

# Pre-Renovation Hazardous Building Materials Survey

Fern Ridge Middle School 88831 Territorial Road Elmira, OR 97347

Prepared for:

Fern Ridge School District

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Laboratory Data Not Numbered AHERA Certificates Not Numbered

September 2014 Project No.: 23544.000 Phase No.: 0004

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#### **GENERAL INFORMATION**

#### **BUILDING DATA**

Fern Ridge Middle School 88831 Territorial Road Elmira, OR 97347

#### **CLIENT DATA**

Fern Ridge School District 88834 Territorial Road Elmira, OR 97437

#### SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed a pre-renovation hazardous building materials survey of accessible building areas of Fern Ridge Middle School in Elmira, Oregon. The survey was performed in accordance with Occupational Safety and Health Administration (OSHA) in 29 Code of Federal Regulations (CFR) 1910.1001. This report is compiled with the following information:

- The type, location, and approximate quantity of suspect asbestos-containing materials
- Bulk sampling of selected suspect building materials
- Lead paint sampling
- · Inspection summary
- Laboratory analytical data of bulk material sampled
- · Suspect polychlorinated biphenyl (PCB) light ballast inspection

PBS endeavored to locate all of 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.

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Project Manager

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Signature

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Date



Engineering + Environmental September 2014

DATES SURVEYED BY ACTIVITY

7/21/2014 Rich Dufresne Inspect and Sample

PBS has investigated accessible areas inside of the building(s) to locate suspect asbestos-containing materials (ACM). 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.

Result	Material (type)	<u>Location</u>	Approx. Quantity
(+)	Vinyl Floor Tile/Mastic; 12" White	Storage closet adjacent kitchen, Room 24	580 SF
(+)	Vinyl Floor Tile/Mastic; White 12"	Music room; under carpet	2,400 SF
(+)	Vinyl Floor Tile/Mastic; 12" White	Northeast science lab work room, and office copy room	400 SF
(+)	Vinyl Floor Tile/Mastic; 9" Red	Office areas, water heater closets	1,100 SF
(+)	Sheet Floor Covering; Yellow Aggregate	Kitchen	510 SF
(+)	Sheet Floor Covering; Yellow	Offices work room, restrooms, custodial restroom	300 SF
(+)	Sheet Floor Covering; Tan	Room 20 Home Economics; Classroom 19 closet	1,020 SF
(+)	Cement Asbestos Board Ceiling Panels	Band practice rooms	150 SF
(+)	Cement Asbestos Board Lab Tops and Sinks	Science classrooms	160 SF
(+)	Exterior Cement Asbestos Board Panels	Building exterior below windows	35 EA
(+)	Black Sink Undercoating	Classrooms 20, 21, 22, band room, science rooms, library and other various locations	20 EA
(+)	Joint Compound	Boy's restroom, Room 19 (less than 1% chrysotile)	400 SF



(+) Residual Mastic Under Music room; music offices 3,200 SF

Carpet

#### MATERIALS WHICH TESTED NEGATIVE FOR ASBESTOS

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

<u>Location</u>
Above music room office
Throughout
Weight room and band rooms
Throughout
Throughout
Various locations throughout
Interior and exterior concrete masonry unit (CMU) walls
Building exterior
Above ceilings throughout
Multi-purpose commons and east corridor
Weight room, band room
Various locations throughout

#### **BACKGROUND**

On July 22, 2014, PBS Engineering and Environmental Inc. (PBS) performed a pre-renovation hazardous building materials survey of the Fern Ridge Middle School located at 88831 Territorial Road in Elmira, Oregon.

The purpose of the survey was to identify asbestos-containing building materials, lead-based paint and other hazardous building materials that be impacted by proposed building improvements.

This survey is compiled to satisfy the requirements to perform an asbestos inspection prior to any renovation or demolition activities under the Oregon Administrative Rule (OAR) 340-248-0270 and Occupational Safety and Health Administration (OSHA) hazard communication requirements.

#### **ASBESTOS SUMMARY**

Bulk samples of suspect asbestos-containing materials (ACM) were collected by a PBS Asbestos Hazard Emergency Response Act (AHERA) accredited inspector and submitted under chain-of-custody to Lab/Cor, Inc. of Portland, Oregon, for polarized light microscopy (PLM) analysis analysis.

 Asbestos-containing vinyl floor tile and associated mastic is present in various locations throughout the school. The floor tile is overlaid with carpet in many areas.

There is evidence of past asbestos flooring abatement projects; additional asbestos-containing vinyl floor tile may be concealed in other locations throughout the school building. Residual floor tile mastic was identified in samples of carpet mastic in the music room.

Asbestos-containing floor tile was observed in good condition in all areas with the exception of minor damage to the red, nine-inch (9") floor tile located in each of the three water heater rooms in the science classrooms wing. The material is non-friable in its current state.

- Asbestos-containing sheet floor covering is present in the kitchen, home economics classroom, and staff restrooms. In the restrooms, the sheet floor covering is used as a wainscot that extends approximately 4 feet up each wall.
  - The sheet floor covering was observed in good condition. The material is non-friable. However, when removed or damaged, the fibrous backing is highly friable.
- Cement asbestos board ceiling panels are present in the music practice rooms. The panels are perforated and installed into a "T" bar grid system.
  - The cement asbestos ceiling panels are non-friable and in good condition. The ceiling panels should not be disturbed as movement may dislodge asbestos fibers bound in the cement matrix.
- Cement asbestos board panels are also present at the exterior windows. The asbestos panels are installed below the windows in the aluminum window assemblies.
  - The cement asbestos panels are non-friable. Several damaged or cracked panels were observed although none of the damage is significant. Several panels have been replaced with plywood.
- The science classroom lab table tops and counter tops are asbestos-containing. The heavy black lab tops are non-friable and in good condition.



- Stainless steel sinks, which utilize an asbestos-containing undercoating, are present in a variety
  of locations. The asbestos-containing coatings are spray applied as an insulator and sound
  dampener to the underside of the metal sinks. The asbestos-containing coating was observed in
  a variety of colors. The material is non-friable and in good condition.
- Less than one percent (<1%) asbestos was indicated in the joint compound of two samples (samples 17 and 21). Samples 17 and 21 were collected in the boy's restroom and Room 19, respectively. All other joint compound samples indicated no asbestos detected.

Please refer to the asbestos bulk sample inventory and laboratory report for specific asbestos sample locations and test results.

#### **LEAD SUMMARY**

Paint-chip samples were collected from representative interior and exterior painted building components. These samples represent the major painted components of the building. The paint samples were submitted under chain-of-custody to R.J. Lee Group in Monroeville, Pennsylvania, for lead analysis by flame atomic absorption (FLAA).

The paint chip samples revealed relatively low concentrations of lead in paint.

Please refer to the lead sample inventory and laboratory report for specific lead sample locations and test results.

