		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	compressed fibrous material, tan with paint, white	No Asbestos Detected
21857.024-0027	Caulk	Driver building; exterior, east, caulk around door		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rubbery material, light gray	2% Chrysotile
21857.024-0028	Caulk	Driver building; exterior, north, building seam sealant		Lab Cor
		Layer:	Description:	Analysis:
		Layer 1	rubbery material, dark gray	No Asbestos Detected

LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB21857.024-1101	Paint	<120 ppm	Driver building; interior by south entrance, wall, gypsum, white, good condition	R.J. Lee Group
LB21857.024-1102	Paint	<680 ppm	Maintenance building; exterior northeast, upper wall, concrete, light gray, good condition	R.J. Lee Group
LB21857.024-1103	Paint	<440 ppm	Maintenance building; exterior southeast, lunch room wall, concrete, gray, fair condition	R.J. Lee Group
LB21857.024-1104	Paint	<390 ppm	Maintenance building; exterior tank building, drain pipe, metal, blue, poor condition	R.J. Lee Group
LB21857.024-1105	Paint	<98 ppm	Maintenance building; line stripping by sprinkler room, floor, concrete, yellow, poor condition	R.J. Lee Group
LB21857.024-1106	Paint	<130 ppm	Maintenance building; receiving bay, wall, cinder block, blue, fair condition	R.J. Lee Group
LB21857.024-1107	Paint	<180 ppm	Maintenance building; interior Bay 32, duct, metal, white, fair condition	R.J. Lee Group
LB21857.024-1108	Paint	<290 ppm	Driver building; exterior east, upper wall, concrete, white, good condition	R.J. Lee Group
LB21857.024-1109	Paint	<470	Driver building; exterior south, lower wall, concrete, gray, good condition	R.J. Lee Group
LB21857.024-1110	Paint	<210 ppm	Driver building; exterior shed, wall, metal, white, poor condition	R.J. Lee Group

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Client:** PBS Engineering and Environmental
4412 SW Corbett Avenue
Portland, OR 97239**Report Number:** 171108R01
Report Date: 03/10/2017**Job Number:** 171108**P.O. No:** n/a**Project Name:****Project Number:** 21857.024 Phase 0001**Project Notes:****Client Sample ID:** 21857.024-0001**Sample ID:** S1**Date Analyzed:** 03/09/2017**Client Sample Description:****Analyst:** Stephanie Golden**Asbestos Mineral Fibers**

Layer	Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01 paper backing, tan	90 %	-	-	-	NAD
Layer 02 mastic, off-white	5 %	-	-	-	NAD
Layer 03 fine cementitious material, dark gray	5 %	-	-	-	NAD

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	100 %	-	-	-	0 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0002**Sample ID:** S2**Date Analyzed:** 03/09/2017**Client Sample Description:****Analyst:** Stephanie Golden**Asbestos Mineral Fibers**

Layer	Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous loose granular material, gray	100 %	-	-	-	NAD

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

Comments: Insufficient sample size for proper analysis. Results reflect only sample submitted and may not be representative of parent material. More sampling may be recommended.

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017

Client Sample ID: 21857.024-0003	Sample ID: S3	Date Analyzed: 03/09/2017	
Client Sample Description:		Analyst: Stephanie Golden	
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 100 %
	- - - - -		

Client Sample ID: 21857.024-0004	Sample ID: S4	Date Analyzed: 03/09/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous compressed fibrous material, tan with paint, white	100 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix 15 %
	5 % 75 % 5 % - - -		Perlite

Client Sample ID: 21857.024-0005	Sample ID: S5	Date Analyzed: 03/09/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01 rubbery material, black	92 % - - -		NAD
Layer 02 mastic, yellow	6 % - - -		NAD
Layer 03 mastic, light brown	2 % - - -		NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
Layer 01	- - - - -		100 %
Layer 02	- - - - -		100 %
Layer 03	- - - - -		100 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
<http://www.labcorpdx.net>*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017**Client Sample ID:** 21857.024-0006**Sample ID:** S6**Date Analyzed:** 03/09/2017**Client Sample Description:****Analyst:** Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
fine compact powder, off-white with paint, white	25 %	-	-	-	NAD	
Layer 02						
compact chalky material with paper, white	75 %	-	-	-	NAD	
Other Fibers						
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	5 %	-	-	-	95 %

