Pre-Demolition Hazardous Materials Survey Report

Edgefield Buildings B and F 2345 NE 244th Avenue Wood Village, OR 97060

Prepared for:

Reynolds School District No. 7

General Information 1.1
Inspection Summary 1.2
Survey Drawings 2.1
Sample Inventories 3.1

Laboratory Data Not Numbered
AHERA Certificates Not Numbered



April 2021 Project No.: 23514.174 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

Edgefield Buildings B and F 2345 NE 244th Avenue Wood Village, OR 97060

CLIENT DATA

Reynolds School District No. 7 1204 NE 201st Avenue Fairview, OR 97024

BACKGROUND INFORMATION

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a pre-demolition 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
- Suspect polychlorinated biphenyl (PCB) light ballast inspection
- Inspection summary
- Floor plan diagrams indicating material and sample locations
- Laboratory analytical data of bulk material sampled

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

1.1

Project Manager/Prime Inspector					
Accreditation #: IRO-21-2771B					
Signature	Date				

© 2021 PBS Engineering and Environmental Inc.



Joel McCarthy

April 2021

DATES	SURVEYED BY	ACTIVITY
3/15/2021	Joel McCarthy	Sample collection
3/16/2021	Joel McCarthy	Sample collection
3/29/2021	Joel McCarthy	Sample collection

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 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>	Material Description	<u>Location</u>	<u>Details</u>
(P)	Asbestos Pipe Insulation	Building F: basement level, wet walls, attic spaces, tunnels, crawl space	1,400 LF
			Friable
			Good
		Response Action: Remove prior to	o demolition
(P)	Boiler Jacket Insulation, Rope Gasket, Refractory	Building F: boiler room	400 SF
			Friable
			Good
		Response Action: Remove prior to	o demolition
(P)	Breeching	Building F: basement	100 SF
			Friable
			Good
		Response Action: Remove prior to	o demolition
(P)	Fire Door	Building F: boiler room	1 EA
			Non-friable
			Good
		Response Action: Remove prior to	o demolition
(P)	Tank Insulation	Building F: boiler room	200 SF
		-	Friable
			Good
		Response Action: Remove prior to	o demolition



(+)	25%	Roofing Debris	Building F: attic spaces throughout
			Friable
			Poor Response Action: Remove prior to demolition
(+)	2%	Vinyl Floor Tile/Mastic	Building F: various rooms throughout - see drawings
			Friable
			Good
			Response Action: Remove prior to demolition
(+)	4%	Wainscotting mastic	Building F: various rooms throughout - see drawings
			Friable
			Good Response Action: Remove prior to demolition
			· · · · · · · · · · · · · · · · · · ·
(+)	<1%	Sink Undercoating, Black	Building F: see drawing 1 EA Non-friable
			Good
			Response Action: Remove as needed
(M)	<1%	Wall and Ceiling Plaster	Building F: throughout NOT QUANTIFIED
			Friable
			Good
			Response Action: Remove as needed
(+)	35%	Built-up Roofing and mastic	Building F: throughout Non-friable
			Good
			Response Action: Remove prior to demolition
(+)	2%	Door and Window Caulking	Building F: throughout exterior 2,000 LF
			Non-friable
			Good
			Response Action: Remove prior to demolition
(+)	3%	Vinyl Floor Tile/Mastic	Building B: various locations throughout - see drawings
			Friable
			Good
			Response Action: Remove prior to demolition

(+) <1% Wallboard mastic Building B: basement level NOT QUANTIFIED

Friable

Good

Response Action: Remove as needed

(+) 50% Sheet Floor Covering Building B: various locations throughout - see drawings

Friable

Good

Response Action: Remove prior to demolition



April 2021

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.

Material (type)	<u>Location</u>
Asphalt Impregnated Paper Vapor Barrier	Building F throughout
Black Masonry Coating	Building F throughout
Blown-in Insulation	Building F throughout
Brick/Mortar	Building F throughout
Carpet Mastic	Building F throughout
Ceramic Tile Grout/Mortar	Building F throughout
Covebase/Mastic	Building F throughout
Glued-on Ceiling Tiles	Building F throughout
Gypsum Wallboard/Joint Compound	Building F throughout
Lay-in Ceiling Tile	Building F throughout
Mechanical Isolation Cloth	Building F throughout
Sheet Floor Covering	Building F throughout
Sink Undercoating, White	Building F throughout
Terra Cotta Mortar/Grout	Building F throughout
Textured Ceiling Material	Building F throughout
Window Glazing Compound	Building F throughout
Asphalt Impregnated Paper	Building B throughout
Blown-in Insulation	Building B throughout
Brick Mortar	Building B throughout
Cementitious Roof Shingles	Building B throughout
Ceramic Tile Grout	Building B throughout
Covebase/Mastic	Building B throughout
Duct Mastic, Gray	Building B throughout
Glued-on Ceiling Tiles	Building B throughout
Gypsum Wallboard/Joint Compound	Building B throughout
Sheet Floor Covering	Building B throughout
Trim/Window Caulk	Building B throughout



April 2021

Vinyl Floor Tile, 12x12 Gray and Building B basement and first floor

Tan/Mastic

Wall and Ceiling Plaster

Building B throughout

Window Glazing Compound

Building B throughout



April 2021

BACKGROUND

In March of 2021, PBS performed a pre-demolition hazardous materials survey of Buildings B and F on the Reynolds School District Edgefield Campus located at 2345 NE 244th Avenue in Wood Village, Oregon. The survey was requested by Reynolds School District in anticipation of demolition.

The purpose of the survey was to locate, identify, and quantify accessible friable and non-friable hazardous building materials for removal prior to demolition.

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 buildings were inspected by a PBS Asbestos Hazard Emergency Response Act (AHERA) accredited inspector to determine the presence, location, and approximate quantity of asbestos-containing materials (ACM). Seventy-nine 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:

Building F:

- Presumed asbestos-containing pipe insulation was noted above ceilings, within wet walls, and throughout
 the basement level. Pipe insulation was not physically accessible for sampling due to flooding in the
 basement level and was presumed to contain asbestos.
- Boiler insulation, rope gaskets, and refractory material were all inaccessible due to basement flooding and are all presumed to contain asbestos.
- Breeching was noted in the basement level but was inaccessible due to flooding.
- A single fire door was noted at the entrance to the boiler room.
- Tank insulation was inaccessible due to basement flooding and are all presumed to contain asbestos.
- Isolated areas of roofing debris were noted in several attic locations throughout the building. Debris is intermixed with blown-in attic insulation.
- Vinyl floor tile and mastic was noted in the majority of locations throughout the building. See drawings for details. Vinyl flooring was often covered with carpeting and/or additional layers of asbestos flooring.
- Mastic associated with wooden wainscotting was noted in various locations throughout the building. See drawings for details.
- A single sink undercoating containing less than 1% (<1%) asbestos was noted. See drawings for location. It should be noted that the Environmental Protection Agency (EPA) and DEQ do not consider building materials that contain <1% asbestos to be an asbestos-containing building material. This sink is included in the asbestos-containing materials section of this report for the sake of hazard communication since there are some OSHA restrictions associated with these materials.
- Wall and ceiling plaster was noted to contain <1% asbestos throughout the building. The EPA and DEQ do not consider building materials that contain <1% asbestos to be an asbestos-containing building material.



April 2021

This plaster is included in the asbestos-containing materials section of this report for the sake of hazard communication since there are some OSHA restrictions associated with these materials.

- Built-up roofing and associated mastic were found to be asbestos-containing throughout the building. It should be noted that the bottom layer of roofing was asbestos-containing.
- Door and window caulking was noted throughout the exterior of the building. Caulking was noted on the perimeter of door and window frames as well as between components such as door stops and frames.

Building B:

- Vinyl floor tile and mastic was noted in various locations throughout the building. See drawings for details. Vinyl flooring was often covered with carpeting and/or additional layers of asbestos flooring.
- Mastic containing <1% asbestos was noted in association with wall coverings throughout the building.
- Sheet flooring was noted in various locations throughout the building. See drawings for details. Vinyl flooring was often covered with carpeting and/or additional layers of asbestos flooring.

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



April 2021

Limitations

At the time of the site visits the basement level of Building F was flooded. Because of this, some portions of the basement level were inaccessible for inspection and survey. These locations include the boiler pit and the dirt floor crawl space/tunnel. Materials which could be identified visually are presumed to contain asbestos and quantities were estimated. Additional materials may be present.

Asbestos Regulations

Oregon DEQ, 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 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, 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:

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



April 2021

LEAD SUMMARY

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

Seven paint chip samples were collected from representative building components and submitted under chain of custody to RJ Lee Group of Monroeville, Pennsylvania, for analysis of lead content via flame atomic absorption (FLAA). The concentration of lead in the samples range from below the limits of detection to 109,000 parts per million (ppm).

In addition, approximately 35 lead-containing vent pipe caps were noted at the roof level of Building F.

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% or 90 ppm or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5% 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.



April 2021

PCB

Polychlorinated Biphenyls (PCBs)/Mercury Investigation

PBS conducted a visual inspection of the buildings for suspect PCB lamp ballasts, mercury-containing fluorescent lamp tubes, and mercury-containing thermostat switches. PBS observed a single mercury-containing switch within building B. See drawings for location.

Approximately 30 PCB-containing light ballasts were noted in Building F.

A total of approximately 220 mercury vapor light tubes were noted in both buildings. This investigation was a visual assessment only; no samples were collected.

Mercury-Containing Compact Fluorescent Light Tubes/Switches Regulatory Issues

All mercury-containing compact fluorescent light bulbs and switches should be carefully handled, packaged, and recycled or disposed of in the appropriate manner.

Please refer to the following documents for requirements for removal and disposal of mercury-containing waste:

- US Environmental Protection Agency Toxic Substance Control Act, TSCA, (Code of Federal Regulations Title 40, Part 761).
- RCRA, Resource Conservation and Recovery Act, 40 CFR Part 2761, Subpart D., 40 CFR 273.

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



April 2021

GENERAL NOTES

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS.
- 2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.
- 3. IF SUSPECT MATERIALS ARE ENCOUNTERED THAT ARE NOT IDENTIFIED ON THIS DRAWING, TESTING IS RECOMMENDED PRIOR TO IMPACT

SURVEY NOTES

- 1. RESIDUAL ASBESTOS-CONTAINING FLOORING AND MASTIC MAY EXIST UNDER CASEWORK THROUGHOUT.
- 2. ADDITIONAL ASBESTOS-CONTAINING PIPE INSULATION LIKELY TO EXIST ABOVE CEILINGS, WITHIN WALLS, IN TUNNELS, AND IN INTERSTITIAL SPACES THROUGHOUT.
- APPROXIMATELY 300 MERCURY VAPOR LIGHT TUBES THROUGHOUT. APPROXIMATELY 20 PCB-CONTAINING LIGHTING BALLASTS PRESENT IN VARIOUS LOCATIONS THROUGHOUT.
- 4. CARPETING OVERLIES ASBESTOS FLOORING IN MOST LOCATIONS.
- 5. ADDITIONAL ASBESTOS-CONTAINING BOILER, TANK, AND PIPE INSULATION PRESENT IN BASEMENT LEVEL SEE SURVEY REPORT
- 6. ADDITIONAL ISOLATED AREAS OF MERCURY VAPOR LIGHT TUBE DEBRIS PRESENT THROUGHOUT.
- WALL AND CEILING PLASTER CONTAINING <1% ASBESTOS PRESENT THROUGHOUT.
- 8. ASBESTOS-CONTAINING ROOFING DEBRIS PRESENT IN ATTIC SPACES THROUGHOUT.

- MERCURY VAPOR LIGHT TUBE DEBRIS THROUGHOUT AREA.
- ② WET WALL WITH PRESUMED ASBESTOS-CONTAINING PIPE INSULATION.
- <1% ASBESTOS SINK UNDERCOATING</p>

LEGEND

ASBESTOS-CONTAINING FLOOR TILE AND MASTIC TWO-LAYERS OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC

THREE-LAYERS OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC

ASBESTOS-CONTAINING FLOOR TILE AND MASTIC UNDER NON-ASBESTOS SHEET FLOORING WAINSCOTTING WITH ASBESTOS-CONTAINING MASTIC

ASBESTOS SAMPLE SYMBOLS

- DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, ♦ 007 -SEE INVENTORY OF SAMPLES MATERIAL SYMBOL

0 θ THERMAL SYSTEM INSULATION SURFACING MATERIAL 0 MISCELLANEOUS MATERIAL

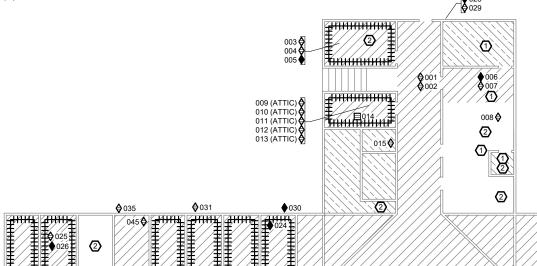
INVENTORY OF ASBESTOS SAMPLES

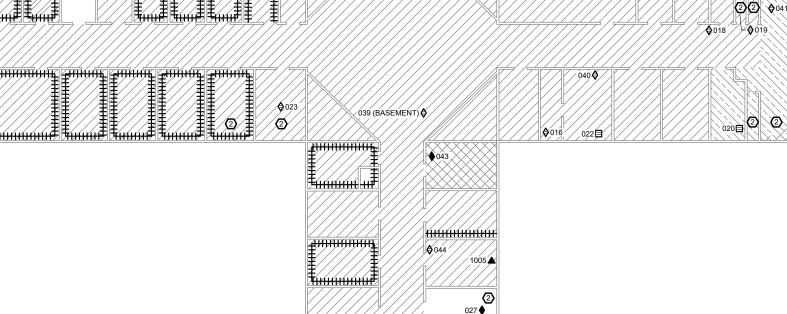
INACIAL	INVENTORT OF ASBESTOS SAWFLES						
DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED				
♦ 001 ♦ 002 ♦ 003 ♦ 004 • 005 • 006 ♦ 007 • 008 • 009 • 010 • 011	23514.174-0001 23514.174-0002 23514.174-0002 23514.174-0004 23514.174-0005 23514.174-0007 23514.174-0008 23514.174-0008 23514.174-0010 23514.174-0010	(-) (-) (+) (-/-/-) (+) (-/-) (-) (-) (-) (-) (-)	GLUED-ON CEILING TILES WALL AND CEILING PLASTER MASTIC COVEBASE/MASTIC MASTIC VINYL FLOOR TILE/MASTIC VINYL FLOOR TILE/MASTIC MORTAR BLOWN-IN INSULATION BLOWN-IN INSULATION BLOWN-IN INSULATION				
♦ 012 ♦ 013 ■ 014 ♦ 015 ♦ 016 ■ 017 ♦ 018 ♦ 019 ■ 020 ♦ 021 ■ 022 ♦ 023	23514.174-0012 23514.174-0013 23514.174-0014 23514.174-0016 23514.174-0016 23514.174-0017 23514.174-0019 23514.174-0020 23514.174-0020 23514.174-0022 23514.174-0022	(-I-I-I-) (-) (-) (-I-I-I-) (-I-I-I-) (-I-I-I-I-I-) (-I-I-I-I-I-I-I-I-I-I-I-I-I-I-I-I-I-I-I	PAPER FELT MECHANICAL ISOLATION CLOTI TEXTURED CEILING MATERIAL VIN'L FLOOR TILEMASTIC CERAMIC TILE/GROUT SINK UNDERCOATING WALL AND CEILING PLASTER LAY-IN CEILING TILE SINK UNDERCOATING VIN'L FLOOR TILEMASTIC TEXTURED CEILING MATERIAL GLUED-ON CEILING TILES				

INVENTORY OF ASBESTOS SAMPLES (CONTINUED)

DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED
♦024	23514.174-0024	(-/<1%/-)	MASTIC
♦ 025	23514.174-0025	(-/-/-)	SHEET FLOOR COVERING
♦026	23514.174-0026	(+/-)	VINYL FLOOR TILE/MASTIC
♦027	23514.174-0027	(+)	BUILT-UP ROOFING
♦028	23514.174-0028	(<1%)	CAULK
Q 029	23514.174-0029	(-/-)	BRICK & MORTAR
♦030	23514.174-0030	(+)	CAULK
Q 031	23514.174-0031	(-)	CONCRETE COATING
Q 035	23514.174-0035	(-)	WINDOW GLAZING COMPOUND
Q 039	23514.174-0039	(-)	CONCRETE ROOFING
Q 040	23514.174-0040	(-/-)	WALL AND CEILING PLASTER
Q 041	23514.174-0041	(-/-/-)	WALL AND CEILING PLASTER
Q 042	23514.174-0042	(-/-/-)	GYPSUM WALLBOARD/
			JOINT COMPOUND
♦ 043	23514.174-0043	(<1%/-)	WALL AND CEILING PLASTER
Q 044	23514.174-0044	(-/-/-)	WALL AND CEILING PLASTER
Q 045	23514.174-0045	(-/-)	WALL AND CEILING PLASTER

1002 A 1003 A





FIRST FLOOR PLAN - BUILDING "F"

Turururur#

1004

2. 1

дидидидид

PREPARED FOR: PORTLAND PUBLIC SCHOOLS

Ø

OREGON GE,

SITE WOOD EDGEFIELD 244TH ,

SURVEY PLAN

HAZARDOUS MATERIAL

DRAWN BY JAB CHECKED: JMc DATE: APRIL 2021

PROJECT NUMBER 23514.174 HS₁ EET 1 OF 3

GENERAL NOTES THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS. 2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING. 3. IF SUSPECT MATERIALS ARE ENCOUNTERED THAT ARE NOT IDENTIFIED ON THIS DRAWING, TESTING IS RECOMMENDED PRIOR

SURVEY NOTES

- 1. ASBESTOS-CONTAINING BUILT-UP ROOFING AND ROOF MASTIC PRESENT THROUGHOUT.
- 2. APPROXIMATELY 35 LEAD-CONTAINING VENT PIPE CAPS PRESENT THROUGHOUT ROOF LEVEL.