For reference, the Environmental Protection Agency (EPA) uses 5,000 parts per million (ppm) as the threshold limit for the definition of lead-based paint. Lead in any concentration may become airborne above the OSHA action level during certain trigger activities. Lead safe work practices should always be employed when impacting paint that contains lead in any concentration.

## POLYCHLORINATED BIPHENYL (PCB) CONTAINING BALLASTS AND MERCURY-CONTAINING LAMPS

Fluorescent light fixtures that utilize mercury-containing lamps and suspect polychlorinated biphenyl (PCB) containing ballasts were observed in the office areas. The inspector disassembled representative fixtures and observed "No PCB" labeling on the ballasts. Each ballast should be inspected by the demolition contractor to ensure that all ballasts are consistent with those observed.

Approximately 1200 four-foot lamps and 16 eight-foot lamps that contain mercury were observed. The lamps should be disposed of properly.

<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23544.000-0001	Glued-on Ceiling	Tiles	Weight room; glued-on ceiling till perf	es, 12" fissures and pin	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0002	Mastic	Layer:	Weight room; glued-on ceiling till <b>Description:</b>	e, brown mastic  Analysis:	Lab Cor
		Layer 1	mastic, brown	No Asbestos Detected	
23544.000-0003	Glued-on Ceiling	Tiles	Weight room; glued-on ceiling tile		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0004	Mastic	Layer:	Weight room; glued-on ceiling tile  Description:	e, brown mastic  Analysis:	Lab Cor
		Layer 1	mastic, brown	No Asbestos Detected	
		Layor	madio, brown	No Alabatica Batalica	
23544.000-0005	Paint		Weight room; wall, masonry paint		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	particulate with paint, green/off-white	No Asbestos Detected	
23544.000-0006	Gypsum Wallboar Compound	rd/Joint	Weight room; office, gypsum wallboard with joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, green with fine compact powder, off-white	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0007	Mastic		Weight room; wall mastic, masor	nry panels	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose mastic, orange	No Asbestos Detected	
23544.000-0008	Vinyl Floor Tile		East hallway; ramp area, 12" vin blue marble, yellow mastic	yl floor tile, white with	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, off-white	No Asbestos Detected	
		Layer 2	mastic, orange	No Asbestos Detected	

<u>Code</u>	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23544.000-0009	Lay-in Ceiling Tile		Hallway outside Room 22; lay-in fissures and pin perf	ceiling tiles, 12" linear	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0010	Sink Undercoating	) Layer:	Offices; Room 22, black sink und <b>Description:</b>	dercoating  Analysis:	Lab Cor
		Layer 1	loose mastic, black	<1% Chrysotile	
23544.000-0011	Sink Undercoating		Offices; Room 21, black sink und	-	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose mastic, black	<1% Chrysotile	
23544.000-0012	Material Debris		Hallway outside Room 22; above roofing debris	e ceiling tiles, black	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	tar, black	No Asbestos Detected	
		Layer 2	compressed fibers with powder, gray	No Asbestos Detected	
23544.000-0013	Covebase/Mastic		Room 21; 4" black covebase, bro	own mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rubbery material, brown	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
23544.000-0014	Lay-in Ceiling Tile	(2) Layer:	Room 21; 2'x4' pin perf lay-in ceiling tiles,  Description:  Analysis:		Lab Cor
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0015	Vinyl Floor Tile (1)	Layer:	Storage closet; 12" white vinyl flo  Description:	oor tile Analysis:	Lab Cor
		Layer 1	vinyl tile, off-white/gray	<1% Chrysotile	
		Layer 2	mastic, black	3% Chrysotile	
23544.000-0016	Sheet Floor Cover	ring <b>Layer:</b>	Kitchen; yellow aggregate sheet <b>Description:</b>	flooring  Analysis:	Lab Cor
		Layer 1	vinyl sheet, tan	No Asbestos Detected	
		Layer 2	fibrous backing, gray	40% Chrysotile	

<u>Code</u>	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
23544.000-0017	Gypsum Wallboar Compound	d/Joint	Boy's restroom; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fine compact powder, off-white with paper backing	<1% Chrysotile	
23544.000-0018	Sink Undercoating	3	Room 20; pink sink undercoating	)	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	powdery putty, purple	3% Chrysotile	
23544.000-0019	Mastic		Room 19; carpet mastic		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	mastic, orange with fibers	No Asbestos Detected	
23544.000-0020	Lay-in Ceiling Tile		Room 19; lay-in ceiling tile		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0021 Gypsum Wallboard/Joint Compound		d/Joint	Room 19; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, white with fine compact powder, white	<1% Chrysotile	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0022	Lay-in Ceiling Tile		Room 19; closet, pin perf lay-in ceiling tile		Lab Cor
	, 0	Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0023	Sheet Floor Cove	ring	Room 19; closet, tan sheet flooring, yellow mastic		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl sheet, tan	No Asbestos Detected	
		Layer 2	fibrous backing, gray	40% Chrysotile	
23544.000-0024	Covebase/Mastic		Band practice room; 4" covebase		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rubbery material, brown	No Asbestos Detected	
		Layer 2	coating, white with fibrous backing	No Asbestos Detected	

<u>Code</u>	<u>Material</u>		<u>Location</u>	Results	<u>Lab</u>
23544.000-0025	Cement Asbestos	Board <b>Layer:</b>	Band practice room; cement asb <b>Description:</b>	estos board, ceiling tiles  Analysis:	Lab Cor
		Layer 1	fibrous cement, gray with paint, white	15% Chrysotile	
23544.000-0026	Glued-on Ceiling	Tiles <b>Layer:</b>	Band practice room; glued-on ce <b>Description:</b>	iling tile Analysis:	Lab Cor
		Layer 1	compressed fibers, gray with paint white	No Asbestos Detected	
23544.000-0027	Mastic		Band practice room; brown mast	ic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers with powder, gray	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
23544.000-0028	Vinyl Floor Tile/M	astic Layer:	Music room; 12" white vinyl floor <b>Description:</b>	tile, black mastic  Analysis:	Lab Cor
		Layer 1	mastic, orange/black	No Asbestos Detected	
		Layer 2	vinyl tile, off-white	<1% Chrysotile	
		Layer 3	mastic, black	No Asbestos Detected	
23544.000-0029	Lay-in Ceiling Tile	: (2) <b>Layer</b> :	Music room office; pin perf lay-in <b>Description:</b>	ceiling tile Analysis:	Lab Cor
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0030	Mastic		Music room office; carpet mastic		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	putty, black with powder	<1% Chrysotile	
23544.000-0031	Caulk	Layer:	Above music room office; HVAC <b>Description:</b>	caulk/sealant Analysis:	Lab Cor
		Layer 1		No Asbestos Detected	
		Layeri	putty, gray	NO Aspesios Delected	
23544.000-0032	Material Debris		Attic above band office; roofing of	debris	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose fibrous particulate, gray/black	No Asbestos Detected	
23544.000-0033	Mastic		Band practice room; carpet mast	iic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	hard compact powder, off- white with mastic, black/orange	4% Chrysotile	