Client Sample ID: 21857.024-0007**Sample ID:** S7**Date Analyzed:** 03/09/2017**Client Sample Description:****Analyst:** Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
woven fibers, brown with paint, white	20 %	-	-	-	NAD	
Layer 02						
fibrous material, yellow	80 %	-	-	-	NAD	
Other Fibers						
	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	15 %	15 %	-	-	-	70 %
Layer 02	100 %	-	-	-	-	0 %



Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
<http://www.labcorpdx.net>

Asbestos and Environmental Analysis

Job Number: 171108

Report Number: 171108R01

Report Date: 03/10/2017

Client Sample ID: 21857.024-0008

Sample ID: S8

Date Analyzed: 03/09/2017

Client Sample Description:

Analyst: Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, blue	96 %	-	-	-		NAD
Layer 02						
mastic, tan	3 %	-	-	-		NAD
Layer 03						
cementitious material, gray	1 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0009

Sample ID: S9

Date Analyzed: 03/09/2017

Client Sample Description:

Analyst: Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
rubbery material, gray	99 %	-	-	-		NAD
Layer 02						
mastic, brown	1 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017

Client Sample ID: 21857.024-0010	Sample ID: S10	Date Analyzed: 03/09/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
rubbery material, white	100 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - - -		100 %

Client Sample ID: 21857.024-0011	Sample ID: S11	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
woven fibers, white with coating, tan	100 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - 40 % - -		60 %

Client Sample ID: 21857.024-0012	Sample ID: S12	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01			
rubbery material, gray	95 % - - -		NAD
Layer 02			
granular mastic, tan	5 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
Layer 01	- - - - - -		100 %
Layer 02	- - - - - -		100 %



Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 171108

Report Number: 171108R01

Report Date: 03/10/2017

Client Sample ID: 21857.024-0013	Sample ID: S13				Date Analyzed: 03/10/2017	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Homogeneous						
granular mastic, gray/green	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0014	Sample ID: S14				Date Analyzed: 03/10/2017	Analyst: Stephanie Golden
Client Sample Description:						
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
	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0015	Sample ID: S15				Date Analyzed: 03/10/2017	Analyst: Stephanie Golden
Client Sample Description:						
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
paper backing, off-white with paint, gray	15 %	-	-	-		NAD
Layer 02						
fine compact powder, off-white	60 %	-	-	-		NAD
Layer 03						
paper backing, brown with powder, white	25 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	50 %	-	-	-	50 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	50 %	-	-	-	50 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017

Client Sample ID: 21857.024-0016	Sample ID: S16	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
putty, light brown	100 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - - -		100 %

Client Sample ID: 21857.024-0017	Sample ID: S17	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
rubbery material, red	100 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	7 % - - - - -		93 %

Client Sample ID: 21857.024-0018	Sample ID: S18	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous			
loose granular material, gray	100 % - - -		NAD
Other Fibers	Fibrous Mineral Glass Cellulose Wool Synthetic Other		Matrix
	- - - - - -		100 %

Comments: Insufficient sample size for proper analysis. Results reflect only sample submitted and may not be representative of parent material. More sampling may be recommended.

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017**Client Sample ID:** 21857.024-0019**Sample ID:** S19**Date Analyzed:** 03/10/2017**Client Sample Description:****Analyst:** Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, black	96 %	-	-	-	NAD	
Layer 02						
mastic, off-white	2 %	-	-	-	NAD	
Layer 03						
mastic, light brown	2 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %
Layer 03	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0020**Sample ID:** S20**Date Analyzed:** 03/10/2017**Client Sample Description:****Analyst:** Stephanie Golden

<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:	
Layer 01						
rubbery material, gray	98 %	-	-	-	NAD	
Layer 02						
mastic, off-white	2 %	-	-	-	NAD	
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	100 %

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017

Client Sample ID: 21857.024-0021	Sample ID: S21	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Layer 01	rubbery material, tan	99 % - - -	NAD
Layer 02	mastic, light brown	1 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
Layer 01	- - - - -	- - - - -	100 %
Layer 02	- - - - -	- - - - -	100 %