KEY NOTES

1 DOOR WITH ASBESTOS-CONTAINING CAULK.

LEGEND

WINDOWS WITH ASBESTOS-CONTAINING CAULK

ASBESTOS SAMPLE SYMBOLS

DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES ♦ 007 -- MATERIAL SYMBOL

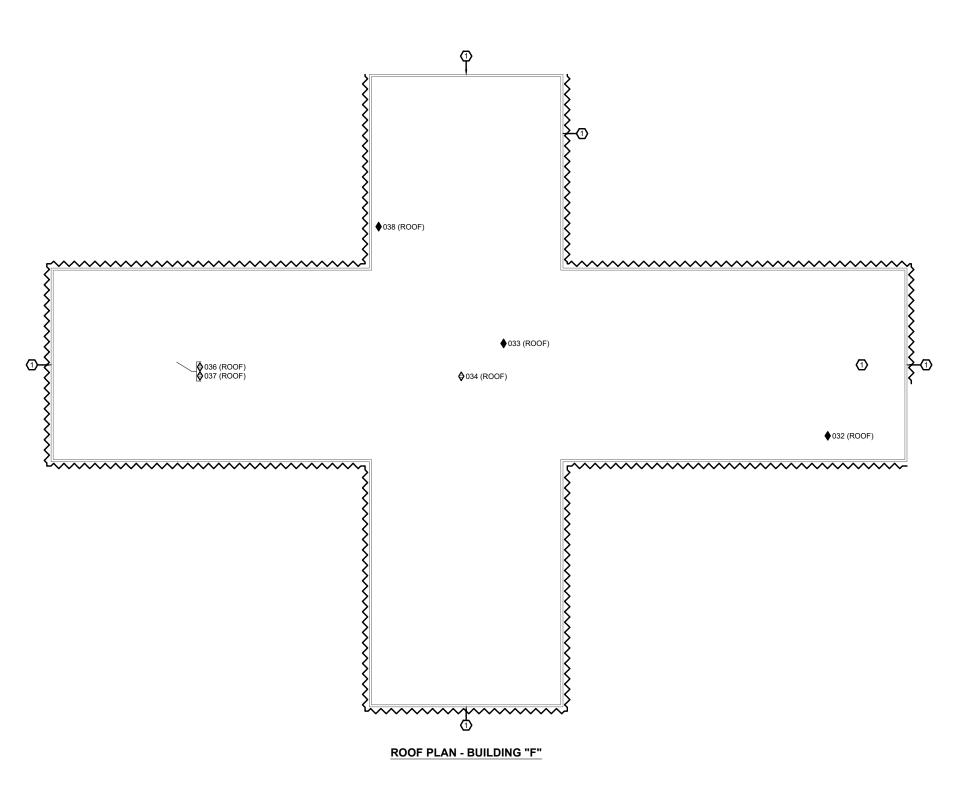
0 Θ

THERMAL SYSTEM INSULATION SURFACING MATERIAL

MISCELLANEOUS MATERIAL

INVENTORY OF ASBESTOS SAMPLES

DRAWING REFERENCE	FIELD CODE	LAB RESULT	MATERIAL SAMPLED
032 033 034	23514.174-0032 23514.174-0033 23514.174-0034		BUILT-UP ROOFING BUILT-UP ROOFING
♦ 036 ♦ 037	23514.174-0036 23514.174-0037	(-/-/-/-/-/-) (-)	BUILT-UP ROOFING MASTIC
038	23514.174-0037	(+)	MASTIC





HS₂ неет **2** оғ **3**

CHECKED: JMc DATE: APRIL 2021 PROJECT NUMBER 23514.174

SURVEY PLAN

HAZARDOUS MATERIAL EDGEFIELD

SITE

GENERAL NOTES

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION AND SAMPLE LOCATIONS.
- 2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.
- 3. IF SUSPECT MATERIALS ARE ENCOUNTERED THAT ARE NOT IDENTIFIED ON THIS DRAWING, TESTING IS RECOMMENDED PRIOR TO IMPACT.

SURVEY NOTES

- 1. APPROXIMATELY 20 MERCURY VAPOR LIGHT TUBES
- 2. <1% ASBESTOS MASTIC ON WALL COVERINGS THROUGHOUT.
- 3. CARPETING OVERLIES ASBESTOS FLOORING IN MOST LOCATIONS.

1 MERCURY-CONTAINING SWITCH

LEGEND

ASBESTOS-CONTAINING FLOOR TILE AND MASTIC

TWO-LAYERS OF ASBESTOS-CONTAINING FLOOR TILE AND MASTIC

TWO-LAYERS OF ASBESTOS-CONTAINING SHEET

ASBESTOS SAMPLE SYMBOLS

♦ 007 — DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, MATERIAL SYMBOL

0 Θ

DRAWING FIELD

THERMAL SYSTEM INSULATION SURFACING MATERIAL

MISCELLANEOUS MATERIAL

INVENTORY OF ASBESTOS SAMPLES

REFERENCE	CODE	RESULT	SAMPLED
4 100	23514.174-0100	(-/-/-)	VINYL FLOOR TILE/MASTIC
♦ 101	23514.174-0101	(-/-/-)	WALL AND CEILING PLASTER
	23514.174-0102	(-/-/-)	WALL AND CEILING PLASTER WINDOW GLAZING COMPOUND
4 103	23514.174-0103	(-)	WINDOW GLAZING COMPOUND
† 104	23514.174-0104	(-/-)	GYPSUM WALLBOARD
4 105	23514.174-0105		COVEBASE/MASTIC
♦ 106	23514.174-0106	(-/-/+)	VINYL FLOOR TILE/MASTIC
4 107	23514.174-0107	(-/-)	COVEBASE/MASTIC
4 108	23514.174-0108	(-/-/-)	VINYL FLOOR TILE/MASTIC
109	23514.174-0109		MASTIC
♦ 110	23514.174-0110	(-)	MASTIC
♦ 111	23514.174-0111	(-)	MASTIC SHEET FLOOR COVERING WALL AND CEILING PLASTER
Q 112	23514.174-0112	(-)	SHEET FLOOR COVERING
♦ 113	23514.174-0113	(-)	WALL AND CEILING PLASTER
♦ 114	23514.174-0114	(-)	ASPHALT IMPREGNATED PAPER
♦ 115	23514.174-0115		CERAMIC TILE GROUT
	23514.174-0116	(-/-)	VINYL FLOOR TILE/MASTIC
117	23514.174-0117	(-/+/+/-/-)	SHEET FLOOR COVERING
118	23514.174-0118	(-/<1%/+)	VINYL FLOOR TILE/MASTIC
119	23514.174-0119		VINYL FLOOR TILE/MASTIC
Q 120	23514.174-0120	(-) (-)	BLOWN-IN INSULATION
Q 121	23514.174-0121	(-)	BLOWN-IN INSULATION
Q 122	23514.174-0122		BLOWN-IN INSULATION
Q 123	23514.174-0123	(-/-/-)	GLUED-ON CEILING TILES
124	23514.174-0124	(-/<1%/+)	VINYL FLOOR TILE/MASTIC
125	23514.174-0125	(-/+/-/-/-)	SHEET FLOOR COVERING
Q 126	23514.174-0126	(-/-)	WALL AND CEILING PLASTER
Q 127	23514.174-0127	(-/-) (-) (-)	MORTAR
128	23514.174-0128	(-)	CEMENTITIOUS ROOF SHINGLES
Q 129	23514.174-0129	(-)	CEMENTITIOUS ROOF SHINGLES
♥ 130	23514.174-0130	(-)	WINDOW GLAZING COMPOUND
	23514.174-0131		ASPHALT IMPREGNATED PAPER
† 132	23514.174-0132	(-)	CAULK
4 133	23514.174-0133	(-)	CAULK

LEAD SAMPLE SYMBOLS

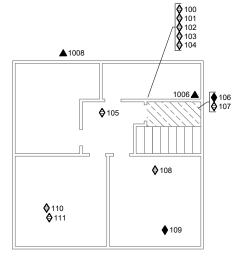
△ 1007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES - MATERIAL SYMBOL

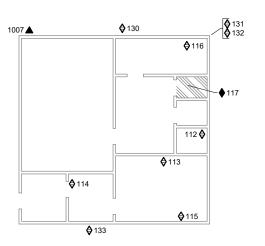
▲ LEAD DETECTED

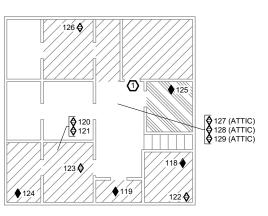
△ BELOW THE LIMIT OF DETECTION

INVENTORY OF AA LEAD SAMPLES

MPLE MBER	FIELD CODE	LAB RESULT (ppm)	MATERIAL DESCRIPTION
1006	23514.174-1006	20.2	PAINT ON BUILDING B; BRICK MORTAR
1007	23514.174-1007	46,400	PAINT ON BUILDING B; WINDOW FRAME, WOOD, GRAY
1008	23514.174-1008	2,750	PAINT ON BUILDING B; SIDING, WOOD, BLUE







BASEMENT

FIRST FLOOR

SECOND FLOOR

BUILDING "B"



OREGON WOOD

SURVEY PLAN SITE HAZARDOUS MATERIAL 244TH AVENUE, EDGEFIELD

DRAWN BY JAB CHECKED: JMc DATE: APRIL 2021 PROJECT NUMBER 23514.174 HS₃

1EET 3 OF 3

<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0001	Glued-on Ceiling	Tiles Layer:	Building F; northeast hall, 12" by Description:	12" peghole, mastic Analysis:	Lab Cor
		Layer 1	mastic, brown, with wood fibers and powder, tan/gray	No Asbestos Detected	
23514.174-0002	Wall and Ceiling F	Plaster	Building F; northeast hall, wall pl	aster	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	granular compact powder, gray/white, with coating, multicolored	No Asbestos Detected	
23514.174-0003	Mastic		Building F; room 1, wainscot mas		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	mastic material, black, with wood, tan	4% Chrysotile	
23514.174-0004	Covebase/Mastic		Building F; room 1, covebase, gra	ау	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	rubbery material, gray	No Asbestos Detected	
		Layer 02	mastic material, clear/off- white/tan	No Asbestos Detected	
		Layer 03	granular compact powder, white	No Asbestos Detected	
23514.174-0005	Mastic	Layer:	Building F; room 1, carpet mastic Description:	r, vinyl floor tile Analysis:	Lab Cor
		Layer 1	loose particulate, brown/tan	3% Chrysotile	
23514.174-0006	Vinyl Floor Tile/M	astic Layer:	Building F; kitchen, 9" by 9" vinyl Description:	floor tile, red Analysis:	Lab Cor
		Layer 01	vinyl, red	2% Chrysotile	
		Layer 02	mastic, black	<1% Chrysotile	
23514.174-0007	Vinyl Floor Tile/M	astic	Building F; kitchen covebase, tan	1	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	loose particulate, brown/red/off-white	No Asbestos Detected	
		Layer 02	rubbery material, tan	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0008	Mortar	Layer:	Building F; kitchen, terracotta, n Description:	nortar Analysis:	Lab Cor
		Layer 1	loose particulate, brown/red/white	No Asbestos Detected	
23514.174-0009	Blown-in Insulation	on Layer:	Building F; north attic, blown-in Description:	attic insulation Analysis:	Lab Cor
		Layer 1	loose fibrous material, black/gray	No Asbestos Detected	
23514.174-0010	Blown-in Insulation	on Layer:	Building F; north attic, blown-in Description:	attic insulation Analysis:	Lab Cor
		Layer 1	loose fibrous material, black/gray	No Asbestos Detected	
23514.174-0011	Blown-in Insulation	on Layer:	Building F; north attic, blown-in Description:	attic insulation Analysis:	Lab Cor
		Layer 1	loose fibrous material, black/gray	No Asbestos Detected	
23514.174-0012	Paper Felt	Layer:	Building F; north attic, attic vapo	or barrier Analysis:	Lab Cor
		Layer 01	fibrous material, tan	No Asbestos Detected	
		Layer 02	compact powdery material, brown	No Asbestos Detected	
		Layer 03	fibrous material, black	No Asbestos Detected	
		Layer 04	loose fibrous material, yellow	No Asbestos Detected	
23514.174-0013	Mechanical Isolat	ion Cloth Layer:	Building F; north attic, mechanic Description:	cal isolation cloth Analysis:	Lab Cor
		Layer 1	woven fibers, brown/black	No Asbestos Detected	
23514.174-0014	Textured Ceiling	Material Layer:	Building F; room 2, textured ceil Description:	ling Analysis:	Lab Cor
		Layer 1	loose granular material, gray/white/tan	No Asbestos Detected	
23514.174-0015	Vinyl Floor Tile/N	lastic	Building F; room 3, 12" by 12" b black mastic	eige vinyl floor tile with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	vinyl, tan/gray	No Asbestos Detected	
		Layer 02	mastic, black	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0016	Ceramic Tile/Grou	ıt Layer:	Building F; room 16, ceramic flo Description:	or tile with mastic/grout Analysis:	Lab Cor
		Layer 01	hard compact powder, tan/gray/off-white	No Asbestos Detected	
		Layer 02	granular compact powder, white	No Asbestos Detected	
23514.174-0017	Sink Undercoating	9	Building F; room 8, black sink u	ndercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose particulate, black	<1% Chrysotile	
23514.174-0018	Wall and Ceiling F	Plaster	Building F; hallway at room 9, pl	aster	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose granular powder, gray/white/tan	No Asbestos Detected	
23514.174-0019	Lay-in Ceiling Tile		Building F; room 9, lay-in ceiling	ı tile	Lab Cor
	, 3	Layer:	Description:	Analysis:	
		Layer 01	coating, off-white	No Asbestos Detected	
		Layer 02	compressed fibrous material, off-white	No Asbestos Detected	
23514.174-0020	Sink Undercoating	q	Building F; room 13, white sink	undercoat	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose particulate, tan	No Asbestos Detected	
23514.174-0021	Vinyl Floor Tile/M	astic	Building F; room 10, vinyl floor t	ile, black mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	hard vinyl, off-white	No Asbestos Detected	
		Layer 02	mastic, yellow	No Asbestos Detected	
		Layer 03	hard vinyl, off-white	No Asbestos Detected	
		Layer 04	mastic, orange/black	No Asbestos Detected	
23514.174-0022	Textured Ceiling I	Material	Building F; room 15, textured ce	eiling	Lab Cor
	3	Layer:	Description:	Analysis:	
		Layer 1	hard compact powder, white/gray	No Asbestos Detected	