Code	<u>Material</u>		Location	Results	<u>Lab</u>
23544.000-0034	Gypsum Wallboar Compound	rd/Joint	Music (choir) room; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, white with fine compact powder, white	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0035	Sink Undercoating	g	Band room closet; pink sink und	ercoating	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	powdery putty, purple	10% Chrysotile	
23544.000-0036	Cement Asbestos	Board	Band room; by door, cement ask	pestos board	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	particulate, gray with mastic, black	15% Chrysotile	
23544.000-0037	Mastic/Leveling C	ompound	Main commons area; yellow mas	stic, leveling compound	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	hard compact powder, off- white with mastic, orange	No Asbestos Detected	
23544.000-0038	Vinyl Floor Tile/M	astic	Main office area; south office, re black mastic	d vinyl asbestos tile,	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	mastic, orange	No Asbestos Detected	
		Layer 2	vinyl tile, red	7% Chrysotile	
		Layer 3	mastic, black	3% Chrysotile	
23544.000-0039	Lay-in Ceiling Tile	<b>)</b>	Main office area; lay-in ceiling tile	es	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0040	Sheet Floor Cove	rina	Office workroom; yellow sheet flo	poring	Lab Cor
	<b>333</b>	Layer:	Description:	Analysis:	
		Layer 1	vinyl sheet, tan	No Asbestos Detected	
		Layer 2	fibrous backing, gray	40% Chrysotile	
23544.000-0041	Vinyl Floor Tile/M	astic (4)	Office workroom; 12" white vinyl	floor tile, black mastic	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	vinyl tile, off-white	<1% Chrysotile	
		Layer 2	mastic, brown	No Asbestos Detected	
		Layer 3	mastic, black	3% Chrysotile	



Code	<u>Material</u>		<u>Location</u>	<u>Results</u>	<u>Lab</u>
23544.000-0042	Leveling Compou	nd <b>Layer:</b>	Main office; northeast office, level <b>Description:</b>	eling compound  Analysis:	Lab Cor
		Layer 1	hard compact powder, off-white	No Asbestos Detected	
		Layer 2	mastic, orange	No Asbestos Detected	
23544.000-0043	Covebase/Mastic	Lavan	Office workroom; 4" black coveb		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	rubbery material, brown	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
23544.000-0044	Sink Undercoating	g	Office workroom; black sink under		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose mastic, black	2% Chrysotile	
23544.000-0045	Gypsum Wallboar Compound	d/Joint	Main office area; gypsum wallboard, joint compound		Lab Cor
	•	Layer:	Description:	Analysis:	
		Layer 1	paint, off-white	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0046	Vinyl Floor Tile/M	astic (3) Layer:	Water heater closet; 9" red vinyl floor tile, black mastic  Description:  Analysis:		Lab Cor
		Layer 1	vinyl tile, dark red	10% Chrysotile	
		Layer 2	mastic, black	2% Chrysotile	
22544 000 0047	Vinyl Floor Tile/M	aatia	Saigned lab white vinul floor tile	blook mostic	Lab Cor
23544.000-0047	Vinyl Floor Tile/Ma	Layer:	Science lab, white vinyl floor tile, <b>Description:</b>	Analysis:	Lab Coi
		Layer 1	vinyl tile, off-white	<1% Chrysotile	
		Layer 2	mastic, black	3% Chrysotile	
23544.000-0048	Sink Undercoating	9	Northwest classrooms; north closundercoating	set, black sink	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose mastic, black	2% Chrysotile	
23544.000-0049	Cement Asbestos	Board	Northwest classrooms; science r asbestos board counter tops	oom, black cement	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous cement, dark gray	15% Chrysotile, 8% Amos	site

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<u>Code</u>	<u>Material</u>		Location	Results	<u>Lab</u>
23544.000-0050	23544.000-0050 Cement Asbestos Board		Northwest classrooms; science room, black cement asbestos board counter tops		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous cement particulate, dark gray	15% Chrysotile, 8% Amo	site
23544.000-0051	Lay-in Ceiling Tile	e (1) Layer:	Classroom 12; lay-in ceiling tile <b>Description:</b>	Analysis:	Lab Cor
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0052	Material Debris		West hallway corridor; above ce debris	iling tile, black roofing	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous mastic, black	No Asbestos Detected	
23544.000-0053	Gypsum Wallboa Compound	rd/Joint	Room 13; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	hard compact powder, off- white with paint, white	No Asbestos Detected	
23544.000-0054	054 Gypsum Wallboard/Joint Compound		Northwest classroom corridor; g compound	Lab Cor	
		Layer:	Description:	Analysis:	
		Layer 1	hard compact powder, off- white with paint, white	No Asbestos Detected	
23544.000-0055	Gypsum Wallboar Compound	rd/Joint	Lab room storage; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, white with fine compact powder, off-white	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0056	Material Debris	Layer:	Southwest classroom; corridor, Description:	black roofing debris  Analysis:	Lab Cor
		Layer 1	mastic, black	No Asbestos Detected	
				, lobosico Dolosico	
23544.000-0057	Lay-in Ceiling Tile	e (2)	Classroom 4		Lab Cor
	. 0	Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	

<u>Code</u>	<u>Material</u>		Location	Results	<u>Lab</u>
23544.000-0058	Lay-in Ceiling Tile		Classroom 7		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0059	Material Debris	Layer:	Main hallway corridor; lay-in ceili <b>Description:</b>	ng tile debris  Analysis:	Lab Cor
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0060	Material Debris		Main hallway; corridor, black roo	-	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	tar, black	No Asbestos Detected	
23544.000-0061	Building Paper	Layer:	Locker room area; black vapor b <b>Description</b> :	arrier building paper  Analysis:	Lab Cor
		Layer 1	paper backing with paint, white	No Asbestos Detected	
00544 000 0000	\( \tau \)		D 04 40 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
23544.000-0062	Vinyl Floor Tile/Ma	astic Layer:	Room 24; 12" white vinyl floor tile <b>Description</b> :	e, black mastic  Analysis:	Lab Cor
		Layer 1	vinyl tile, off-white	<1% Chrysotile	
		Layer 2	mastic, black	3% Chrysotile	
23544 000-0063	Covebase/Mastic		Room 24; 4" black covebase, bro	own mastic	Lab Cor
200111000 0000	Covosaco, macilo	Layer:	Description:	Analysis:	200 00.
		Layer 1	rubbery material, brown	No Asbestos Detected	
		Layer 2	mastic, brown	No Asbestos Detected	
		Layer 3	fibrous particulate, gray	No Asbestos Detected	
23544.000-0064	Lay-in Ceiling Tile	(2)	Room 9; lay-in ceiling tile		Lab Cor
	,	Layer:	Description:	Analysis:	
		Layer 1	compressed fibers, gray with paint, white	No Asbestos Detected	
23544.000-0065	Material Debris		Room 2; above ceiling, black roo	fing debris	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	loose granular particulate, gray with mastic, brown	No Asbestos Detected	
23544.000-0066	Gypsum Wallboar Compound	d/Joint	Room 2; gypsum wallboard, joint	compound	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, white	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	