Client Sample ID: 21857.024-0022	Sample ID: S22	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous	fine compact powder, white with paint, off-white	100 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- - - - -	- - - - -	100 %

Client Sample ID: 21857.024-0023	Sample ID: S23	Date Analyzed: 03/10/2017	
Client Sample Description:		Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent: Chrysotile Amosite Crocidolite		Percent Asbestos:
Homogeneous	loose granular material, gray	100 % - - -	NAD
Other Fibers	Fibrous Glass Cellulose Mineral Wool Synthetic Other		Matrix
	- - - - -	- - - - -	100 %

Comments: Insufficient sample size for proper analysis. Results reflect only sample submitted and may not be representative of parent material. More sampling may be recommended.

**Lab/Cor Portland, Inc.**4321 SW Corbett Ave., Ste A
Portland, OR 97239**BULK SAMPLE ASBESTOS ANALYSIS**Phone: (503) 224-5055
http://www.labcorpdx.net*Asbestos and Environmental Analysis***Job Number:** 171108**Report Number:** 171108R01**Report Date:** 03/10/2017

Client Sample ID: 21857.024-0024	Sample ID: S24				Date Analyzed: 03/10/2017	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01						
woven fibers, white with coating, white	20 %	-	-	-		NAD
Layer 02						
fibrous material, yellow	80 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
Layer 01	-	25 %	-	-	-	75 %
Layer 02	100 %	-	-	-	-	0 %

Client Sample ID: 21857.024-0025	Sample ID: S25				Date Analyzed: 03/10/2017	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
rubbery material, tan	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	-	-	-	-	-	100 %

Client Sample ID: 21857.024-0026	Sample ID: S26				Date Analyzed: 03/10/2017	
Client Sample Description:					Analyst: Stephanie Golden	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous						
compressed fibrous material, tan with paint, white	100 %	-	-	-		NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix
	5 %	75 %	5 %	-	-	Perlite 15 %



Lab/Cor Portland, Inc.

4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 171108

Report Number: 171108R01

Report Date: 03/10/2017

Client Sample ID: 21857.024-0027

Sample ID: S27

Date Analyzed: 03/10/2017

Client Sample Description:

Analyst: Stephanie Golden

Asbestos Mineral Fibers

Layer	Chrysotile	Amosite	Crocidolite	
Percent:				

Percent Asbestos:

Homogeneous

rubbery material, light gray	100 %	2 %	-	-		2 %
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Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	
-	-	-	-	-	

Matrix
98 %

Client Sample ID: 21857.024-0028

Sample ID: S28

Date Analyzed: 03/10/2017

Client Sample Description:

Analyst: Stephanie Golden

Asbestos Mineral Fibers

Layer	Chrysotile	Amosite	Crocidolite	
Percent:				

Percent Asbestos:

Homogeneous

rubbery material, dark gray	100 %	-	-	-		NAD
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Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	
-	-	-	-	-	

Matrix
100 %



Engineering + Environmental

171108
P1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 21857.024 Phase 0001

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: March 03, 2017

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

Hailey Edmeades
Name

Edmeades 3/3 1:50
Authorized Signature Date Time

RECEIVER

Date Received: 3/3/17

Company: Lab Cor
Address: 4321 SW Corbett Ave Ste A
Portland, OR 97239
503-224-5055

Hillarie Sales
Name

[Signature] 3/3/17 1:54 pm
Authorized Signature Date Time

Sender's ID No.	Brief Description	Receiver's ID No.
21857.024-0001		
21857.024-0002		
21857.024-0003		
21857.024-0004		
21857.024-0005		
21857.024-0006		
21857.024-0007		
21857.024-0008		
21857.024-0009		
21857.024-0010		
21857.024-0011		
21857.024-0012		
21857.024-0013		
21857.024-0014		



171108
P2/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

21857.024-0015		
21857.024-0016		
21857.024-0017		
21857.024-0018		
21857.024-0019		
21857.024-0020		
21857.024-0021		
21857.024-0022		
21857.024-0023		
21857.024-0024		
21857.024-0025		
21857.024-0026		
21857.024-0027		
21857.024-0028		