23514.174-0023 (Glued-on Ceiling [·]	Tiles Layer:	Building F; room 27, glued-on ce	iling tile	Lab Cor
		Layer:		-	
			Description:	Analysis:	
		Layer 01	granular compact powder, gray	No Asbestos Detected	
		Layer 02	mastic, brown	No Asbestos Detected	
		Layer 03	compressed fibers, brown	No Asbestos Detected	
23514.174-0024 N	Mastic	Layer:	Building F; room 18, beige & blace Description:	ck mastic and wainscoting Analysis:	Lab Cor
		Layer 01	mastic, white	No Asbestos Detected	
		Layer 02	mastic, black	<1% Chrysotile	
		Layer 03	compressed fibers, brown	No Asbestos Detected	
23514.174-0025 S	Sheet Floor Cover	ing Layer:	Building F; room #25, beige shee Description:	et floor covering Analysis:	Lab Cor
		Layer 01	flexible vinyl, pebbled pattern, off-white/tan	No Asbestos Detected	
		Layer 02	fibrous backing, gray	No Asbestos Detected	
		Layer 03	mastic, tan	No Asbestos Detected	
23514.174-0026 V	Vinyl Floor Tile/M	astic Layer:	Building F; room #25, green viny Description:	l floor tile Analysis:	Lab Cor
		Layer 01	hard vinyl, green	8% Chrysotile	
		Layer 02	mastic, tan with granular powder, gray	No Asbestos Detected	
23514.174-0027 E	Built-up Roofing		Building F; room #35, roofing de	bris	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous tar, black	25% Chrysotile	
23514.174-0028	Caulk	Layer:	Building F; north exit door, gray of Description:	caulking Analysis:	Lab Cor
		Layer 1	loose hard powder, tan/gray	<1% Chrysotile	
23514.174-0029 E	Brick & Mortar	Layer:	Building F; north exit door, brick Description:	& mortar Analysis:	Lab Cor
		Layer 01	granular compact powder, tan	No Asbestos Detected	
		Layer 02	granular compact powder, red	No Asbestos Detected	
23514.174-0030	Caulk	Layer:	Building F; northwest exterior, wi	indow caulking Analysis:	Lab Cor
		Layer 1	hard compact powder, tan	2% Chrysotile	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0031	Concrete Coating		Building F; northwest exterior, bl. brick	ack concrete coating on	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	hard granular powder, gray	No Asbestos Detected	
23514.174-0032	Built-up Roofing	Layer:	Building F; southeast central roo Description:	f, built-up roofing Analysis:	Lab Cor
		Layer 01	fibrous tar, brown/white	No Asbestos Detected	
		Layer 02	fibrous tar, black	No Asbestos Detected	
		Layer 03	fibrous tar, black	No Asbestos Detected	
		Layer 04	fibrous tar, black	No Asbestos Detected	
		Layer 05	fibrous tar, black	No Asbestos Detected	
		Layer 06	tar, black	No Asbestos Detected	
		Layer 07	fibrous tar, black/brown	13% Chrysotile	
		Layer 08	fibrous tar, black/brown	13% Chrysotile	
		Layer 09	fibrous tar, black/brown	13% Chrysotile	
		Layer 10	fibrous tar, black/brown	8% Chrysotile	
23514.174-0033	Built-up Roofing		Building F; central doghouse, bu	ilt-up roofing	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	rocky fibrous tar, black/gray	No Asbestos Detected	
		Layer 02	fibrous tar, black	No Asbestos Detected	
		Layer 03	fibrous tar, black	No Asbestos Detected	
		Layer 04	fibrous tar, black	No Asbestos Detected	
		Layer 05	tar, black	No Asbestos Detected	
		Layer 06	fibrous material, brown with tar, black	35% Chrysotile	
		Layer 07	fibrous material, brown with tar, black	35% Chrysotile	
		Layer 08	fibrous tar, black	No Asbestos Detected	
		Layer 09	tar, black	No Asbestos Detected	
		Layer 10	fibrous material, brown with tar, black	25% Chrysotile	
		Layer 11	fibrous material, brown with tar, black	25% Chrysotile	
		Layer 12	fibrous material, brown with tar, black	25% Chrysotile	
		Layer 13	fibrous material, brown with tar, black	25% Chrysotile	
		Layer 14	fibrous material, brown with tar, black	25% Chrysotile	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0034	Window Glazing (Compound Layer:	Building F; central doghouse, win Description:	ndow glazing Analysis:	Lab Cor
		Layer 1	paint, off-white with hard compact powder, white/off- white	No Asbestos Detected	
23514.174-0035	Window Glazing (Compound Layer:	Building F; central doghouse, win Description:	ndow glazing Analysis:	Lab Cor
		Layer 1	compact powder, white/off- white	No Asbestos Detected	
23514.174-0036	Built-up Roofing	Layer:	Building F; northwest roof, built- Description:	up roofing Analysis:	Lab Cor
		Layer 01	rubbery material, black/white	No Asbestos Detected	
		Layer 02	rocky fibrous tar, black/gray	No Asbestos Detected	
		Layer 03	fibrous tar, black	No Asbestos Detected	
		Layer 04	fibrous tar, black	No Asbestos Detected	
		Layer 05	fibrous tar, black	No Asbestos Detected	
		Layer 06	fibrous tar, black	No Asbestos Detected	
		Layer 07	fibrous tar, black	No Asbestos Detected	
		Layer 08	wood fibers, tan/brown	No Asbestos Detected	
23514.174-0037	Mastic		Building F; northwest roof exhau	st, mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coating, white with tar, black	No Asbestos Detected	
23514.174-0038	Mastic	Layer:	Building F; northeast roof stack, Description:	mastic Analysis:	Lab Cor
		Layer 1	soft fibrous tar, black	5% Chrysotile	
23514.174-0039	Concrete Roofing	Layer:	Building F; basement, black cond Description:	rete roofing Analysis:	Lab Cor
		Layer 1	loose hard particulate black/silver	No Asbestos Detected	
23514.174-0040	Wall and Ceiling I	Plaster	Building F; room #16, plaster wal	I	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	paint, pink/green with hard compact powder, white	No Asbestos Detected	
		Layer 02	granular compact powder, gray	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0041	Wall and Ceiling F		Building F; hallway at #11, plaste		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	paint, multicolored with powder, white	No Asbestos Detected	
		Layer 02	hard compact powder, white	No Asbestos Detected	
		Layer 03	granular compact powder, gray	No Asbestos Detected	
23514.174-0042	Gypsum Wallboar	rd/Joint	Building F; room #8, gypsum wa	llboard with joint	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	hard compact powder, white with paint, gray	No Asbestos Detected	
		Layer 02	woven fibers, white	No Asbestos Detected	
		Layer 03	compact chalky material with paper, white	No Asbestos Detected	
23514.174-0043	Wall and Ceiling I	Plaster	Building F; hallway at #32, plaste	r wall	Lab Cor
	J	Layer:	Description:	Analysis:	
		Layer 01	fine compact powder, off- white with paint, gray/green/off-white	<1% Chrysotile	
		Layer 02	compact powder, white	No Asbestos Detected	
23514.174-0044	Wall and Ceiling I	Plaster Layer:	Building F; hallway at #34, plaste Description:	r wall Analysis:	Lab Cor
		Layer 01	fine compact powder, off- white with paint, green/off- white/orange	No Asbestos Detected	
		Layer 02	compact powder, white	No Asbestos Detected	
		Layer 03	granular compact powder, gray	No Asbestos Detected	
23514.174-0045	Wall and Ceiling F	Plaster Layer:	Building F; room 23, plaster wall Description:	Analysis:	Lab Cor
		Layer 01	hard compact powder, white with paint, purple/green/offwhite	No Asbestos Detected	
		Layer 02	granular compact powder, gray	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0100	Vinyl Floor Tile/M	lastic Layer:	Building B; basement, gray vinyl Description:	floor tile Analysis:	Lab Cor
		Layer 01	mastic, tan	No Asbestos Detected	
		Layer 02	hard vinyl, off-white	No Asbestos Detected	
		Layer 03	mastic, clear orange with coating, gray	No Asbestos Detected	
23514.174-0101	Wall and Ceiling I	Plaster	Building B; basement, wall plaste	er	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	paint, black/off-white/green	No Asbestos Detected	
		Layer 02	granular compact powder, white	No Asbestos Detected	
		Layer 03	granular compact powder, gray	No Asbestos Detected	
23514.174-0102	Wall and Ceiling I	Plaster	Building B; basement, ceiling pla	ster	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	coating, white	No Asbestos Detected	
		Layer 02	granular compact powder, gray/white	No Asbestos Detected	
		Layer 03	paper, brown	No Asbestos Detected	
23514.174-0103	Window Glazing	Compound	Building B; basement, window gl	lazing compound	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	coating, blue/gray with hard compact powder, white/off-white	No Asbestos Detected	
23514.174-0104	Gypsum Wallboa	rd Layer:	Building B; basement, ceiling gyposcription:	osum Analysis:	Lab Cor
		Layer 01	granular compact powder, gray	No Asbestos Detected	
		Layer 02	compact chalky material with paper, white	No Asbestos Detected	
23514.174-0105	Covebase/Mastic		Building B; basement, covebase,		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	rubbery material, off- white/gray/black	No Asbestos Detected	
		Layer 02	mastic, tan	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0106	Vinyl Floor Tile/M	astic Layer:	Building B; basement, two layers Description:	vinyl floor tile Analysis:	Lab Cor
		Layer 01	vinyl, off-white/gray	No Asbestos Detected	
		Layer 02	mastic, tan	No Asbestos Detected	
		Layer 03	vinyl, tan	2% Chrysotile	
		Layer 04	mastic, black	3% Chrysotile	
23514.174-0107	Covebase/Mastic		Building B; basement, covebase,	black	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	rubbery material, black/gray, with mastic, clear/yellow	No Asbestos Detected	
		Layer 02	mastic, brown, with thin coating, off-white	No Asbestos Detected	
23514.174-0108	Vinyl Floor Tile/M	astic Layer:	Building B; basement, two layers Description:	vinyl floor tile Analysis:	Lab Cor
		Layer 01	vinyl, gray	No Asbestos Detected	
		Layer 02	mastic, yellow/clear/orange	No Asbestos Detected	
		Layer 03	vinyl, tan	No Asbestos Detected	
		Layer 04	thin mastic with backing, brown/gray/orange	No Asbestos Detected	
23514.174-0109	Mastic		Building B; basement, wallboard	mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose particulate, black/tan/off- white	<1% Chrysotile	
23514.174-0110	Mastic	Layer:	Building B; basement, duct mast Description:	ic Analysis:	Lab Cor
		Layer 1	fibrous rubbery material, off- white	No Asbestos Detected	
23514.174-0111	Mastic	Layer:	Building B; basement, duct mast Description:	ic Analysis:	Lab Cor
		Layer 1	compact powder, white/gray	No Asbestos Detected	
23514.174-0112	Sheet Floor Cover	ring Layer:	Building B; stair, sheet flooring, I Description:	eveling compound Analysis:	Lab Cor
		Layer 1	loose flexible particulate with paper, blue/gray/off-white/tan	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0113	Wall and Ceiling F	Plaster	Building B; first floor, wall plaster		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	granular compact powder, white/gray, with paint, tan/pink	No Asbestos Detected	
23514.174-0114	Asphalt Impregna	ated Paper Layer:	Building B; first floor, floor vapor Description:	barrier Analysis:	Lab Cor
		Layer 1	fibrous material, black, with loose particulate, multicolored	No Asbestos Detected	
23514.174-0115	Ceramic Tile Grou	ıt	Building B; first floor, ceramic tile	e/grout	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact powdery material, off- white/gray/pink	No Asbestos Detected	
23514.174-0116	Vinyl Floor Tile/M	astic Layer:	Building B; first floor, vinyl floor to Description:	tile, tan Analysis:	Lab Cor
		Layer 01	vinyl, gray/off-white	No Asbestos Detected	
		Layer 02	mastic, tan/yellow	No Asbestos Detected	
23514.174-0117	Sheet Floor Cover	rina	Building B; first floor, sheet floor	covering	Lab Cor
23311.1710117		Layer:	Description:	Analysis:	200 00.
		Layer 01	vinyl, tan/brown/gray	No Asbestos Detected	
		Layer 02	fibrous backing, gray	50% Chrysotile	
		Layer 03	thin mastic, tan/brown	12% Chrysotile	
		Layer 04	vinyl, tan/gray	No Asbestos Detected	
		Layer 05	woven fibrous backing with coating, brown/tan/gray	No Asbestos Detected	
23514.174-0118	Vinyl Floor Tile/M	astic	Building B; second floor, vinyl flo	oor tile, tan	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	mastic, tan	No Asbestos Detected	
		Layer 02	vinyl, off-white	<1% Chrysotile	
		Layer 03	mastic, black	2% Chrysotile	
23514.174-0119	Vinyl Floor Tile/M	astic	Building B; second floor, vinyl flo	oor tile, tan	Lab Cor
	-	Layer:	Description:	Analysis:	
		Layer 01	mastic, yellow	No Asbestos Detected	
		Layer 02	hard vinyl, off-white	<1% Chrysotile	
		Layer 03	mastic, black	2% Chrysotile	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0120	Blown-in Insulation	on	Building B; second floor, blown a	attic insulation	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose fibrous material, white	No Asbestos Detected	
23514.174-0121	Blown-in Insulation	on Layer:	Building B; second floor, blown a Description:	attic insulation Analysis:	Lab Cor
		Layer 1	loose fibrous material, white	No Asbestos Detected	
23514.174-0122	Blown-in Insulation	on	Building B; second floor, blown a	attic insulation	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose fibrous material, white	No Asbestos Detected	
23514.174-0123	Glued-on Ceiling	Tiles	Building B; second floor, 12" by ceiling tile	12" fissured glued-on	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	coating, white	No Asbestos Detected	
		Layer 02	mastic, brown	No Asbestos Detected	
		Layer 03	compressed fibers, brown	No Asbestos Detected	
23514.174-0124	Vinyl Floor Tile/N	lastic Layer:	Building B; second floor, vinyl flo Description:	oor tile, tan Analysis:	Lab Cor
		Layer 01	mastic, yellow	No Asbestos Detected	
		Layer 02	hard vinyl, off-white	<1% Chrysotile	
		Layer 03	mastic, black	2% Chrysotile	
23514.174-0125	Sheet Floor Cove	ring Layer:	Building B; second floor, two lay Description:	ers sheet floor covering Analysis:	Lab Cor
		Layer 01	vinyl, tan/gray	No Asbestos Detected	
		Layer 02	fibrous backing, gray	55% Chrysotile	
		Layer 03	thin mastic, tan	No Asbestos Detected	
		Layer 04	vinyl, tan/green	No Asbestos Detected	
		Layer 05	woven fibers, tan/brown, with thin mastic, brown	No Asbestos Detected	
		Layer 06	fibrous material, black	No Asbestos Detected	
23514.174-0126	Wall and Ceiling	Plaster	Building B; second floor, wall pla	aster	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 01	textured coating with powder, tan/gray/white	No Asbestos Detected	
		Layer 02	granular compact powder, gray	No Asbestos Detected	



<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23514.174-0127	Mortar		Building B; second floor, chimney	y mortar	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose granular powder, gray	No Asbestos Detected	
23514.174-0128	Cementitious Roo	of Shingles	Building B; second floor, roof shi	ngles	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23514.174-0129	Cementitious Roo	f Shingles	Building B; second floor, roof shi	ngles	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rocky fibrous tar, black	No Asbestos Detected	
23514.174-0130	Window Glazing C	•	Building B; second floor, window		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compact powdery material, off- white, with paint, gray	No Asbestos Detected	
23514.174-0131	Asphalt Impregna	ted Paper	Building B; exterior, siding tar pa	per	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous material, black/brown	No Asbestos Detected	
23514.174-0132	Caulk		Building B; exterior, trim caulk		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	soft rubbery material, gray	No Asbestos Detected	
23514.174-0133	Caulk		Building B; exterior, window caul	k	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	hard flexible material, off- white/gray/blue	No Asbestos Detected	



LEAD SAMPLE INVENTORY

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	<u>Location</u>	<u>Lab</u>
PAINT				
LB23514.174-1001	Paint	<11.9 ppm	Building F; northeast, door, metal, tan	R.J. Lee Group
LB23514.174-1002	Paint	<11.7 ppm	Building F; roof, stack	R.J. Lee Group
LB23514.174-1003	Paint	109,000 ppm	Building F; northeast, pillar, metal, tan	R.J. Lee Group
LB23514.174-1004	Paint	50,600 ppm	Building F; southeast, window frame, wood, white	R.J. Lee Group
LB23514.174-1005	Paint	562 ppm	Building F; east, radiator, metal, purple	R.J. Lee Group
LB23514.174-1006	Paint	20.2 ppm	Building B; brick mortar	R.J. Lee Group
LB23514.174-1007	Paint	46,400 ppm	Building B; window frame, wood, gray	R.J. Lee Group
LB23514.174-1008	Paint	2,750 ppm	Building B; siding, wood, blue	R.J. Lee Group



April 2021

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

Phone: (503) 224-5055 www.labcorpdx.com

PLM - Visual Estimate Extended Final Report

Job Number: 210924

Client: PBS Engineering and Environmental

Address: 4412 S Corbett Avenue Portland, OR 97239

Project Name:

Inc.