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<u>Code</u>	<u>Material</u>		Location	Results	<u>Lab</u>
23544.000-0067	Gypsum Wallboar Compound	d/Joint	Room 9; gypsum wallboard, joint compound		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	paint, white with fine compact powder	No Asbestos Detected	
		Layer 2	compact chalky material with paper, white	No Asbestos Detected	
23544.000-0068	Cement Asbestos	Board	Outside Room 2; west side of schoord	hool, cement asbestos	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous cement, gray	15% Chrysotile	
23544.000-0069	Cement Asbestos	Board	Outside Room 2; west side of schoord	nool, cement asbestos	Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous cement, gray	15% Chrysotile	
23544.000-0070	Paint	Layer:	Building exterior; exterior masoning Description:	ry paint <b>Analysis:</b>	Lab Cor
		Layer 1	paint, beige with powder, off- white	No Asbestos Detected	
23544.000-0071	Paint	Layer:	Building exterior; exterior masoni <b>Description</b> :	ry paint <b>Analysis:</b>	Lab Cor
		Layer 1	paint, beige with powder, off- white	No Asbestos Detected	
23544.000-0072	Paint	Layer:	Building interior; interior masonry <b>Description</b> :	paint Analysis:	Lab Cor
		Layer 1	paint, beige with powder, off- white	No Asbestos Detected	
23544.000-0073	Cement Asbestos		Building exterior; cement asbesto		Lab Cor
		Layer:	Description:	Analysis:	
		Layer 1	fibrous cement, gray	15% Chrysotile	
23544.000-0074	Paint	Layer:	Building exterior; exterior masoni <b>Description:</b>	ry paint <b>Analysis:</b>	Lab Cor
		Layer 1	paint, beige with powder, off- white	No Asbestos Detected	

September 2014

#### **LEAD SAMPLE INVENTORY**

<u>Code</u>	<u>Material</u>	<u>Analysis</u>	Location	<u>Lab</u>
PAINT				
LB23544.000-1001	Paint	269 ppm	Weight room; wall, concrete masonry unit (CMU), light green, intact condition	R.J. Lee Group
LB23544.000-1002	Paint	100 ppm	Music room; wall, gypsum, white, intact condition	R.J. Lee Group
LB23544.000-1003	Paint	3,290 ppm	Room #13; wall, gypsum, white, intact condition	R.J. Lee Group
LB23544.000-1004	Paint	<98.1 ppm	Gym; wall, plaster, white, intact condition	R.J. Lee Group
LB23544.000-1005	Paint	704 ppm	Locker room; wall, CMU, white, intact condition	R.J. Lee Group
LB23544.000-1006	Paint	<97.2 ppm	Shed exterior; siding, wood, gray, peeling condition	R.J. Lee Group
LB23544.000-1007	Paint	<93.0 ppm	Exterior wall; CMU, white, intact condition	R.J. Lee Group
LB23544.000-1008	Paint	2,510 ppm	Exterior gym wall; siding, wood, black, fair condition	R.J. Lee Group

#### LabCor Portland

Inc

#### Lab/Cor Portland, Inc.

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

#### Asbestos and Environmental Analysis

Client: PBS Engineering and Environmental

> 4412 SW Corbett Avenue Portland, OR 97239

Report Number: 141890R01 Report Date: 07/31/2014

Job Number: 141890

P.O. No: n/a

Asbestos:

Percent

Asbestos:

**Project Name:** 

**Project Number:** 23544.000 Phase 0004

**Project Notes:** 

23544.000-0001 Sample ID: S1 Date Analyzed: 07/30/2014 Client Sample ID: Analyst: Ryan Brown

Amosite

**Client Sample Description:** 

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

Homogeneous

compressed fibers, gray 100 % NAD

with paint, white

Fibrous Mineral Other Fibers

Glass Wool Other Cellulose Synthetic Matrix 25 %

25 % 50 %

Sample ID: S2 Date Analyzed: 07/30/2014

Client Sample ID: 23544.000-0002

**Client Sample Description:** Analyst: Ryan Brown

**Asbestos Mineral Fibers** Layer

Percent Percent: Chrysotile Crocidolite Asbestos: Amosite

Homogeneous

mastic, brown 100 % NAD

**Other Fibers** Fibrous Mineral

Glass Cellulose Wool Other Synthetic Matrix

100 %

Client Sample ID: 23544.000-0003

**Client Sample Description:** Analyst: Ryan Brown

**Asbestos Mineral Fibers** Layer

Sample ID: S3

Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

compressed fibers, gray 100 % NAD with paint, white

**Other Fibers Fibrous** 

Mineral Glass Wool Other Cellulose Synthetic Matrix

25 % 50 % 25 %

Client Sample ID: 23544.000-0004 Sample ID: S4 Date Analyzed: 07/30/2014 **Client Sample Description:** Analyst: Ryan Brown

Amosite

**Asbestos Mineral Fibers** Laver Percent Crocidolite

Percent: Chrysotile

Homogeneous mastic, brown 100 % NAD

**Other Fibers Fibrous** Mineral

Glass Wool Other Cellulose Synthetic Matrix

100 %

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Date Analyzed:

07/30/2014

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

lob Number: 141890	Report Number: 141890R01 Report Date: 07/31/2014
Client Sample ID: 23544.000-0005 Sample ID: S5 Client Sample Description:	Date Analyzed: 07/30/2014 Analyst: Ryan Brown
<u>Asbestos Mineral Fibers</u> Layer Percent: Chrysotile Amosite C	Percent rocidolite Asbestos:
Homogeneous  particulate with paint, 100 %	- NAD
green/off-white  Other Fibers Fibrous Glass Cellulose Wool Synthetic	Other Matrix 100 %
Client Sample ID: 23544.000-0006 Sample ID: S6	<b>Date Analyzed:</b> 07/30/2014
Client Sample Description: <u>Asbestos Mineral Fibers</u> Layer  Percent: Chrysotile Amosite C	Analyst: Ryan Brown Percent rocidolite Asbestos:
Layer 01  paint, green with fine 10 % compact powder, off-white	- NAC
Layer 02  compact chalky material 90 %	- NAC
with paper, white  Other Fibers Fibrous Mineral Glass Cellulose Wool Synthetic	Other Matrix
Layer 02 - 2 %	100 % 98 %
Client Sample ID: 23544.000-0007 Sample ID: S7 Client Sample Description:	Date Analyzed: 07/30/2014 Analyst: Ryan Brown
Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite C	rocidolite Percent Asbestos:
Homogeneous loose mastic, orange 100 %	- NAC
Other FibersFibrousMineralGlassCelluloseWoolSynthetic-2 %	Other Matrix 98 %
Client Sample ID: 23544.000-0008 Sample ID: S8 Client Sample Description:	Date Analyzed: 07/30/2014 Analyst: Ryan Brown
·	rocidolite Percent Asbestos:
Layer 01 vinyl tile, off-white 90 %  Layer 02	- NAC
mastic, orange 10 %	- NAC
Other Fibers     Fibrous Glass     Mineral Wool     Synthetic       Layer 01     -     -     -     -	Other Matrix 100 %
Laver 01	100 %