Please analyze the enclosed 28 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: 5 Day

SPECIAL INSTRUCTIONS:

Jmc

LABORATORY REPORT

 PBS Engineering & Environmental
 4412 Southwest Corbett Ave.
 Portland, OR 97239

 Attn: Hailey Edmeades
 Phone: 503-417-7594

Email: hailey.edmeades@pbsenv.com

 RJ Lee Group Job No.: PA060320170025
 Samples Received: March 6, 2017
 Report Date: March 13, 2017
 Client Project: 21857.024 Phase 0001
 Purchase Order No.: N/A
 Matrix: Solid
 Prep/Analysis: EPA 3050B / EPA 7000B-Paint

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
LB21857.024-1101	PA060320170025-001	NP	Lead	< 0.021	< 210	0.021	210	03/13/2017	AN
LB21857.024-1102	PA060320170025-002	NP	Lead	< 0.068	< 680	0.068	680	03/13/2017	AN
LB21857.024-1103	PA060320170025-003	NP	Lead	< 0.044	< 440	0.044	440	03/13/2017	AN
LB21857.024-1104	PA060320170025-004	NP	Lead	< 0.039	< 390	0.039	390	03/13/2017	AN
LB21857.024-1105	PA060320170025-005	NP	Lead	< 0.0098	< 98	0.0098	98	03/13/2017	AN
LB21857.024-1106	PA060320170025-006	NP	Lead	< 0.013	< 130	0.013	130	03/13/2017	AN
LB21857.024-1107	PA060320170025-007	NP	Lead	< 0.018	< 180	0.018	180	03/13/2017	AN
LB21857.024-1108	PA060320170025-008	NP	Lead	< 0.029	< 290	0.029	290	03/13/2017	AN
LB21857.024-1109	PA060320170025-009	NP	Lead	< 0.047	< 470	0.047	470	03/13/2017	AN
LB21857.024-1110	PA060320170025-010	NP	Lead	< 0.021	< 210	0.021	210	03/13/2017	AN

Comments:
Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
C : CA ELAP Accredited (CA ELAP Certificate 1970)
A : AIHA-LAP, LLC Accredited (Lab ID 100364)
 — : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples. This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to <http://www.rjlg.com/about-us/accreditations/> for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.



 Philip Grindle
 Laboratory Supervisor



TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 21857.024 Phase 0001

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: March 03, 2017

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

Hailey Edmeades
Name

H Edmeades
Authorized Signature Date 3/3/2017

RECEIVER

Date Received: 03/06/17 1030

Company: R.J. Lee Group
Address: 350 Hochberg Road
Monroeville, PA 15146
724-325-1776

M. Scully
Name

M. Scully
Authorized Signature Date 03/06/17

Table with 3 columns: Sender's ID No., Brief Description, Receiver's ID No. Rows include IDs from LB21857.024-1101 to 1110.



TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

ANALYSIS REQUESTED:

- LEAD:
- Paint
 - Wipe
 - Soil/Misc.
 - Air
 - TCLP

Please analyze the enclosed 10 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:

5 Day

SPECIAL INSTRUCTIONS:

Joel Mc.

THIS IS TO CERTIFY THAT

STEVE DILLING

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR REFRESHER

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

Course Date: 04/19/2016

Course Location: Portland, OR

Certificate: IR-16-0931A



Engineering +
Environmental

Expiration Date 04/19/2017

Refresher Course taken Online

For verification of the authenticity of this
certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

A handwritten signature in black ink that reads "Gregory M. Baker".

Greg Baker, Instructor

THIS IS TO CERTIFY THAT

JOEL MCCARTHY

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE
for

**ASBESTOS INSPECTOR / MANAGEMENT
PLANNER REFRESHER**

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

Course Date: 07/07/2016

Course Location: Portland, OR

Certificate: IMR-16-2771B



**Engineering +
Environmental**

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

Expiration Date: 07/07/2017

For verification of the authenticity of this
certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

A handwritten signature in black ink that reads "Gregory M. Baker".

Greg Baker, Instructor