Project No.: 23514.174 Phase 0001

PO Number: Sub Project: Reference No.: Report Number: 210924R01

Report Date: 3/24/2021

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

·	•		
Lab/Cor Sample #	Client Sample # and Description	Analysis Notes	Date Received
210924 - S1	23514.174-0001 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S2	23514.174-0002 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S3	23514.174-0003 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S4	23514.174-0004 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S5	23514.174-0005 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S6	23514.174-0006 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S7	23514.174-0007 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S8	23514.174-0008 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S9	23514.174-0009 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S10	23514.174-0010 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S11	23514.174-0011 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S12	23514.174-0012 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S13	23514.174-0013 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S14	23514.174-0014 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S15	23514.174-0015 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S16	23514.174-0016 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S17	23514.174-0017 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S18	23514.174-0018 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S19	23514.174-0019 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S20	23514.174-0020 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S21	23514.174-0021 -	PLM - Visual Estimate Extended	3/17/2021

Phone: (503) 224-5055 www.labcorpdx.com

PLM - Visual Estimate Extended Final Report

Job Number: 210924

Client: PBS Engineering and Environmental

Report Number: 210924R01

Report Date: 3/24/2021

Project Name:	gg		Nepolt Date: 3/24/2021
210924 - S22	23514.174-0022 -	PLM - Visual Estimate	3/17/2021
210324 - 022	23314.174-0022	Extended	3/1//2021
210924 - S23	23514.174-0023 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S24	23514.174-0024 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S25	23514.174-0025 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S26	23514.174-0026 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S27	23514.174-0027 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S28	23514.174-0028 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S29	23514.174-0029 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S30	23514.174-0030 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S31	23514.174-0031 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S32	23514.174-0032 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S33	23514.174-0033 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S34	23514.174-0034 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S35	23514.174-0035 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S36	23514.174-0036 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S37	23514.174-0037 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S38	23514.174-0038 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S39	23514.174-0039 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S40	23514.174-0040 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S41	23514.174-0041 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S42	23514.174-0042 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S43	23514.174-0043 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S44	23514.174-0044 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S45	23514.174-0045 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S46	23514.174-0100 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S47	23514.174-0101 -	PLM - Visual Estimate Extended	3/17/2021



Phone: (503) 224-5055 www.labcorpdx.com

PLM - Visual Estimate Extended Final Report

Job Number: 210924

Client: PBS Engineering and Environmental

Report Number: 210924R01

Report Date: 3/24/2021

roject Name:			Report Date: 3/24/2021
210924 - S48	23514.174-0102 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S49	23514.174-0103 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S50	23514.174-0104 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S51	23514.174-0105 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S52	23514.174-0106 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S53	23514.174-0107 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S54	23514.174-0108 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S55	23514.174-0109 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S56	23514.174-0110 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S57	23514.174-0111 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S58	23514.174-0112 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S59	23514.174-0113 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S60	23514.174-0114 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S61	23514.174-0115 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S62	23514.174-0116 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S63	23514.174-0117 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S64	23514.174-0118 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S65	23514.174-0119 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S66	23514.174-0120 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S67	23514.174-0121 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S68	23514.174-0122 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S69	23514.174-0123 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S70	23514.174-0124 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S71	23514.174-0125 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S72	23514.174-0126 -	PLM - Visual Estimate Extended	3/17/2021
210924 - S73	23514.174-0127 -	PLM - Visual Estimate Extended	3/17/2021

Extended

Portland, OR 97239

Phone: (503) 224-5055 www.labcorpdx.com

PLM - Visual Estimate Extended Final Report

Job Number: 210924 Report Number: 210924R01 Client: PBS Engineering and Environmental Report Date: 3/24/2021

Project Name:

23514.174-0128 -	PLM - Visual Estimate Extended	3/17/2021
23514.174-0129 -	PLM - Visual Estimate Extended	3/17/2021
23514.174-0130 -	PLM - Visual Estimate Extended	3/17/2021
23514.174-0131 -	PLM - Visual Estimate Extended	3/17/2021
23514.174-0132 -	PLM - Visual Estimate Extended	3/17/2021
23514.174-0133 -	PLM - Visual Estimate Extended	3/17/2021
	23514.174-0129 - 23514.174-0130 - 23514.174-0131 - 23514.174-0132 -	Extended 23514.174-0129 - PLM - Visual Estimate Extended 23514.174-0130 - PLM - Visual Estimate Extended 23514.174-0131 - PLM - Visual Estimate Extended 23514.174-0132 - PLM - Visual Estimate Extended 23514.174-0133 - PLM - Visual Estimate Extended

PLM - Visual The submitted sample(s) were analyzed according to the EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Estimate Extended 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 HCI, 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

PLM Technical Manager

LabCor Lab/Cor Portland, Inc. Portland

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

PBS Engineering and Environmental

4412 S Corbett Avenue

Portland, OR 97239

Job Number: 210924

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

Report Date: 03/24/2021

P.O. No: n/a

Project Name:

Inc

Client:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0001 Date Analyzed: 03/22/2021 Sample ID: S1

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent Percent: Chrysotile Crocidolite Asbestos: Amosite

Homogeneous

100 % mastic, brown, with NAD

wood fibers and powder,

tan/gray

Other Fibers Fibrous Mineral

Other Glass Wool Cellulose Synthetic Matrix

25 % 75 %

Client Sample ID: Date Analyzed: 03/22/2021 23514.174-0002 Sample ID: S2

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Percent Layer

Percent: Chrysotile Crocidolite Asbestos: Amosite

Homogeneous

granular compact 100 % NAD

powder, gray/white, with coating, multicolored

Other Fibers **Fibrous** Mineral

Wool Other Glass Cellulose Synthetic Matrix

100 %

03/22/2021 Client Sample ID: 23514.174-0003 Sample ID: S3 Date Analyzed:

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

mastic material, black, 100 % 4 % 4 %

with wood, tan

Other Fibers Fibrous Mineral

Other Glass Cellulose Wool Synthetic Matrix 96 %

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Report Number: 210924R01

Report Date: 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: **Project Notes:**

Client Sample ID:	23514.17	4-0004		Sample ID:	S/I		Date Analyzed:	03/22/2021	
Client Sample ID:		4-0004		Sample ID:	34		Analyst:	Tim Cammann	
Asbestos Mineral F	-	Layer					Allalyst.	Tilli Callillallii	Percent
ASDESIOS MIIIEIAI F	IDEIS		Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01			•						
rubbery material,	gray	65 %	-	-	-				NAD
Layer 02									
mastic material, o white/tan	clear/off-	15 %	-	-	-				NAD
Layer 03									
granular compact powder, white	t	20 %	-	-	-				NAD
Other Fibers	Fibrou		Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other		Matr	
Layer 01	-	-	-	-		-	-	100	0 %
Layer 02	-	-	-	-		-	-		0 %
Layer 03	-	-	-	-		-	-	100	0 %
Client Sample ID:	23514.17	4-0005		Sample ID:	S5		Date Analyzed:	03/22/2021	
Client Sample Desc	ription:						Analyst:	Tim Cammann	
Asbestos Mineral F	ibers	Layer							Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous		Percent:	·	Amosite	Crocidolite				
Homogeneous loose particulate, brown/tan		Percent:	3 %	Amosite -	Crocidolite -				Asbestos:
loose particulate,	Fibrou	100 % s	3 % Mineral	-	Crocidolite -	O.II			
loose particulate, brown/tan		100 % s	3 % Mineral	Amosite - Synthetic	Crocidolite -	Other		Matr	3 %
loose particulate, brown/tan	Fibrou	100 % s	3 % Mineral	-	Crocidolite -	Other -	-		3 %
loose particulate, brown/tan	Fibrou Glass	100 % s Cellulos	3 % Mineral e Wool	-	-	Other -	- Date Analyzed:		3 %
loose particulate, brown/tan <u>Other Fibers</u>	Fibrous Glass - 23514.17	100 % s Cellulos	3 % Mineral e Wool	- Synthetic -	-	Other -	- Date Analyzed: Analyst:	97	3 %
loose particulate, brown/tan Other Fibers Client Sample ID:	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer	3 % Mineral e Wool	Synthetic - Sample ID:	- S6	Other -	•	97	3 %
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc. Asbestos Mineral F	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer	3 % Mineral e Wool	- Synthetic -	-	Other -	•	97	3 % rix %
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer Percent:	3 % Mineral e Wool - Chrysotile	Synthetic - Sample ID:	- S6	Other -	•	97	3 % rix % Percent Asbestos:
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer	3 % Mineral e Wool	Synthetic - Sample ID:	- S6	Other -	•	97	3 %
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red Layer 02	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer Percent: 90 %	3 % Mineral e Wool - Chrysotile 2 %	Synthetic - Sample ID:	- S6	Other -	•	97	3 % Percent Asbestos:
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red	Fibrous Glass - 23514.174 cription:	100 % s Cellulos - 4-0006 Layer Percent:	3 % Mineral e Wool - Chrysotile	Synthetic - Sample ID:	- S6	Other -	•	97	3 % rix % Percent Asbestos:
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red Layer 02	Fibrous Glass - 23514.174 cription: Fibers	100 % s Cellulos - 4-0006 Layer Percent: 90 % 10 % s	3 % Mineral e Wool - Chrysotile 2 % Trace Mineral	Synthetic - Sample ID: Amosite	- S6	-	•	97	3 % Percent Asbestos:
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red Layer 02 mastic, black Other Fibers	Fibrous Glass - 23514.17 cription:	100 % s Cellulos - 4-0006 Layer Percent: 90 % 10 % s Cellulos	3 % Mineral e Wool - Chrysotile 2 % Trace Mineral	Synthetic - Sample ID:	- S6	Other -	•	97 03/22/2021 Tim Cammann	3 % Percent Asbestos: 2 % <1 %
loose particulate, brown/tan Other Fibers Client Sample ID: Client Sample Desc Asbestos Mineral F Layer 01 vinyl, red Layer 02 mastic, black	Fibrous Glass - 23514.174 cription: Fibers	100 % s Cellulos - 4-0006 Layer Percent: 90 % 10 % s	3 % Mineral e Wool - Chrysotile 2 % Trace Mineral	Synthetic - Sample ID: Amosite	- S6	-	•	97 03/22/2021 Tim Cammann Matr 96	3 % Percent Asbestos: 2 % <1 %



Inc.

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Layer 01	Percent Asbestos: NAD NAD latrix 100 % 100 % Percent Asbestos: NAD
Asbestos Mineral Fibers Layer Orl Percent: Chrysotile Amosite Crocidolite Crocidolite	Asbestos: NAD NAD latrix 100 % 100 % Percent Asbestos: NAD
Layer 01	Asbestos: NAD NAD latrix 100 % 100 % Percent Asbestos: NAD
	NAD latrix 100 % 100 % Percent Asbestos: NAD
Layer 02	NAD latrix 100 % 100 % Percent Asbestos: NAD
Tubbery material, tan 82 % - - - Other Fibers Fibrous Glass Cellulose Wool Wool Synthetic Other Other Mode Layer 01 - </td <td>Percent Asbestos:</td>	Percent Asbestos:
Other Fibers Fibrous Glass Mineral Wool Synthetic Other Mode of Glass Cellulose Wool Wool Synthetic Other Mode of Glass Mineral Fibers Layer O2 - <td>Percent Asbestos:</td>	Percent Asbestos:
Callest Call	Percent Asbestos:
Client Sample ID: 23514.174-0008 Sample ID: S8 Date Analyzed: 03/22/2021 Tim Cammann Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite Crocidolite Crocidolite Homogeneous loose particulate, 100 % - - - - -	Percent Asbestos:
Client Sample ID: 23514.174-0008 Sample ID: S8 Date Analyzed: 03/22/2021 Tim Cammann Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite Crocidolite Crocidolite Homogeneous loose particulate 100 % - - - - -	Percent Asbestos: NAD
Client Sample Description:	Asbestos:
Client Sample Description: Analyst: Tim Cammann Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite Crocidolite Homogeneous	Asbestos:
Asbestos Mineral Fibers Layer Percent: Layer Percent: Layer Percent: Amosite Crocidolite Homogeneous loose particulate, brown/red/white 100 % -	Asbestos:
Percent: Chrysotile	NAD
loose particulate, brown/red/white	
brown/red/white Other Fibers Fibrous Glass Mineral Wool Synthetic Other Other No. - Trace - </td <td></td>	
Glass Cellulose Wool Synthetic Other Other Client Sample ID: 23514.174-0009 Sample ID: S9 Date Analyzed: 03/22/2021	atriv
Trace Client Sample ID: 23514.174-0009 Sample ID: S9 Date Analyzed: 03/22/2021	atriv
Client Sample ID: 23514.174-0009 Sample ID: S9 Date Analyzed: 03/22/2021	100 %
· · · · · · · · · · · · · · · · · · ·	100 %
Client Sample Description: Analyst: Tim Cammann	
Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite Crocidolite	Percent Asbestos:
Homogeneous	
loose fibrous material, 100 % black/gray	NAD
Other Fibers Fibrous Mineral	
Glass Cellulose Wool Synthetic Other	atrix
100 %	0 %
<u>Client Sample ID:</u> 23514.174-0010 Sample ID: S10 Date Analyzed: 03/22/2021	
Client Sample Description: Analyst: Tim Cammann	
Asbestos Mineral Fibers Layer	Percent
Percent: Chrysotile Amosite Crocidolite	Asbestos:
Homogeneous	
loose fibrous material, 100 % black/gray	NAD
Other Fibers Fibrous Mineral	
· · · · · · · · · · · · · · · · · · ·	
100 %	atrix 0 %



LabCor Portland Inc

Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0011 Sample ID: S11 Date Analyzed: 03/22/2021 **Client Sample Description:** Analyst: Tim Cammann **Asbestos Mineral Fibers** Laver Percent Percent: Chrysotile Crocidolite Asbestos: Amosite Homogeneous loose fibrous material, 100 % NAD black/gray Other Fibers **Fibrous** Mineral Glass Wool Other Cellulose Synthetic Matrix 100 % 0 % Client Sample ID: 23514.174-0012 Sample ID: S12 Date Analyzed: 03/22/2021 **Client Sample Description:** Analyst: Tim Cammann **Asbestos Mineral Fibers** Layer Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Layer 01 fibrous material, tan 45 % NAD Layer 02 5 % compact powdery NAD material, brown Layer 03 fibrous material, black 35 % NAD Layer 04 loose fibrous material, 15 % NAD yellow **Other Fibers Fibrous** Mineral Other Glass Cellulose Wool Synthetic Matrix Layer 01 95 % 5 % Layer 02 Trace 5 % 95 % 40 % Layer 03 Trace 60 % Layer 04 100 % 0 % 23514.174-0013 Sample ID: S13 03/22/2021 Client Sample ID: Date Analyzed: **Client Sample Description:** Analyst: Tim Cammann **Asbestos Mineral Fibers** Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Homogeneous woven fibers, 100 % NAD brown/black Other Fibers **Fibrous** Mineral Glass Wool Other Cellulose Synthetic Matrix 100 % 0 %



Portland Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue

Job Number: 210924

Portland, OR 97239

Project Name:

Inc.