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890	)							oort Number: Report Date:	
Client Sample ID: 23 Client Sample Descrip		-009		Sample ID:	S9		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibe	ers_	Layer Percent: 0	Chrysotile	Amosite	Crocidolite		Analyst.	Kyan biowii	Percent Asbestos:
Homogeneous									
compressed fibers, quith paint, white	gray	100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
	-	25 %	50 %	-		-	-		25 %
Client Sample ID: 23 Client Sample Descrip	544.000 tion:	-0010		Sample ID:	S10		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibe	ers_	Layer Percent: 0	Chrysotile	Amosite	Crocidolite		•	·	Percent Asbestos:
Homogeneous									
loose mastic, black		100 %	Trace	-	-				< 1 %
Other Fibers	Fibrous		Mineral			Other			
	Glass	Cellulose	. Wool -	Synthetic -		-	_		Matrix 100 %
Client Commis ID. 02	E 4 4 000	0044		Commis ID:	C11		Data Analysis de	07/30/2014	.00 //
Client Sample ID: 23 Client Sample Descrip	544.000	-0011		Sample ID:	511		Date Analyzed: Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer					Analyst.	Ryan blown	Percent
710000100 IIIIII OTALI I ISO			Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
loose mastic, black		100 %	Trace	-	-				< 1 %
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		100 %
Client Sample ID: 23	544.000	-0012		Sample ID:	S12		Date Analyzed:	07/30/2014	
Client Sample Descrip	tion:						Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer Percent: 0	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01									
tar, black		85 %	-	-	-				NAD
Layer 02									
compressed fibers w powder, gray		15 %	-	-	-				NAC
Other Fibers	Fibrous Glass		Mineral Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	25 %	50 %	-		-	-		15 %
								Perlite	10 %

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Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 14189	0							oort Number: Report Date:	
Client Sample ID: 2 Client Sample Descri	3544.000 ption:	-0013		Sample ID:	S13		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fib		Layer Percent: C	hrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01		22.0/							
rubbery material, b Layer 02	rown	80 %	-	-	-				NAI
mastic, brown		20 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	Trace	-	-		-	-		100 %
Client Sample Descri				Sample ID:	S14		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fib		Layer Percent: C	hrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous									
compressed fibers with paint, white	, gray	100 %	-	-	-				NAI
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			
	-	25 %	50 %	-		-	-		Matrix 25 %
•	3544.000	-0015		Sample ID:	S15		Date Analyzed:	07/30/2014	
Client Sample Descri Asbestos Mineral Fib		Layer					Analyst:	Ryan Brown	Percent
		Percent: C	hrysotile	Amosite	Crocidolite				Asbestos
Layer 01			_						
vinyl tile, off-white/	gray	90 %	Trace	-	-				< 1 %
Layer 02 mastic, black		10 %	3 %	_	_				3 %
Other Fibers	Fibrous		Mineral						σ,
<del></del>	Glass	Cellulose	Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		97 %
	3544.000	-0016		Sample ID:	S16		Date Analyzed:	07/30/2014	
Client Sample Descri Asbestos Mineral Fib		Layer					Analyst:	Ryan Brown	Percent
novestos Millerai Fil		Percent: C	hrysotile	Amosite	Crocidolite				Asbestos
Layer 01									
vinyl sheet, tan		50 %	-	-	-				NAI
Layer 02 fibrous backing, gra	av	50 %	40 %	_	_				40 %
Other Fibers	ay Fibrous		Mineral	-	-				<del>4</del> 0 7
	Glass	Cellulose		Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	60 %	-	-		-	-		0 %

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890						Re	port Number: Report Date:	
Client Sample ID: 23544.00	0-0017		Sample ID:	S17		Date Analyzed:	07/30/2014	
Client Sample Description:						Analyst:	Ryan Brown	
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
fine compact powder, off- white with paper backing	100 %	Trace	-	-				< 1 %
Other Fibers Fibrou		Mineral						
Glass	S Cellulos	se Wool	Synthetic		Other			Matrix
-	4 %	-	-		-	-		96 %
Client Sample ID: 23544.00	0-0018		Sample ID:	S18		Date Analyzed:	07/30/2014	
Client Sample Description:			•			Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer					•	•	Percent
	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
powdery putty, purple	100 %	3 %	-	-				3 %
Other Fibers Fibrou		Mineral						
Glass	S Cellulos	se Wool	Synthetic		Other			Matrix
-	-	-	-		-	-		97 %
Client Sample ID: 23544.00	0-0019		Sample ID:	S19		Date Analyzed:	07/30/2014	
Client Sample Description:			•			Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer							Percent
	Percent:	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous								
mastic, orange with fibers	100 %	-	-	-				NAD
Other Fibers Fibrou		Mineral			<b>.</b>			
Glass	00	se Wool	Synthetic		Other			Matrix
-	2 %	-	2 %		-	-		96 %
Client Sample ID: 23544.00	0-0020		Sample ID:	S20		Date Analyzed:	07/30/2014	
Client Sample Description:			-			Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
compressed fibers, gray with paint, whtie	100 %	-	-	-				NAD
Other Fibers Fibrou	ıs	Mineral						
Glass	S Cellulos	se Wool	Synthetic		Other			Matrix
-	25 %	50 %	-		-	-		25 %

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 14189	0							oort Number: Report Date:	
Client Sample ID: 2 Client Sample Descri	3544.000 ption:	)-0021		Sample ID:	S21		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01  paint, white with fin compact powder, w		10 %	Trace	-	-				< 1 %
Layer 02 compact chalky ma with paper, white	aterial	90 %	-	-	-				NAD
Other Fibers	Fibrous Glass	S Cellulos	Mineral se Wool	Synthetic		Other			Matrix
Layer 01 Layer 02	-	- 2 %	- -	-		-	-		100 % 98 %
	3544.000			Sample ID:	522		Date Analyzed:	07/30/2014	
Client Sample ID. 2 Client Sample Descri		J-0022		Sample ID.	322		Analyst:	Ryan Brown	
Asbestos Mineral Fib	ers	Layer Percent:	Chrysotile	Amosite	Crocidolite		7 and you	, 2.0	Percent Asbestos:
Homogeneous compressed fibers,	, gray	100 %	-	-	-				NAD
with paint, white	<b>-</b>		NA:						
Other Fibers	Fibrous Glass	Cellulos 25 %	Mineral Se Wool 50 %	Synthetic		Other			Matrix 25 %
			30 /6					0=10010011	23 /6
<u>Client Sample ID:</u> 2 Client Sample Descri <sub>l</sub>	3544.000 ntion:	J-UU23		Sample ID:	523		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fib	ers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Andryot	rtyan Brown	Percent Asbestos:
Layer 01									
vinyl sheet, tan		50 %	-	-	-				NAD
Layer 02			10.07						
fibrous backing, gra	-	50 %	40 %	-	-				40 %
Other Fibers	Fibrous Glass	Cellulos	Mineral se Wool	Synthetic		Other			Matrix
Layer 01 Layer 02	-	- 60 %	-	-		-	-		100 % 0 %
	3544.000			Sample ID:	S24		Date Analyzed:	07/30/2014	0 70
Client Sample ID. 2 Client Sample Descri		J-UU24		Sample ID.	324		Analyst:	Ryan Brown	
Asbestos Mineral Fib	ers	Layer Percent:	Chrysotile	Amosite	Crocidolite		7 and you	, 2.0	Percent Asbestos:
Layer 01									
rubbery material, bi	rown	75 %	-	-	-				NAD
Layer 02 coating, white with fibrous backing		25 %	-	-	-				NAD
Other Fibers	Fibrous Glass	S Cellulos	Mineral se Wool	Synthetic		Other			Nantoise
Layer 01	-	-	-	- Synthetic		-	_		Matrix 100 %
Layer 02	-	-	-	-		-	-		100 %

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## LabCor Portland, Inc.

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 141890	)						Re	port Number: Report Date:	
Client Sample ID: 23 Client Sample Descrip	544.000 tion:	0-0025		Sample ID:	S25		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Homogeneous fibrous cement, gray with paint, white	/	100 %	15 %	-	-				15 %
Other Fibers	Fibrous Glass		Mineral Se Wool	Synthetic		Other	_		Matrix 85 %
	544.000	0-0026		Sample ID:	S26		Date Analyzed:	07/30/2014	
Client Sample Descrip <u>Asbestos Mineral Fibe</u>	ers_	Layer Percent:	Chrysotile	Amosite	Crocidolite		Analyst:	Ryan Brown	Percent Asbestos
Homogeneous compressed fibers, g with paint white	gray	100 %	-	-	-				NAI
Other Fibers	Fibrous		Mineral se Wool	Synthetic		Other			Matrix
	-	25 %	50 %	-		-	-		25 %
Client Sample ID: 23	544.000	0-0027		Sample ID:	S27		Date Analyzed:	07/30/2014	
Client Sample Descrip	tion:						Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Layer 01									
compressed fibers w powder, gray	vith	35 %	-	-	-				NAI
Layer 02 mastic, brown		65 %	_	_	_				NAI
Other Fibers	Fibrous	3	Mineral se Wool	Synthetic		Other			Matrix
Layer 01	_	25 %	50 %	-		_	_		25 %
Layer 02	-	Trace	-	-		-	-		100 %
Client Sample ID: 23	544.000	0-0028		Sample ID:	S28		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibe	ers_	Layer Percent:	Chrysotile	Amosite	Crocidolite		, alaiyoti		Percent Asbestos
Layer 01									
mastic, orange/black Layer 02	K	15 %	-	-	-				NAI
vinyl tile, off-white Layer 03		75 %	Trace	-	-				< 1 %
mastic, black		10 %	-	-	-				NAI
Other Fibers	Fibrous Glass		Mineral se Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		100 %
Layer 03	-	-	-	-		-	-		100 %

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 141890						Re	port Number: Report Date:	
Client Sample ID: 23544.000 Client Sample Description:	-0029		Sample ID:	S29		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Ch	rysotile	Amosite	Crocidolite		·	,	Percent Asbestos:
Homogeneous compressed fibers, gray with paint, white	100 %	-	-	-				NAC
Other Fibers Fibrous Glass	Cellulose 25 %	Mineral Wool 50 %	Synthetic		Other -	-		Matrix 25 %
Client Sample ID: 23544.000 Client Sample Description:	-0030		Sample ID:	S30		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
<u>Asbestos Mineral Fibers</u> F	Layer Percent: Ch	rysotile	Amosite	Crocidolite		Analyst	rtyan Brown	Percent Asbestos:
Homogeneous putty, black with powder	100 %	Ггасе	_	-				< 1 %
Other Fibers Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other -	-		Matrix 100 %
Client Sample ID: 23544.000 Client Sample Description:	-0031		Sample ID:	S31		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibers	Layer Percent: Ch	rysotile	Amosite	Crocidolite			. 9	Percent Asbestos:
Homogeneous putty, gray	100 %	_	-	-				NAC
Other Fibers Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix 100 %
Client Sample ID: 23544.000	-0032		Sample ID:	S32		Date Analyzed:	07/30/2014	100 /0
Client Sample Description: Asbestos Mineral Fibers	Layer Percent: Ch	rvsotile	Amosite	Crocidolite		Analyst:	Ryan Brown	Percent Asbestos:
Homogeneous	100 %	-	-	-				NAC
<u>Other Fibers</u> Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
8 %	25 %	-			-		0=10010011	67 %
Client Sample ID: 23544.000 Client Sample Description: Asbestos Mineral Fibers	-0033 Layer		Sample ID:	533		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	Percent
F	Percent: Ch	rysotile	Amosite	Crocidolite				Asbestos:
Homogeneous  hard compact powder, off-white with mastic, black/orange	100 %	4 %	-	-				4 %
Other Fibers Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890								oort Number: Report Date:	
Client Sample ID: 23 Client Sample Descrip	544.000	0-0034		Sample ID:	S34		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	
Asbestos Mineral Fibe	<u>rs</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		Analyst.	Ttyan brown	Percent Asbestos:
Layer 01			·						
paint, white with fine compact powder, wh		10 %	-	-	-				NAD
Layer 02									
compact chalky mate with paper, white	erial	90 %	-	-	-				NAD
Other Fibers	Fibrous Glass	cellulos	Mineral se Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	2 %	-	-		-	-		98 %
Client Sample ID: 23 Client Sample Descrip	544.000 tion:	0-0035		Sample ID:	S35		Date Analyzed: Analyst:	07/30/2014 Ryan Brown	ı
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous powdery putty, purpl	e	100 %	10 %	-	-				10 %
Other Fibers	Fibrous	3	Mineral						
	Glass -	Cellulos -	se Wool -	Synthetic -		Other -	_		Matrix 90 %
Client Sample ID: 23	544.000	-0036		Sample ID:	S36		Date Analyzed:	07/30/2014	
Client Sample Descript							Analyst:	Ryan Brown	l
Asbestos Mineral Fibe	<u>rs</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		·	·	Percent Asbestos:
Homogeneous									
particulate, gray with mastic, black	1	100 %	15 %	-	-				15 %
Other Fibers	Fibrous Glass	Cellulos	Mineral se Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		85 %
Comments: Majority	of samp	le was us	ed because	e very little wa	as submitted wa	as for analy	ysis.		
Client Sample ID: 23	544.000	0-0037		Sample ID:	S37		Date Analyzed:	07/31/2014	
Client Sample Descrip	tion:			-			Analyst:	Ryan Brown	l
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous									
hard compact powde off-white w ith mastic orange		100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	s Cellulos	Mineral se Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		100 %