Project Number: 23514.174 Phase 0001

Project Notes:

Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

	3514.17	4-0014		Sample ID:	S14		Date Analyzed:	03/22/2021	
Client Sample Descri	-						Analyst:	Tim Cammann	
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous									
loose granular mat gray/white/tan	erial,	100 %	-	-	-				NAD
Other Fibers	Fibrou		Mineral						
	Glass	Cellulo	se Wool	Synthetic		Other		Ma	trix
	-	3 %	-	-		-	-	9	7 %
Client Sample ID: 2	3514.17	4-0015		Sample ID:	S15		Date Analyzed:	03/22/2021	
Client Sample Descri	ption:						Analyst:	Tim Cammann	
Asbestos Mineral Fib	<u>ers</u>	Layer							Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
vinyl, tan/gray		80 %	-	-	-				NAD
Layer 02									
mastic, black		20 %	-	-	-				NAD
Other Fibers	Fibrou	_	Mineral						
	Glass	Cellulo	se Wool	Synthetic		Other		Ma	
Layer 01	-	-	-	-		-	-		00 %
Layer 02	-	2 %	-	-		-	-	9	8 %
Client Sample ID: 2	3514.17	4-0016		Sample ID:	S16		Date Analyzed:	03/22/2021	
Client Sample Descri	ption:						Analyst:	Tim Cammann	
Asbestos Mineral Fib		Layer							Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
hard compact power tan/gray/off-white	der,	94 %	-	-	-				NAD
Layer 02									
granular compact powder, white		6 %	-	-	-				NAD
Other Fibers	Fibrous Glass	-	Mineral se Wool	Synthetic		Other		Ma	trix
Layer 01	-	_	-	-		-	-		00 %
Layer 02	-	-	-	-		-	-	10	00 %

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Report Date: 03/24/2021

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: Project Notes:

Client Sample ID: 23	3514.174	4-0017		Sample ID:	S17		Date Analyzed:	03/22/2021	
Client Sample Descrip		7 00 17		Jampie ID.	517		Analyst:	Tim Cammann	
Asbestos Mineral Fibe		Layer					Allaiy St.	Gammann	Percent
			Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
loose particulate, bla	ack	100 %	Trace	-	-				< 1 %
Other Fibers	Fibrous	s	Mineral						
	Glass	Cellulos	se Wool	Synthetic		Other		Mat	rix
	-	3 %	-	-		-	-	9	7 %
Client Sample ID: 23	3514.174	4-0018		Sample ID:	S18		Date Analyzed:	03/22/2021	
Client Sample Descrip	tion:			•			Analyst:	Tim Cammann	
Asbestos Mineral Fibe		Layer					·		Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
loose granular powd gray/white/tan	ler,	100 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulos	se Wool	Synthetic		Other		Mat	rix
	-	2 %	-	-		-	-	98	3 %
Client Sample ID: 23	3514.174	4-0019		Sample ID:	S19		Date Analyzed:	03/22/2021	
								- : •	
Client Sample Descrip	tion:						Analyst:	Tim Cammann	
Asbestos Mineral Fibe	ers	Layer					Analyst:	I im Cammann	Percent
Asbestos Mineral Fibe	ers		Chrysotile	Amosite	Crocidolite		Analyst:	Im Cammann	Percent Asbestos:
Asbestos Mineral Fibe	ers	Percent:	Chrysotile	Amosite	Crocidolite		Analyst:	Tim Cammann	Asbestos:
Asbestos Mineral Fiber Layer 01 coating, off-white	ers		Chrysotile	Amosite -	Crocidolite		Analyst:	I im Cammann	
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02	<u>ers</u>	Percent: 20 %	Chrysotile -	Amosite	Crocidolite		Analyst:	I im Cammann	Asbestos:
Asbestos Mineral Fibe Layer 01 coating, off-white Layer 02 compressed fibrous	<u>ers</u>	Percent:	Chrysotile	Amosite - -	Crocidolite		Analyst:	I im Cammann	Asbestos:
Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white	<u>ers</u>	20 % 80 %	-	Amosite - -	Crocidolite - -		Analyst:	I im Cammann	Asbestos:
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous	<u>ers</u> Fibrous	Percent: 20 % 80 % s	- - Mineral	-	Crocidolite - -	Other	Analyst:		Asbestos: NAD NAD
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers	<u>ers</u>	Percent: 20 % 80 % s	- - Mineral se Wool	Amosite Synthetic	Crocidolite	Other	Analyst:	Mat	Asbestos: NAD NAD
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01	<u>ers</u> Fibrous	Percent: 20 % 80 % S Cellulos	- Mineral se Wool -	-	Crocidolite	Other - -	Analyst:	M at 10	Asbestos: NAD NAD trix 0 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02	Fibrous Glass - -	20 % 80 % s Cellulos - 5 %	- - Mineral se Wool	- - Synthetic - -	-	Other - -	- - -	M at 10 3:	Asbestos: NAD NAD
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23	Fibrous Glass - - -	20 % 80 % s Cellulos - 5 %	- Mineral se Wool -	-	-	Other - -	- - - Date Analyzed:	Mat 10 3: 03/22/2021	Asbestos: NAD NAD trix 0 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descrip	Fibrous Glass - - 8514.174	Percent: 20 % 80 % S Cellulos - 5 % 4-0020	- Mineral se Wool -	- - Synthetic - -	-	Other - -	- - -	M at 10 3:	Asbestos: NAD NAD rix 0 % 5 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23	Fibrous Glass - - - 8514.174 stion:	20 % 80 % s Cellulos - 5 % 4-0020 Layer	- Mineral Wool - 60 %	Synthetic Sample ID:	- - \$20	Other - -	- - - Date Analyzed:	Mat 10 3: 03/22/2021	Asbestos: NAD NAD rix 0 % 5 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descrip Asbestos Mineral Fiber	Fibrous Glass - - - 8514.174 stion:	20 % 80 % s Cellulos - 5 % 4-0020 Layer	- Mineral se Wool -	- - Synthetic - -	-	Other - -	- - - Date Analyzed:	Mat 10 3: 03/22/2021	Asbestos: NAD NAD rix 0 % 5 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descript Asbestos Mineral Fiber Homogeneous	Fibrous Glass - - 8514.174 stion:	Percent: 20 % 80 % S Cellulos 5 % 4-0020 Layer Percent:	- Mineral Wool - 60 %	Synthetic Sample ID:	- - \$20	Other - -	- - - Date Analyzed:	Mat 10 3: 03/22/2021	Asbestos: NAD NAD rrix 0 % 5 % Percent Asbestos:
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descript Asbestos Mineral Fiber Homogeneous loose particulate, tan	Fibrous Glass - - 8514.174 ation: ers	Percent: 20 % 80 % S Cellulos 5 % 4-0020 Layer Percent: 100 %	- Mineral wool - 60 % Chrysotile	Synthetic Sample ID:	- - \$20	Other - -	- - - Date Analyzed:	Mat 10 3: 03/22/2021	Asbestos: NAD NAD rix 0 % 5 %
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descript Asbestos Mineral Fiber Homogeneous	Fibrous Glass - - 8514.174 otion: ers	Percent: 20 % 80 % S Cellulos 5 % 4-0020 Layer Percent: 100 % s	- Mineral Wool - 60 % Chrysotile - Mineral	Synthetic Sample ID: Amosite	- - \$20	-	- - - Date Analyzed:	Mat 10 3: 03/22/2021 Tim Cammann	Asbestos: NAD NAD rix 0 % 5 % Percent Asbestos: NAD
Asbestos Mineral Fiber Layer 01 coating, off-white Layer 02 compressed fibrous material, off-white Other Fibers Layer 01 Layer 02 Client Sample ID: 23 Client Sample Descript Asbestos Mineral Fiber Homogeneous loose particulate, tan	Fibrous Glass - - 8514.174 ation: ers	Percent: 20 % 80 % S Cellulos 5 % 4-0020 Layer Percent: 100 % s	- Mineral Wool - 60 % Chrysotile - Mineral	Synthetic Sample ID:	- - \$20	Other Other	- - - Date Analyzed:	Mat 10 3: 03/22/2021 Tim Cammann	Asbestos: NAD NAD rix 0 % 5 % Percent Asbestos: NAD



Portland Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239 **Report Number:** 210924R01 **Report Date:** 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

23514.174 Phase 0001

Glass Cellulose Wool

Synthetic

Project Number: Project Notes:

white/gray
Other Fibers

Inc.

	514.174	-0021		Sample ID:	S21		Date Analyzed:	03/24/2021	
Client Sample Descript							Analyst:	Ryan Talaski-Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent bestos:
Layer 01									
hard vinyl, off-white		25 %	-	-	-				NAD
Layer 02									
mastic, yellow		3 %	-	-	-				NAD
Layer 03									
hard vinyl, off-white		50 %	-	-	-				NAD
Layer 04									
mastic, orange/black	<	22 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulos	Mineral se Wool	Synthetic		Other		Matrix	
Layer 01	_	_	_	-		-	-	100 %	
Layer 02	-	-	-	-		-	-	100 %	
Layer 03	-	-	-	-		-	-	100 %	
Layer 04	-	-	-	-		-	-	100 %	
Client Sample ID: 23	514.174	-0022		Sample ID:	S22		Date Analyzed:	03/24/2021	
Client Sample Descript				-			Analyst:	Ryan Talaski-Brown	
Asbestos Mineral Fibe	ers	Layer Percent:	Chrysotile	Amosite	Crocidolite		•		ercent bestos:
Homogeneous									
hard compact powde	er,	100 %	-	-	-				NAD

Other



Matrix 100 %

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239 Report Number: 210924R01

P.O. No: n/a

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: Project Notes:

Client Sample ID: 23	3514.174	1-0023		Sample ID:	S23		Date Analyzed:	03/24/2021
Client Sample Descrip	tion:						Analyst:	Ryan Talaski-Brown
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
granular compact powder, gray		15 %	-	-	-			NAD
Layer 02								
mastic, brown		70 %	-	-	-			NAD
Layer 03								
compressed fibers, brown		15 %	-	-	-			NAD
Other Fibers	Fibrous Glass		Mineral e Wool	Synthetic		Other		Matrix
Layer 01	-	-	-	-		-	-	100 %
Layer 02	-	-	-	-		-	-	100 %
Layer 03	-	100 %	-	-		-	-	0 %
Client Sample ID: 23	3514.174	1-0024		Sample ID:	S24		Date Analyzed:	03/24/2021
Client Sample Descrip	tion:			•			Analyst:	Ryan Talaski-Brown
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
mastic, white		15 %	-	-	-			NAD
Layer 02								
mastic, black		10 %	Trace	-	-			< 1 %
Layer 03								
compressed fibers, brown		75 %	-	-	-			NAD
Other Fibers	Fibrous Glass	S Cellulos	Mineral e Wool	Synthetic		Other		Matrix
Layer 01	_	-	_	-		_	_	100 %
, -· · ·								
Layer 02	-	-	-	-		-	_	100 %



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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239 Report Date: 03/24/2021

P.O. No: n/a

Report Number: 210924R01

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: Project Notes:

	3514.174	1-0025		Sample ID:	S25	_	Date Analyzed:	03/24/2021
Client Sample Descri							Analyst:	Ryan Talaski-Brown
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01								
flexible vinyl, pebbl pattern, off-white/ta		75 %	-	-	-			NAD
Layer 02								
fibrous backing, gra	ау	18 %	-	-	-			NAD
Layer 03								
mastic, tan		7 %	-	-	-			NAD
Other Fibers	Fibrous Glass	s Cellulos	Mineral e Wool	Synthetic		Other		Matrix
Layer 01	-	-	-	-		-	-	100 %
Layer 02	-	65 %	-	-		-	-	35 %
Layer 03	-	-	-	-		-	-	100 %
Client Sample ID: 2	3514.174	1-0026		Sample ID:	S26		Date Analyzed:	03/24/2021
Client Sample Descri	ption:			•			Analyst:	Ryan Talaski-Brown
Asbestos Mineral Fib	ers	Layer Percent:	Chrysotile	Amosite	Crocidolite		•	Percent Asbestos:
Layer 01								
hard vinyl, green		92 %	8 %	-	-			8 %
Layer 02								
mastic, tan with gra powder, gray	anular	8 %	-	-	-			NAD
Other Fibers	Fibrous	6	Mineral					
	Glass	Cellulos	e Wool	Synthetic		Other		Matrix
Layer 01	-	-	-	-		-	-	92 %
Layer 02	-	-	-	-		-	-	100 %
Client Sample ID: 2	3514.174	1-0027		Sample ID:	S27		Date Analyzed:	03/24/2021
Client Sample Descri	ption:						Analyst:	Ryan Talaski-Brown
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous								
		4000/	25 %	_	_			25 %
fibrous tar, black		100 %	25 %					, ,
fibrous tar, black Other Fibers	Fibrous	3	Mineral					<i></i>
	Fibrous Glass		Mineral	Synthetic		Other	_	Matrix 40 %



LabCor Lab Portland

Inc

Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0028 Sample ID: S28 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Ryan Talaski-Brown **Asbestos Mineral Fibers** Laver Percent Percent: Chrysotile Crocidolite Amosite Asbestos: Homogeneous loose hard powder, 100 % Trace < 1 % tan/gray **Fibrous** Mineral Other Fibers Glass Wool Other Cellulose Synthetic Matrix 100 % Client Sample ID: 23514.174-0029 Sample ID: S29 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Ryan Talaski-Brown **Asbestos Mineral Fibers** Layer Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Layer 01 50 % granular compact NAD powder, tan Layer 02 50 % granular compact NAD powder, red **Other Fibers Fibrous** Mineral Other Glass Cellulose Wool Synthetic Matrix 100 % Layer 01 Layer 02 100 % Client Sample ID: 23514.174-0030 Sample ID: S30 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Ryan Talaski-Brown **Asbestos Mineral Fibers** Percent Layer Percent: Chrysotile Amosite Crocidolite Asbestos: Homogeneous hard compact powder, 100 % 2 % 2 % tan **Other Fibers** Fibrous Mineral Glass Wool Other Cellulose Synthetic Matrix 5 % 93 % Talc Client Sample ID: 23514.174-0031 Sample ID: S31 03/24/2021 Date Analyzed: **Client Sample Description:** Analyst: Jeffrey Pratt **Asbestos Mineral Fibers** Percent Layer Percent: Chrysotile Amosite Crocidolite Asbestos: Homogeneous hard granular powder, 100 % NAD gray Other Fibers **Fibrous** Mineral Other Glass Wool Cellulose Synthetic Matrix Trace 100 %



Inc.