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Layer 02

60 %

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 1418	90						•	oort Number: Report Date:	
Client Sample ID:	23544.000	-0038		Sample ID:	S38		Date Analyzed:	07/31/2014	0770172014
Client Sample Descr							Analyst:	Ryan Brown	
<u>Asbestos Mineral Fi</u>		Layer					•	,	Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos
Layer 01									
mastic, orange		15 %	-	-	-				NA
Layer 02									
vinyl tile, red		70 %	7 %	-	-				7
Layer 03									
mastic, black		15 %	3 %	-	-				3
Other Fibers	Fibrous	;	Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-		-	-		93 %
Layer 03	-	-	-	-		-	-		97 %
Client Sample ID:	23544.000	-nn39		Sample ID:	S39		Date Analyzed:	07/31/2014	
Client Sample Descr				oumpie ib.	000		Analyst:	Ryan Brown	
Asbestos Mineral Fi	-	Laver					Aldiyoti	rtyan Brown	Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos
Homogeneous									
compressed fibers with paint, white	s, gray	100 %	-	-	-				NA
Other Fibers	Fibrous	;	Mineral						
	Glass	Cellulos	e Wool	Synthetic		Other			Matrix
	-	25 %	50 %	-		-	-		25 %
Client Sample ID:	23544.000	-0040		Sample ID:	S40		Date Analyzed:	07/31/2014	
Client Sample Descr	ription:						Analyst:	Ryan Brown	
Asbestos Mineral Fi		Layer					•	Ţ	Percent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbestos
Layer 01									
vinyl sheet, tan		50 %	-	-	-				NA
Layer 02									
fibrous backing, g	ray	50 %	40 %	-	-				40
Other Fibers	Fibrous	;	Mineral						
<del></del>	Glass	Cellulos	e Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
		00.01							2 0/

0 %

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

ob Number: 14189	0						Re	port Number: Report Date:		
Client Sample ID: 2	3544.000	0-0041		Sample ID:	S41		Date Analyzed:	07/31/2014		
Client Sample Descri	ption:			·			Analyst:	Ryan Brown		
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite		-	•		cent estos
_ayer 01										
vinyl tile, off-white		80 %	Trace	-	-					< 1 9
ayer 02										
mastic, brown		10 %	-	-	-					NA
_ayer 03										
mastic, black		10 %	3 %	-	-					3 9
Other Fibers	Fibrous Glass	S Cellulos	Mineral se Wool	Synthetic		Other			Matrix	
ayer 01	_	-	-	-		-	-		100 %	
Layer 02	-	-	-	-		-	-		100 %	
ayer 03	-	-	-	-		-	-		97 %	
lient Sample ID: 2	3544.000	0-0042		Sample ID:	S42		Date Analyzed:	07/31/2014		
lient Sample Descri							Analyst:	Ryan Brown		
Asbestos Mineral Fib		Layer					, ,	,	Per	cent
		Percent:	Chrysotile	Amosite	Crocidolite				Asbe	estos
ayer 01										
hard compact power off-white	der,	85 %	-	-	-					NA
_ayer 02										
mastic, orange		15 %	-	-	-					NA
Other Fibers	Fibrous	6	Mineral							
	Glass	Cellulos	se Wool	Synthetic		Other			Matrix	
_ayer 01	-	-	-	-		-	-		100 %	
_ayer 02	-	-	-	-		-	-		100 %	
lient Sample ID: 2	3544.000	0-0043		Sample ID:	S43		Date Analyzed:	07/31/2014		
lient Sample Descri							Analyst:	Ryan Brown		
Asbestos Mineral Fib		Layer Percent:	Chrysotile	Amosite	Crocidolite					cent estos
_ayer 01										
rubbery material, b	rown	92 %	-	-	-					NA
ayer 02										
mastic, brown		8 %	-	-	-					NA
Other Fibers	Fibrous Glass		Mineral se Wool	Cumthotic		Other				
over 01	Olass	Cellulos	SC ***UUI	Synthetic					Matrix	
_ayer 01 _ayer 02	-	-	-	-	Talc	- Trace	-		100 % 100 %	
				-		Hace			100 70	
lient Sample ID: 2	3544.000 ption:	)-0044		Sample ID:	S44		Date Analyzed: Analyst:	07/31/2014 Ryan Brown		
Asbestos Mineral Fib	oers I	Layer Percent:	Chrysotile	Amosite	Crocidolite					cent estos
Homogeneous loose mastic, black	(	100 %	2 %	_	-					2 9
Other Fibers	Fibrous Glass		Mineral	Synthetic		Other			Matrix	
	_	_	_	_		_	_		98 %	

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## LabCor Portland, Inc.

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 14189(	b Number: 141890							oort Number: Report Date:	
Client Sample ID: 23 Client Sample Descrip	3544.000 otion:	-0045		Sample ID:	S45		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	ı
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Layer 01									
paint, off-white		8 %	-	-	-				NA
Layer 02 compact chalky man with paper, white	terial	92 %	-	-	-				NA
Other Fibers	Fibrous Glass	Cellulos	Mineral e Wool	Synthetic		Other			N.A. a. daring
Layer 01	-	-	-	-		-	_		Matrix 100 %
Layer 02	_	2 %	_	_		_	-		98 %
	544.000	0046		Commis ID:	C46		Data Analysis de	07/31/2014	
<u>Client Sample ID:</u> 23 Client Sample Descrip	3544.000 stion:	1-0046		Sample ID:	546		Date Analyzed: Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer					Analyst.	ryan biowii	Percent
ASSESTED IMITERIAL FIRST			Chrysotile	Amosite	Crocidolite				Asbestos
Layer 01									
vinyl tile, dark red		92 %	10 %	-	-				10 '
Layer 02									
mastic, black		8 %	2 %	-	-				2 9
Other Fibers	Fibrous Glass	Cellulos	Mineral e Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		90 %
Layer 02	-	-	-	-		-	-		98 %
Client Sample ID: 23	3544.000	-0047		Sample ID:	S47		Date Analyzed:	07/31/2014	
Client Sample Descrip	tion:						Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Layer 01		00.0/	T						. 4
vinyl tile, off-white		90 %	Trace	-	-				<1'
Layer 02 mastic, black		10 %	3 %						3 '
Other Fibers	Fibrous		Mineral	_	_				3
Other Fibers	Glass	, Cellulos		Synthetic		Other			Matrix
Layer 01	_	-	_	-		-	-		100 %
Layer 02	-	-	-	-		-	-		97 %
Client Sample ID: 23	3544.000	-0048		Sample ID:	S48		Date Analyzed:	07/31/2014	
Client Sample Descrip							Analyst:	Ryan Brown	
Asbestos Mineral Fibe	<u>ers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		·	•	Percent Asbestos
Assestes Willeral Library									
Homogeneous loose mastic, black		100 %	2 %	-	-				2 '
Homogeneous	Fibrous Glass		Mineral	- Synthetic	-	Other			2 <sup>o</sup> Matrix