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample Description: Layer Percent: Chrysotile Amosite Crocidolite Percent Asbestos Percent Percent Percent Asbestos Percent Percent Percent Asbestos Percent Percent Percent Percent Percent Asbestos Percent Percent	Client Sample ID: 23514.174	-0032		Sample ID:	S32		Date Analyzed:	03/24/2021	
Layer 01 Forcant of Ibrorus tar, brown/white of %							Analyst:	Jeffrey Pratt	
Layer 01 fibrous tar, brown/white 6 % - - - NAD Layer 02 fibrous tar, black 12 % - - NAD Layer 03 fibrous tar, black 12 % - - NAD Layer 04 fibrous tar, black 12 % - - NAD Layer 05 fibrous tar, black 12 % - - - NAD Layer 06 tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 fibrous tar, black/brown 11 % 13 % - - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Fibrous tar, brown/white		Percent: C	hrysotile	Amosite	Crocidolite				Asbestos:
Layer 02	•								
Fibrous tar, black 12 % - - - - - - - - -	•	6 %	-	-	-				NAD
Layer 03									
fibrous tar, black 12 % - - - NAD Layer 04 fibrous tar, black 12 % - - - NAD Layer 05 fibrous tar, black 12 % - - - NAD Layer 06 tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - 13 % Layer 08 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10 -	fibrous tar, black	12 %	-	-	-				NAD
Layer 04 fibrous tar, black 12 % - - - - NAD Layer 05 fibrous tar, black 12 % - - - NAD Layer 06 tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10 - - - - - - - -	Layer 03								
Fibrous tar, black	fibrous tar, black	12 %	-	-	-				NAD
Layer 05 fibrous tar, black 12 % - - - NAD Layer 06 tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 Fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10 -	Layer 04								
fibrous tar, black 12 % - - - NAD Layer 06 tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10 - </td <td>fibrous tar, black</td> <td>12 %</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td>NAD</td>	fibrous tar, black	12 %	-	-	-				NAD
Layer 06 tar, black 4 % - - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10	Layer 05								
tar, black 4 % - - - NAD Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 - - - - - 13 % Layer 09 - - - - 13 % Layer 10 11 % 13 % - - - 13 %	fibrous tar, black	12 %	-	-	-				NAD
Layer 07 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 08 - - - - 13 % Layer 09 - - - - 13 % Layer 10 - - - - - 13 %	Layer 06								
fibrous tar, black/brown 11 % 13 % 13 % Layer 08 fibrous tar, black/brown 11 % 13 % 13 % Layer 09 fibrous tar, black/brown 11 % 13 % 13 % Layer 10	tar, black	4 %	-	-	-				NAD
Layer 08 fibrous tar, black/brown 11 % 13 % - - 13 % Layer 09 fibrous tar, black/brown 11 % 13 % - - - 13 % Layer 10 -	Layer 07								
fibrous tar, black/brown 11 % 13 % 13 % Layer 09 fibrous tar, black/brown 11 % 13 % 13 % Layer 10	fibrous tar, black/brown	11 %	13 %	-	-				13 %
Layer 09 fibrous tar, black/brown 11 % 13 % 13 % Layer 10	Layer 08								
fibrous tar, black/brown 11 % 13 % 13 % Layer 10	fibrous tar, black/brown	11 %	13 %	-	-				13 %
Layer 10	Layer 09								
•	fibrous tar, black/brown	11 %	13 %	-	-				13 %
fibrous far black/brown 9% 8%	Layer 10								
indicated, blackbrown 5 /0 5 /0 5	fibrous tar, black/brown	9 %	8 %	-	-				8 %
Other Fibers Fibrous Mineral	Other Fibers Fibrous		Mineral						
Glass Cellulose Wool Synthetic Other Matrix		Cellulose	Wool	Synthetic		Other		М	atrix
Layer 01 20 % Trace 80 %	Layer 01 20 %	Trace	-	-		-	-		80 %
Layer 02 10 % 90 %	Layer 02 10 %	-	-	-		-	-		90 %
Layer 03 10 % 90 %	Layer 03 10 %	-	-	-		-	-		90 %
Layer 04 10 % 90 %	Layer 04 10 %	-	-	-		-	-		90 %
Layer 05 9 % 91 %	Layer 05 9 %	-	-	-		-	-		91 %
Layer 06 - Trace 100 %	Layer 06 -		-	-		-	-		
Layer 07 - 12 % 75 %	Layer 07 -		-	-		-	-		
Layer 08 - 12 % 75 %	Layer 08 -		-	-		-	-		
Layer 09 - 12 % 75 %	Layer 09 -		-	-		-	-		
Layer 10 - 12 % 80 %	Layer 10 -	12 %	-	-		-	-		80 %

Inc.

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID:	23514.174	-0033		Sample ID:	S33		Date Analyzed:	03/24/2021	
Client Sample Desc							Analyst:	Jeffrey Pratt	
Asbestos Mineral F		Layer Percent: (Chrvsotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01		0.00	,	runoono	O TO GIA GIA GIA				Addicatos.
rocky fibrous tar, black/gray		8 %	-	-	-				NAD
Layer 02									
fibrous tar, black		8 %	-	-	-				NAD
Layer 03									
fibrous tar, black		8 %	-	-	-				NAD
Layer 04									
fibrous tar, black		8 %	-	-	-				NAD
Layer 05									
tar, black		8 %	-	-	-				NAD
Layer 06									
fibrous material, l with tar, black	brown	11 %	35 %	-	-				35 %
Layer 07									
fibrous material, l with tar, black	brown	11 %	35 %	-	-				35 %
Layer 08									
fibrous tar, black		5 %	-	-	-				NAD
Layer 09									
tar, black		5 %	-	-	-				NAD
Layer 10									
fibrous material, l with tar, black	brown	8 %	25 %	-	-				25 %
Layer 11									
fibrous material, l with tar, black	brown	4 %	25 %	-	-				25 %
Layer 12									
fibrous material, l with tar, black	brown	4 %	25 %	-	-				25 %
Layer 13									
fibrous material, l with tar, black	brown	4 %	25 %	-	-				25 %
Layer 14									
fibrous material, l with tar, black	brown	8 %	25 %	-	-				25 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other		Ma	atrix
Layer 01	8 %	-	-	-		-	-		92 %
Layer 02	9 %	-	-	-		-	-		01 %
Layer 03	9 %	-	-	-		-	-		91 %
Layer 04	9 %	-	-	-		-	-		91 %

LabCor Portland, Inc. 4321 South Corbett Ave., Ste A Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

	4412 S C	neering and orbett Avenu OR 97239		ental					ort Number: 2 Report Date: 0	
Job N	Number:	210924							P.O. No: n	/a
Projec	t Name:									
Project N		23514.174	Phase 000	01						
Layer 05	;	1 %	-	-	-		-	-		99 %
Layer 06	;	-	35 %	-	-		-	-		30 %
_ayer 07	•	-	35 %	-	-		-	-		30 %
_ayer 08	}	-	35 %	-	-		-	-		65 %
_ayer 09)	-	2 %	-	-		-	-		98 %
_ayer 10)	-	40 %	-	-		-	-		35 %
_ayer 11		-	40 %	-	-		-	-		35 %
Layer 12	2	-	40 %	-	-		-	-		35 %
Layer 13	}	-	40 %	-	-		-	-		35 %
_ayer 14	ļ	-	40 %	-	-		-	-		35 %
lient Sa	mple ID:	23514.174	 1-0034		Sample ID:	S34		Date Analyzed:	03/24/2021	
lient Sa	mple Des	cription:						Analyst:	Jeffrey Pratt	
Asbesto	s Mineral		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Homoge	neous									
comp	off-white vact powde /off-white		100 %	-	-	-				NA
Other Fil	<u>bers</u>	Fibrous	3	Mineral						
		Glass								
		Glass	Cellulos	e Wool	Synthetic		Other			Matrix
		-	Cellulos	e Wool -	Synthetic -		Other -	-		Matrix 100 %
lient Sa	ımple ID:	23514.174	-	•	Synthetic - Sample ID:	S35	Other -	- Date Analyzed:	03/24/2021	
	ample ID:	23514.174	-	•	<u>.</u>	S35	Other -	- Date Analyzed: Analyst:	03/24/2021 Jeffrey Pratt	
lient Sa		23514.174 cription: Fibers	- 4-0035 Layer	•	<u>.</u>	S35 Crocidolite	Other -			
lient Sa Asbesto	mple Des s Mineral	23514.174 cription: Fibers	- 4-0035 Layer	- -	Sample ID:		Other -			100 % Percent
lient Sa Asbesto Homoge comp	mple Des s Mineral	23514.174 cription: Fibers	- 4-0035 Layer	- -	Sample ID:		-			100 % Percent
Client Sa Asbesto Homoge comp	s Mineral eneous act powde off-white	23514.174 cription: Fibers	1-0035 Layer Percent: 100 %	Chrysotile - Mineral	Sample ID:		Other -			Percent Asbestos



Inc.

Portland Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

	3514.174	-0036		Sample ID:	S36		Date Analyzed:	03/24/2021	
Client Sample Descri		Laver					Analyst:	Jeffrey Pratt	Porcont
Asbestos Mineral Fib		Layer Percent: (Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01	·		,		2.23.200				
rubbery material, black/white		5 %	-	-	-				NAD
Layer 02									
rocky fibrous tar, black/gray		7 %	-	-	-				NAD
Layer 03									
fibrous tar, black		7 %	-	-	-				NAD
Layer 04									
fibrous tar, black		7 %	-	-	-				NAD
Layer 05									
fibrous tar, black		7 %	-	-	-				NAD
Layer 06									
fibrous tar, black		6 %	-	-	-				NAD
Layer 07									
fibrous tar, black		6 %	-	-	-				NAD
Layer 08									
wood fibers, tan/br	own	55 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	e Wool	Synthetic		Other			Matrix
Layer 01	-	4 %	-	-		-	-		96 %
Layer 02	11 %	1 %	-	-		-	-		88 %
Layer 03	7 %	2 %	-	-		-	-		91 %
Layer 04	7 %	2 %	-	-		-	-		91 %
Layer 05	6 %	2 %	-	-		-	-		92 %
Layer 06	8 %	2 %	-	-		-	-		90 %
Layer 07	6 %	8 %	-	-		-	-		86 %
Layer 08	-	100 %	-	-		-	-		0 %
Client Sample ID: 2	3514.174	-0037		Sample ID:	S37		Date Analyzed:	03/24/2021	
Client Sample Descri							Analyst:	Jeffrey Pratt	
Asbestos Mineral Fil	-	Layer							Percent
	F	Percent: (Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
coating, white with black	tar,	100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix



95 %

5 %

LabCor Lab/Cor Portland, Inc. Portland

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

> 4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Trace

Project Name:

Inc

Project Number: 23514.174 Phase 0001

Project Notes:

Layer 02

Client Sample ID: 23514.174-0038 Sample ID: S38 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Jeffrey Pratt **Asbestos Mineral Fibers** Laver Percent Percent: Chrysotile Crocidolite Asbestos: Amosite Homogeneous soft fibrous tar, black 100 % 5 % 5 % Other Fibers Fibrous Mineral Other Glass Wool Cellulose Synthetic Matrix 94 % 1 % Client Sample ID: 23514.174-0039 Sample ID: S39 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Jeffrey Pratt **Asbestos Mineral Fibers** Layer Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Homogeneous loose hard particulate 100 % NAD black/silver Mineral Other Fibers **Fibrous** Other Glass Cellulose Wool Synthetic Matrix 3 % 97 % Client Sample ID: Date Analyzed: 23514.174-0040 Sample ID: S40 03/24/2021 **Client Sample Description:** Analyst: Jeffrey Pratt **Asbestos Mineral Fibers** Percent Percent: Chrysotile Crocidolite Amosite Asbestos: Layer 01 25 % paint, pink/green with NAD hard compact powder. white Layer 02 granular compact 75 % NAD powder, gray Fibrous Mineral **Other Fibers** Glass Wool Other Cellulose Synthetic Matrix Layer 01 Trace 100 %



100 %

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239 Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: Project Notes:

Client Sample ID:	23514.17	4-0041		Sample ID:	S41		Date Analyzed:	03/24/2021	
Client Sample Desc				 =-	-		Analyst:	Mia Gaines	
Asbestos Mineral F	-	Layer Percent:	Chrysotile	Amosite	Crocidolite		•		Percent Asbestos:
Layer 01									
paint, multicolored powder, white	d with	20 %	-	-	-				NAD
Layer 02									
hard compact pow white	wder,	20 %	-	-	-				NAD
Layer 03									
granular compact powder, gray	t	60 %	-	-	-				NAD
Other Fibers	Fibrou Glass		Mineral se Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		100 %
Layer 03	-	-	-	-		-	-		100 %
Client Sample ID:	23514.17	4-0042		Sample ID:	S42		Date Analyzed:	03/24/2021	
Client Sample Desc	ription:			•			Analyst:	Mia Gaines	
Asbestos Mineral F	<u>ibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
hard compact pow white with paint, of		8 %	-	-	-				NAD
Layer 02									
woven fibers, whi	te	2 %	-	-	-				NAD
Layer 03									
compact chalky n with paper, white	naterial	90 %	-	-	-				NAD
Other Fibers	Fibrou Glass	-	Mineral se Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	100 %	-	-	-		-	-		0 %
Layer 03	-	2 %	-	-		-	-		98 %

LabCor Portland, Inc. 4321 South Corbett Ave., Ste A

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239

Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: **Project Notes:**

	3514.174	-0043		Sample ID:	S43		Date Analyzed:	03/24/2021	
Client Sample Descri	-						Analyst:	Mia Gaines	
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
fine compact powd white with paint, gray/green/off-whit	·	25 %	Trace	-	-				< 1 %
Layer 02									
compact powder, v	vhite	75 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	e Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		100 %
Client Sample ID: 2	3514.174	-0044		Sample ID:	S44		Date Analyzed:	03/24/2021	
Client Sample Descri	ption:						Analyst:	Mia Gaines	
Asbestos Mineral Fib		Layer							Percent
1 04	Г	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01	Г	Percent:	Chrysotile	Amosite	Crocidolite				
fine compact powd white with paint, green/off-white/ora	er, off-	Percent: 10 %	Chrysotile -	Amosite -	Crocidolite				
fine compact powd white with paint,	er, off-		Chrysotile -	Amosite -	Crocidolite -				Asbestos:
fine compact powd white with paint, green/off-white/ora	er, off- nge		Chrysotile - -	Amosite - -	Crocidolite				Asbestos:
fine compact powd white with paint, green/off-white/ora Layer 02	er, off- nge	10 %	Chrysotile - -	Amosite - -	Crocidolite				Asbestos:
fine compact powd white with paint, green/off-white/ora Layer 02 compact powder, v	er, off- nge	10 %	Chrysotile	Amosite	Crocidolite - -				Asbestos:
fine compact powd white with paint, green/off-white/ora Layer 02 compact powder, v Layer 03 granular compact	er, off- nge vhite Fibrous	10 % 25 % 65 %	- - - Mineral	-	Crocidolite - -				Asbestos: NAD NAD
fine compact powd white with paint, green/off-white/ora Layer 02 compact powder, v Layer 03 granular compact powder, gray	er, off- nge vhite	10 % 25 % 65 %	- - - Mineral	Amosite Synthetic	Crocidolite	Other			Asbestos: NAD NAD NAD
fine compact powd white with paint, green/off-white/ora Layer 02 compact powder, v Layer 03 granular compact powder, gray	er, off- nge vhite Fibrous	10 % 25 % 65 %	- - - Mineral	-	Crocidolite - -	Other	_		Asbestos: NAD NAD NAD Matrix 100 %
fine compact powd white with paint, green/off-white/ora Layer 02 compact powder, v Layer 03 granular compact powder, gray Other Fibers	er, off- nge vhite Fibrous	10 % 25 % 65 %	- - Mineral e Wool	-	Crocidolite - -	Other - -	- -		Asbestos: NAD NAD NAD



Lab/Cor Portland, Inc. LabCor Portland 4321 South Corbett Ave., Ste A

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0045 Sample ID: S45 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Mia Gaines **Asbestos Mineral Fibers** Laver Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Layer 01 hard compact powder, 15 % NAD white with paint, purple/green/off-white Layer 02 granular compact 85 % NAD powder, gray Fibrous Mineral Other Fibers Glass Other Cellulose Wool Synthetic Matrix 100 % Layer 01 Layer 02 Trace 100 % Client Sample ID: 23514.174-0100 Sample ID: S46 03/24/2021 Date Analyzed: Mia Gaines **Client Sample Description:** Analyst: **Asbestos Mineral Fibers** Percent Layer Chrysotile Percent: Amosite Crocidolite Asbestos: Layer 01 mastic, tan 5 % NAD Layer 02 hard vinyl, off-white 90 % NAD Layer 03

mastic, clear orang with coating, gray	je	5 %	-	-	-		
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	-	-	-	-	-	100 %
Layer 03	-	Trace	-	-	-	-	100 %

NAD

Inc.

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

23514.174 Phase 0001

Project Number: **Project Notes:**

Client Sample ID: 23	514.174	-0101		Sample ID:	S47		Date Analyzed:	03/24/2021	
Client Sample Descrip	tion:						Analyst:	Mia Gaines	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
paint, black/off- white/green		20 %	-	-	-				NAD
Layer 02									
granular compact powder, white		20 %	-	-	-				NAD
Layer 03									
granular compact powder, gray		60 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		100 %
Layer 03	-	-	-	-		-	-		100 %
Client Sample ID: 23	514.174	-0102		Sample ID:	S48		Date Analyzed:	03/24/2021	
Client Sample Descrip	tion:						Analyst:	Jeffrey Pratt	
Asbestos Mineral Fibe		Layer							Percent
	F	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
coating, white		4 %	-	-	-				NAD
Layer 02									
granular compact powder, gray/white		88 %	-	-	-				NAD
Layer 03									
paper, brown		8 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
Layer 01	-	3 %	-	-		-	-		97 %
Layer 02	-	1 %	-	-		-	-		99 %
Layer 03	-	100 %	-	-		-	-		0 %
Client Sample ID: 23	514.174	-0103		Sample ID:	S49		Date Analyzed:	03/24/2021	
Client Sample Descrip	tion:						Analyst:	Jeffrey Pratt	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous									
coating, blue/gray w hard compact powd white/off-white		100 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose	e Wool	Synthetic		Other			Matrix
		Trace		-					100 %



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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Report Number: 210924R01 Report Date: 03/24/2021

Job Number: 210924

P.O. No: n/a

Project Name:

Inc.

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 2	3514.17	4-0104		Sample ID:	S50		Date Analyzed:	03/24/2021	
Client Sample Descri	ption:						Analyst:	Jeffrey Pratt	
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite			,	Percent Asbestos:
Layer 01									
granular compact powder, gray		7 %	-	-	-				NAD
Layer 02									
compact chalky ma with paper, white	aterial	93 %	-	-	-				NAD
Other Fibers	Fibrous Glass		Mineral se Wool	Synthetic		Other		Matrix	
Layer 01	-	Trace	-	-		-	-	100	%
Layer 02	-	5 %	-	-		-	-	95 %	6
Client Sample ID: 2	3514.17	4-0105		Sample ID:	S51		Date Analyzed:	03/24/2021	
Client Sample Descri	ption:						Analyst:	Tim Cammann	
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite			,	Percent Asbestos:
Layer 01									
rubbery material, o white/gray/black	ff-	92 %	-	-	-				NAD
Layer 02									
mastic, tan		8 %	-	-	-				NAD
Other Fibers	Fibrous Glass		Mineral se Wool	Synthetic		Other		Matrix	
Layer 01	-	-	-	-		-	-	100 9	%



LabCor Lab/Cor Portland, Inc. Portland 4321 South Corbett Ave., Ste A

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

mastic, brown, with thin

coating, off-white

Other Fibers

Layer 01 Layer 02 6 %

Cellulose

Mineral

Wool

Synthetic

Fibrous

Glass

Project Name:

Inc

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0106 Sample ID: S52 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Tim Cammann Percent **Asbestos Mineral Fibers** Laver Percent: Chrysotile Crocidolite Asbestos: Amosite Layer 01 vinyl, off-white/gray 30 % NAD Layer 02 4 % NAD mastic, tan Layer 03 50 % 2 % 2 % vinyl, tan Layer 04 16 % mastic, black 3 % 3 % **Other Fibers Fibrous** Mineral Other Glass Cellulose Wool Synthetic Matrix Layer 01 100 % 100 % Layer 02 Trace 98 % Layer 03 Layer 04 97 % Trace 23514.174-0107 03/24/2021 Client Sample ID: Sample ID: S53 Date Analyzed: **Client Sample Description:** Analyst: Tim Cammann **Asbestos Mineral Fibers** Layer Percent Percent: Chrysotile Amosite Crocidolite Asbestos: Layer 01 rubbery material, 94 % NAD black/gray, with mastic, clear/yellow Layer 02

Other



NAD

Matrix 100 %

100 %

Inc.

LabCor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

Report Date: 03/24/2021

P.O. No: n/a

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID:	23514.174	-0108		Sample ID:	S54		Date Analyzed:	03/24/2021	
Client Sample Descr	iption:						Analyst:	Tim Cammann	
Asbestos Mineral Fi		Layer							Percent
	F	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
vinyl, gray		44 %	-	-	-				NAD
Layer 02									
mastic, yellow/clear/orang	e	6 %	-	-	-				NAD
Layer 03									
vinyl, tan		44 %	-	-	-				NAD
Layer 04									
thin mastic with ba brown/gray/orange		6 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other		Ma	trix
Layer 01	-	-	-	-		-	-	10	00 %
Layer 02	-	-	-	-		-	-	10	00 %
Layer 03	-	-	-	-		-	-	10	00 %
Layer 04	-	3 %	-	-		-	-	9	7 %
Client Sample ID:	23514.174	-0109		Sample ID:	S55		Date Analyzed:	03/24/2021	_
Client Sample ID: Client Sample Descr		-0109		Sample ID:	S55		Date Analyzed: Analyst:	03/24/2021 Tim Cammann	
	iption: bers	Layer		Sample ID:					Percent
Client Sample Descr	iption: bers	Layer	Chrysotile	Sample ID: Amosite	S55 Crocidolite				Percent Asbestos:
Client Sample Descr	iption: bers	Layer	Chrysotile	·					
Client Sample Descr Asbestos Mineral Fi	iption: <u>bers</u>	Layer	Chrysotile Trace	·					
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate,	ription: bers Fibrous	Layer Percent: 100 %	Trace Mineral	Amosite					Asbestos:
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white	ription: bers	Layer Percent: 100 %	Trace Mineral	•		Other			Asbestos:
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white	ription: bers Fibrous	Layer Percent: 100 %	Trace Mineral	Amosite		Other -		Tim Cammann	Asbestos:
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers	iption: bers Fibrous Glass	Layer Percent: 100 % Cellulos	Trace Mineral e Wool	Amosite - Synthetic	Crocidolite -			Tim Cammann	Asbestos: <1 %
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers	Fibrous Glass	Layer Percent: 100 % Cellulos	Trace Mineral e Wool	Amosite - Synthetic -	Crocidolite -		Analyst:	Tim Cammann Ma	Asbestos: <1 %
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers	Fibrous Glass - 23514.174 iption: bers	Layer Percent: 100 % Cellulos 0110 Layer	Trace Mineral e Wool	Amosite - Synthetic -	Crocidolite -		Analyst:	Ma 10 03/24/2021	Asbestos: <1 %
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers	Fibrous Glass - 23514.174 iption: bers	Layer Percent: 100 % Cellulos 0110 Layer	Trace Mineral e Wool	Amosite - Synthetic - Sample ID:	Crocidolite - S56		Analyst:	Ma 10 03/24/2021	Asbestos: <1 % trix 00 % Percent
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers Client Sample ID: Client Sample Descr Asbestos Mineral Fi	Fibrous Glass - 23514.174 iption: bers	Layer Percent: 100 % Cellulos 0110 Layer	Trace Mineral e Wool	Amosite - Synthetic - Sample ID:	Crocidolite - S56		Analyst:	Ma 10 03/24/2021	Asbestos: <1 % trix 00 % Percent
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers Client Sample ID: Client Sample Descr Asbestos Mineral Fi Homogeneous fibrous rubbery ma	Fibrous Glass - 23514.174 ription: bers faterial, Fibrous	Layer Percent: 100 % Cellulos0110 Layer Percent: 100 %	Trace Mineral e Wool	Amosite - Synthetic - Sample ID:	Crocidolite - S56	-	Analyst:	Ma 10 03/24/2021	Asbestos: <1 % trix 10 % Percent Asbestos:
Client Sample Descr Asbestos Mineral Fi Homogeneous loose particulate, black/tan/off-white Other Fibers Client Sample ID: Client Sample Descr Asbestos Mineral Fi Homogeneous fibrous rubbery ma off-white	Fibrous Glass - 23514.174 ription: bers faterial,	Layer Percent: 100 % Cellulos0110 Layer Percent: 100 %	Trace Mineral e Wool - Chrysotile - Mineral	Amosite - Synthetic - Sample ID:	Crocidolite - S56		Analyst:	Ma 10 03/24/2021	Asbestos: <1 % trix 00 % Percent Asbestos: NAD



Portland Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

112 S Carbett Avenue

Report Number: 210924R01 **Report Date:** 03/24/2021

P.O. No: n/a

Job Number: 210924 Project Name:

Project Number:

Inc.

23514.174 Phase 0001

Project Notes:

Other Fibers

Fibrous

Mineral

Synthetic

Glass Cellulose Wool

75 %

Client Sample ID: 23514.17	74-0111		Sample ID:	S57		Date Analyzed:	03/24/2021	
Client Sample Description:						Analyst:	Tim Cammann	
Asbestos Mineral Fibers	Layer							Percent
	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
compact powder, white/gray	100 %	-	-	-				NAD
Other Fibers Fibrou	ıs	Mineral						
Glass	s Cellulos	se Wool	Synthetic		Other		Ma	trix
	-	-	-		-	-	10	00 %
Client Sample ID: 23514.17	74-0112		Sample ID:	S58		Date Analyzed:	03/24/2021	
Client Sample Description:						Analyst:	Tim Cammann	
Asbestos Mineral Fibers	Layer							Percent
	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
loose flexible particulate with paper, blue/gray/off- white/tan	100 %	-	-	-				NAD
Other Fibers Fibrou		Mineral						
Glass	s Cellulos	se Wool	Synthetic		Other		Ma	trix
-	50 %	-	-		-	-	5	0 %
Client Sample ID: 23514.17	74-0113		Sample ID:	S59		Date Analyzed:	03/24/2021	
Client Sample Description:			•			Analyst:	Tim Cammann	
Asbestos Mineral Fibers	Layer					•		Percent
	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
granular compact powder, white/gray, with paint, tan/pink	100 %	-	-	-				NAD
Other Fibers Fibrou	ıs	Mineral						
Glass	s Cellulos	se Wool	Synthetic		Other		Ma	trix
-	-	-	-		-	-	10	00 %
Client Sample ID: 23514.17	74-0114		Sample ID:	S60		Date Analyzed:	03/24/2021	
Client Sample Description:			•			Analyst:	Tim Cammann	
Asbestos Mineral Fibers	Layer					,		Percent
		Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
fibrous material, black, with loose particulate.	100 %	-	-	-				NAD



Matrix

25 %

Other

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc.

Project Number: 23514.174 Phase 0001

Project Notes:

Report Number: 210924R01

Report Date: 03/24/2021

P.O. No: n/a

Client Sample ID: Client Sample Desc		Sample ID:	S61		Date Analyzed: Analyst:	03/23/2021 Tim Cammann		
Asbestos Mineral F	Fibers Layer Percent	: Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
compact powder material, off- white/gray/pink	y 100 %	-	-	-				NAD
Other Fibers	Fibrous Glass Cellul 	Mineral lose Wool -	Synthetic -		Other -	-	M a 10	trix 00 %
Client Sample ID:	23514.174-0116		Sample ID:	S62		Date Analyzed:	03/23/2021	_
Client Sample Desc	ription:					Analyst:	Tim Cammann	
Asbestos Mineral F	<u>ibers</u> Layer Percent	: Chrysotile	Amosite	Crocidolite				Percent Asbestos:

Olient Gample Descripti	OII.						Allalyst.	Tilli Gallillallii	
Asbestos Mineral Fiber	_	Layer 'ercent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
vinyl, gray/off-white		85 %	-	-	-				NAD
Layer 02									
mastic, tan/yellow		15 %	-	-	-				NAD
	Fibrous Glass	Cellulos	Mineral e Wool	Synthetic		Other		Mat	rix
Layer 01	-	-	-	-		-	-	10	0 %
Layer 02	-	-	-	-		-	-	10	0 %

LabCor Lab/Cor Portland, Inc.

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Report Date: 03/24/2021

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc.

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0117 Sample ID: S63 Date Analyzed: 03/23/2021 **Client Sample Description:** Analyst: Tim Cammann **Asbestos Mineral Fibers** Percent Laver Percent: Chrysotile Amosite Crocidolite Asbestos: Layer 01 vinyl, tan/brown/gray 28 % NAD Layer 02 28 % 50 % 50 % fibrous backing, gray Layer 03 8 % 12 % 12 % thin mastic, tan/brown Layer 04 vinyl, tan/gray 18 % NAD Layer 05 NAD woven fibrous backing 18 % with coating, brown/tan/gray Other Fibers **Fibrous** Mineral Other Glass Wool Cellulose Synthetic Matrix 5 % 95 % Layer 01 Layer 02 5 % 45 % 88 % Layer 03 Trace Layer 04 15 % 85 % Layer 05 75 % 25 %

Comments: Chrysotile content in Layer 03 could be contamination from Layer 02; due to the thickness of Layer 03, determination of contamination is difficult.

Client Sample ID:	23514.174	-0118		Sample ID:	S64		Date Analyzed:	03/23/2021	
Client Sample Desc	ription:						Analyst:	Tim Cammann	
Asbestos Mineral F		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
mastic, tan		15 %	-	-	-				NAD
Layer 02									
vinyl, off-white		70 %	Trace	-	-				< 1 %
Layer 03									
mastic, black		15 %	2 %	-	-				2 %
Other Fibers	Fibrous Glass	Cellulos	Mineral se Wool	Synthetic		Other		Ma	trix
Layer 01	-	-	-	-		-	-	10	00 %
Layer 02	-	-	-	-		-	-	10	00 %
Layer 03	-	-	-	-		-	-	9	8 %

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Report Date: 03/24/2021

Job Number: 210924

Project Name:

Inc.

23514.174 Phase 0001

Project Number: Project Notes:

Client Sample ID: 23514.1	74-0119		Sample ID:	S65		Date Analyzed:	03/24/2021
Client Sample Description:						Analyst:	Ryan Talaski-Brown
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01							
mastic, yellow	10 %	-	-	-			NAD
Layer 02							
hard vinyl, off-white	72 %	Trace	-	-			< 1 %
Layer 03							
mastic, black	18 %	2 %	-	-			2 %
Other Fibers Fibro		Mineral se Wool	Synthetic		Other		Matrix
Layer 01 -	-	-	-		-	-	100 %
Layer 02 -	-	-	-		-	-	100 %
Layer 03 -	-	-	-		-	-	98 %
Comments: A gravimetric	preparation	and point-co	ount is recom	mended for lay	er 02.		
	74-0120		Sample ID:	S66		Date Analyzed:	03/24/2021
Client Sample Description: Asbestos Mineral Fibers	Layer					Analyst:	Ryan Talaski-Brown
_	Percent:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous loose fibrous material, white	,	Chrysotile -	Amosite -	Crocidolite			
Homogeneous loose fibrous material, white Other Fibers Fibro	Percent: 100 %	- Mineral	-	Crocidolite -			Asbestos:
Homogeneous loose fibrous material, white	Percent: 100 % us ss Cellulo:	- Mineral	Amosite - Synthetic -	Crocidolite -	Other -	-	Asbestos:
Homogeneous loose fibrous material, white Other Fibers Glas	Percent: 100 % us ss Cellulo:	- Mineral se Wool	-	-	Other -	- Date Analyzed:	Asbestos: NAD Matrix
Homogeneous loose fibrous material, white Other Fibers Glas 100	Percent: 100 % us ss Cellulo: % -	- Mineral se Wool	- Synthetic -	-	Other -	- Date Analyzed: Analyst:	Asbestos: NAD Matrix 0 %
Homogeneous loose fibrous material, white Other Fibers Fibro Glas 100 G	Percent: 100 % us ss Cellulo: % -	- Mineral se Wool -	- Synthetic -	-	Other -	•	Asbestos: NAD Matrix 0 % 03/24/2021
Homogeneous loose fibrous material, white Other Fibers Glas 100 G Client Sample ID: 23514.1 Client Sample Description:	Percent: 100 % us ss Cellulo: % - 74-0121 Layer	- Mineral se Wool -	Synthetic - Sample ID:	- S67	Other -	•	Asbestos: NAD Matrix 0 % 03/24/2021 Ryan Talaski-Brown Percent



LabCor Portland, Inc. 4321 South Corbett Ave., Ste A

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

<u>Client:</u> PBS Engineering and Environmental

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239 150 csi os ana Environmenta intalyst.

Report Number: 210924R01 **Report Date:** 03/24/2021

P.O. No: n/a

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

	3514.17	4-0122		Sample ID:	S68		Date Analyzed:	03/24/2021	
Client Sample Descrip							Analyst:	Ryan Talaski-Brown	
Asbestos Mineral Fibe		Layer	Clam . a a 4:1 a		0				rcent
		Percent:	Chrysotile	Amosite	Crocidolite			Ask	estos:
Homogeneous									
loose fibrous materi white	ial,	100 %	-	-	-				NAD
Other Fibers	Fibrous Glass		Mineral se Wool	Synthetic		Other		Matrix	
	-	-	-	-		-	-	100 %	
Client Sample ID: 23	3514.17	4-0123		Sample ID:	S69		Date Analyzed:	03/24/2021	
Client Sample Descrip	tion:			•			Analyst:	Ryan Talaski-Brown	
Asbestos Mineral Fibe		Layer					, ,	•	rcent
		Percent:	Chrysotile	Amosite	Crocidolite			Ask	estos:
Layer 01									
coating, white		20 %	-	-	-				NAD
Layer 02									
mastic, brown		65 %	-	-	-				NAD
Layer 03									
compressed fibers, brown		15 %	-	-	-				NAD
Other Fibers	Fibrous	s	Mineral						
	Glass	Cellulos	se Wool	Synthetic		Other		Matrix	
Layer 01	-	-	-	-		-	-	100 %	
Layer 02	-	-	-	-	Wollastonite	5 %	-	95 %	
Layer 03	-	65 %	-	-		-	-	25 %	
								Perlite 10 %	
Client Sample ID: 23	3514.17	4-0124		Sample ID:	S70		Date Analyzed:	03/24/2021	
Client Sample Descrip				•			Analyst:	Ryan Talaski-Brown	
Asbestos Mineral Fibe	<u>ers</u>	Layer	01				•	Pe	rcent
1 04		Percent:	Chrysotile	Amosite	Crocidolite			Ask	estos:
Layer 01		46.01							
mastic, yellow		10 %	-	-	-				NAD
Layer 02			_						
hard vinyl, off-white		72 %	Trace	-	-				< 1 %
Layer 03									
mastic, black		18 %	2 %	-	-				2 %
Other Fibers	Fibrous Glass		Mineral se Wool	Synthetic		Other		Matrix	
Layer 01	_	-	-	-		_	_	100 %	
				_		_	_	100 %	
•	-								
Layer 02 Layer 03	-	-	_	_		_	_	98 %	



4321 South Corbett Ave., Ste A

Portland Lab/Cor Portland, Inc.

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

Report Date: 03/24/2021

P.O. No: n/a

Asbestos and Environmental Analysis

PBS Engineering and Environmental Client:

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc.

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID:	23514.174	I-0125		Sample ID:	S71		Date Analyzed:	03/24/2021	
Client Sample Des	cription:						Analyst:	Tim Cammann	
Asbestos Mineral		Layer	O						Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
vinyl, tan/gray		23 %	-	-	-				NAD
Layer 02									
fibrous backing,	gray	23 %	55 %	-	-				55 %
Layer 03									
thin mastic, tan		8 %	-	-	-				NAD
Layer 04									
vinyl, tan/green		20 %	-	-	-				NAD
Layer 05									
woven fibers, tar with thin mastic,		20 %	-	-	-				NAD
Layer 06									
fibrous material,	black	6 %	-	-	-				NAD
Other Fibers	Fibrous	3	Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other		Matri	x
Layer 01	-	-	-	-		-	-	100	%
Layer 02	-	20 %	-	-		-	-	25	
Layer 03	-	18 %	-	-		-	-	82	
Layer 04	-	40 %	-	-		-	-	60	
Layer 05	-	50 %	-	-		-	-	50	
Layer 06	-	70 %	-	-		-	-	30	%
Client Sample ID:	23514.174	I-0126		Sample ID:	S72		Date Analyzed:	03/24/2021	
Client Sample Des				•			Analyst:	Tim Cammann	
Asbestos Mineral	-	Layer					•		Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Layer 01									
textured coating powder, tan/gray		20 %	-	-	-				NAD
Layer 02									
granular compac powder, gray	ct	80 %	-	-	-				NAD
Other Fibers	Fibrous	3	Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other		Matri	x
Layer 01	-	-	-	-		-	-	100	%
Layer 02	-	Trace	-	-		-	-	100	%



LabCor Lab/Cor Portland, Inc. Portland

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

Fibrous

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

> 4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc

Project Number: 23514.174 Phase 0001

Project Notes:

Report Number: 210924R01 Report Date: 03/24/2021

P.O. No: n/a

Client Sample ID: 23514.174-0127 Sample ID: S73 Date Analyzed: 03/24/2021

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent Percent: Chrysotile Crocidolite Amosite Asbestos:

Homogeneous

loose granular powder, 100 % NAD

gray

Other Fibers Glass Wool Other Cellulose Synthetic Matrix

Trace 100 %

Client Sample ID: 23514.174-0128 Sample ID: S74 Date Analyzed: 03/24/2021

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent

Percent: Chrysotile Crocidolite Amosite Asbestos:

Homogeneous

rocky fibrous tar, black 100 % NAD

Fibrous Mineral Other Fibers

Mineral

Other Glass Cellulose Wool Synthetic Matrix

15 % 3 % 82 %

Client Sample ID: 23514.174-0129 Sample ID: S75 Date Analyzed: 03/24/2021

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent Percent: Chrysotile Crocidolite Asbestos:

Amosite Homogeneous

100 % rocky fibrous tar, black NAD

Fibrous Mineral Other Fibers

Glass Wool Other Cellulose Synthetic Matrix 15 % Trace 85 %

Client Sample ID: 23514.174-0130 Sample ID: S76 Date Analyzed: 03/24/2021 **Client Sample Description:** Analyst: Tim Cammann

Asbestos Mineral Fibers Percent

Percent: Chrysotile Asbestos: Amosite Crocidolite

Homogeneous

material, off-white, with

compact powdery 100 % NAD

paint, gray

Other Fibers **Fibrous** Mineral

Glass Cellulose Wool Synthetic Other Matrix

100 %

LabCor Lab/Cor Portland, Inc. Portland

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

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Report Number: 210924R01

P.O. No: n/a

Tim Cammann

Analyst:

Report Date: 03/24/2021

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Inc

Project Number: 23514.174 Phase 0001

Project Notes:

Client Sample ID: 23514.174-0131 Sample ID: S77 Date Analyzed: 03/24/2021

Client Sample Description:

Percent **Asbestos Mineral Fibers** Laver Percent: Chrysotile Crocidolite Asbestos: Amosite

Homogeneous

fibrous material. 100 % NAD

black/brown

Other Fibers **Fibrous** Mineral

Glass Wool Other Cellulose Synthetic Matrix 80 % 20 %

Client Sample ID: 23514.174-0132 Sample ID: S78 Date Analyzed: 03/24/2021

Client Sample Description: Analyst: Tim Cammann

Asbestos Mineral Fibers Layer Percent

Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

100 % soft rubbery material, NAD

gray

Other Fibers Fibrous Mineral Wool Other

Glass Cellulose Synthetic Matrix 100 %

Client Sample ID: 23514.174-0133 Sample ID: S79 Date Analyzed: 03/24/2021

Client Sample Description: Analyst: Tim Cammann **Asbestos Mineral Fibers** Layer

Percent Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

hard flexible material, off-100 % NAD

white/gray/blue

Other Fibers **Fibrous** Mineral Glass Other Wool Cellulose Synthetic Matrix

98 % 2 %

LabCor Portland, Inc. 4321 South Corbett Ave., Ste A

BULK SAMPLE ASBESTOS ANALYSIS

Phone: (503) 224-5055 www.labcorpdx.com

Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

Portland, OR 97239

4412 S Corbett Avenue Portland, OR 97239

Job Number: 210924

Project Name:

Project Number: 23514.174 Phase 0001

Project Notes:

Report Date: 03/24/2021

P.O. No: n/a

Report Number: 210924R01

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

PLM Technical Manager



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.:	23514.174	Phase 0001					
Individuals signin original. The Rec immediately to Se	ng this form warrant eiver should comple ender.	that the inform	nation provided is ep a copy and retu	correct and comple rn the original to th	te. The Sender sho ne Sender. Receive	uld keep a copy r shall report dar	and send the mage of package
SENDER				RECEIVER			
Date Sent:	March 17, 2021			Date Receiv	ved:	/2 1	- -
PBS Engineeri	ng and Environ	nental Inc.		Company:	Lab Cor		
4412 S Corbet	tt Avenue			Address:	4321 S Corbe		
Portland, OR 9	97239				Portland, OR		
503,248.1939	, Fax: 866.727.01	140		MANK	503-224-5055 2002011		
Name		-, 1		Name	J.	1//	11:10
#2		3/12/21	[See	1010		_ 4 <u>07</u> 0	12
Authorized Si	gnature	Date	Time	Authorized	Signature	Date	Time
Sender's ID N	o.	Brief E	Description	·	Receiver's ID N	ło.	
23514.174-000	D1		<u></u> .				
23514.174-000	D2						
23514.174-000							
23514.174-000	04					· 	
23514.174-000	05				<u> </u>		
23514.174-00	06				_ ·		
23514.174-00	07 <u></u>						
23514.174-00	08						
23514.174-00	09 <u> </u>						
23514.174-00							
23514.174-00)11					.	
23514.174-00)12 <u> </u>					<u></u>	
23514.174-00)13					<u></u>	

23514.174-0014



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

23514.174-0015		
23514.174-0016		
23514.174-0017		
23514.174-0018		
23514.174-0019		
23514.174-0020		
23514.174-0021		
23514.174-0022		
23514.174-0023		
23514.174-0024		
23514.174-0025		
23514.174-0026	 •	
23514.174-0027	 -	
23514.174-0028	 -	
23514.174-0029	 -	
23514.174-0030	-	
23514.174-0031	 -	
23514.174-0032	 -	
23514.174-0033	 -	
23514.174-0034	 _	
23514.174-0035	 _	
23514.174-0036	 -	
23514.174-0037	 _	
23514.174-0038	 _	
23514.174-0039	 _	



TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES 23514.174-0040 23514.174-0041 23514.174-0042 23514.174-0043 23514.174-0044 23514.174-0045 23514.174-0100 23514.174-0101 23514.174-0102 23514.174-0103 23514.174-0104 23514.174-0105 23514,174-0106 23514.174-0107 23514.174-0108 23514.174-0109 23514.174-0110 23514.174-0111 23514.174-0112 23514.174-0113 23514.174-0114 23514.174-0115 23514.174-0116 23514.174-0117 23514.174-0118



TRAN	NSMITTAL AND CHAIN OF	CUSTODY FOR ASB	ESTOS BULK SAMPLES	
23514.174-0119		_		
23514.174-0120				
23514.174-0121		_		
23514.174-0122				
23514.174-0123				_
23514.174-0124				
23514.174-0125				
23514.174-0126				
23514.174-0127				
23514.174-0128				
23514.174-0129				
23514.174-0130		.		
23514.174-0131				
23514.174-0132				
23514.174-0133				
notification if samples will Request verbal results by:	AM/PM		ith dispersion staining. I	PBS requests prior
Please fax and mail the res				
SPECIAL INSTRUCTIONS	:			SM



LABORATORY REPORT

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

Attn: Alex Johnson Phone: 503-248-1939

Email: alex.johnson@pbsusa.com

RJ Lee Group Job No.: PA180320210004 Samples Received: March 18, 2021 Report Date: March 24, 2021 Client Project: 23514.174 Phase 0001

Purchase Order No.: N/A Matrix: Solid

Prep/Analysis: EPA 3050B / EPA 6010C-Paint

				Sample Co	oncentration	Minimum Reporting Limit			
Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg	Analysis Date	Q
LB23514.174-1001	PA180320210004-001	NP	Lead	< 0.00119	< 11.9	0.00119	11.9	3/18/2021	A
LB23514.174-1002	PA180320210004-002	NP	Lead	< 0.00117	< 11.7	0.00117	11.7	3/18/2021	Α
LB23514.174-1003	PA180320210004-003	NP	Lead	10.9	109000	0.231	2310	3/19/2021	Α
LB23514.174-1004	PA180320210004-004	NP	Lead	5.06	50600	0.234	2340	3/19/2021	A
LB23514.174-1005	PA180320210004-005	NP	Lead	0.0562	562	0.00115	11.5	3/18/2021	Α
LB23514.174-1006	PA180320210004-006	NP	Lead	0.00202	20.2	0.00119	11.9	3/18/2021	A
LB23514.174-1007	PA180320210004-007	NP	Lead	4.64	46400	0.249	2490	3/19/2021	Α
LB23514.174-1008	PA180320210004-008	NP	Lead	0.275	2750	0.0119	119	3/19/2021	A

Comments:

Report Qualifiers (Q):

P: PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N: NY ELAP Accredited (NY ELAP Lab Code 10884)

A: AIHA-LAP, LLC Accredited (Lab ID 100364)

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

- : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accredidations

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 17025:2017 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.





Phase 0001

Project No.:

23514.174

PBS Engineering and Environmental Inc.

PA180320210004

March 17, 2021

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Individuals signing this form warrant that the in original. The Receiver should complete the form package immediately to Sender.	formation provided is corre , keep a copy and return th	ect and complete. The original to the Sen	he Sender should keep a copy der. Receiver shall report dan	and send the nage of			
SENDER		RECEIVER					
Date Sent: March 17, 2021		Date Received: 03/921					
PBS Engineering and Environmental Inc			Lee Group				
Portland, OR 97239 503,248.1939, Fax: 866.727.0140		Address: 350 Hochberg Road Monroeville, PA 15146 724-325-1776					
Name	.//	Name					
	3/17/21	-/A	/	03/02/ 1/0			
Authorized Signature	Date	Authorized Sign	ature	Date //			
Sender's ID No. LB23514.174-1001	f Description	Recei	iver's ID No.				
LB23514.174-1002							
LB23514.174-1003							
LB23514.174-1004							
LB23514.174-1005							
LB23514.174-1006							
LB23514.174-1007							
LB23514.174-1008							
ANALYSIS REQUESTED:	Please analyze the enclosed PBS requests prior notification	8 sample(s) for LEAD on if samples will be c	content using Atomic Absorption	on Method.			
LEAD: Paint							
☐ Wipe	Please fax and mail the resul	ts to the above addre	ess.				
Soil/Misc.	TURNAROUND DECIR						
☐ Air	TURNAROUND DESIR	ED:					
TCLP	5 Day						
SPECIAL INSTRUCTIONS:							
				SW-			

Page 1

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:

02/11/2020



Course Location:

Portland, OR

Certificate:

IMR-20-2771B

CCB #SRA0615 4-Hr Training

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

Expiration Date:

02/11/2021

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

Andy Fridley, Instructor

andew fisley