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 14189	90						Re	port Number: Report Date:	
Client Sample ID: 2 Client Sample Descri	23544.000 iption:	-0049		Sample ID:	S49		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fil	<u>oers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		<b>,</b>	7	Percent Asbestos:
Homogeneous fibrous cement, da gray	ırk	100 %	15 %	8 %	-				23 %
Other Fibers	Fibrous Glass	cellulo	Mineral se Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		77 %
Client Sample ID: 2 Client Sample Descri	23544.000 ption:	-0050		Sample ID:	S50		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fit	<u>oers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		•	<b>3</b> · · ·	Percent Asbestos:
Homogeneous fibrous cement particulate, dark gr	·av	100 %	15 %	8 %	-				23 %
Other Fibers	Fibrous Glass	Cellulo	Mineral se Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		77 %
Client Sample ID: 2 Client Sample Descri	23544.000	-0051		Sample ID:	S51		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fil	-	Layer					Allalyst.	Ryan Blown	Percent
Homogeneous			Chrysotile	Amosite	Crocidolite				Asbestos:
compressed fibers with paint, white	, gray	100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	cellulo	Mineral se Wool	Synthetic		Other			Matrix
	-	25 %	50 %	-		-	-		25 %
Client Sample ID: 2 Client Sample Descri	23544.000 iption:	-0052		Sample ID:	S52		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fil	oers	Layer Percent:	Chrysotile	Amosite	Crocidolite		ŕ	,	Percent Asbestos:
Homogeneous									
fibrous mastic, blace Other Fibers	ck Fibrous	100 %	- Mineral	-	-				NAC
	Glass -	Cellulo 2 %		Synthetic -		Other -	-		Matrix 98 %
Client Sample ID: 2	23544.000	-0053		Sample ID:	S53		Date Analyzed:	07/31/2014	
Client Sample Descri	ption:			-			Analyst:	Ryan Brown	
Asbestos Mineral Fit		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous hard compact pow off-white with paint		100 %	-	-	-				NAD
Other Fibers	Fibrous Glass	cellulo	Mineral se Wool	Synthetic		Other			Matrix
	-	-	-	-		-	-		Matrix 100 %

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890						Re	port Number: Report Date:	
Client Sample ID: 23544.00 Client Sample Description:			Sample ID:	S54		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
hard compact powder, off-white with paint, white	100 %	-	-	-				NAD
Other Fibers Fibrou Glass		Mineral se Wool	Synthetic		Other			Matrix
-	-	-	-		-	-		100 %
Client Sample ID: 23544.00	0-0055		Sample ID:	S55		Date Analyzed:	07/31/2014	
Client Sample Description:			•			Analyst:	Ryan Brown	
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Layer 01								
paint, white with fine compact powder, off- white	15 %	-	-	-				NAD
Layer 02								
compact chalky material with paper, white	85 %	-	-	-				NAD
Other Fibers Fibrou Glass		Mineral se Wool	Synthetic		Other			Matrix
Layer 01 -	2 %	-	-		-	-		98 %
Layer 02 -	2 %	-	-		-	-		98 %
Client Sample ID: 23544.00	0-0056		Sample ID:	S56		Date Analyzed:	07/31/2014	
Client Sample Description:						Analyst:	Ryan Brown	
<u>Asbestos Mineral Fibers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos:
Homogeneous								
mastic, black	100 %	-	-	-				NAD
Other Fibers Fibrou Glass		Mineral se Wool	Synthetic		Other			
2 %	2 %	-	-		-	_		Matrix 96 %
Client Sample ID: 23544.00			Sample ID:	S57		Date Analyzed:	07/31/2014	
Client Sample ID: 23544.00 Client Sample Description:	0-0037		Jample ID:	001		Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		Analyst.	D. O	Percent Asbestos:
Homogeneous								
compressed fibers, gray with paint, white	100 %	-	-	-				NAD
with pairt, write								

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

	0						Re	port Number: Report Date:	
Client Sample ID: 23 Client Sample Descrip	3544.000 otion:	-0058		Sample ID:	S58		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Homogeneous compressed fibers, with paint, white	gray	100 %	-	-	-				NAI
Other Fibers	Fibrous Glass	Cellulos		Synthetic		Other			Matrix
	-	25 %	50 %	-		-	-		25 %
Client Sample ID: 23 Client Sample Descrip	3544.000 otion:	-0059		Sample ID:	S59		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibe		Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Homogeneous compressed fibers, with paint, white	gray	100 %	-	-	-				NAI
Other Fibers	Fibrous Glass	Cellulos 25 %	Mineral Wool 50 %	Synthetic		Other	_		Matrix 25 %
Client Sample ID: 23	3544.000			Sample ID:	S60		Date Analyzed:	07/31/2014	== /-
Client Sample Descrip		-0000		Cample ID.	000		Analyst:	Ryan Brown	
Asbestos Mineral Fibe	<u>ers</u>	Layer Percent:	Chrysotile	Amosite	Crocidolite		, and yet	rtyun Brown	Percent Asbestos
Homogeneous tar, black		100 %	-	-	-				NAI
Other Fibers	Fibrous Glass Trace	Cellulos Trace	Mineral se Wool	Synthetic -		Other	_		Matrix
Client Sample ID: 23	3544.000	-0061		Sample ID:	S61		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibe									
		Layer Percent:	Chrysotile	Amosite	Crocidolite		Analyst.	,	Percent Asbestos
paper backing with			Chrysotile -	Amosite -	Crocidolite		Allalyst.	ŕ	Asbestos
paper backing with paint, white		Percent:	- Mineral	Amosite - Synthetic	Crocidolite -	Other	Allalyst.	ŕ	Asbestos NAI
paper backing with paint, white	Fibrous	Percent:	- Mineral	-	Crocidolite -	Other	-	•	
paper backing with paint, white  Other Fibers  Client Sample ID: 23	Fibrous Glass - 3544.000	Percent:  100 %  Cellulos 75 %	- Mineral	-	-	Other -	- Date Analyzed:	07/31/2014 Ryan Brown	Asbestos NAI Matrix
paper backing with paint, white  Other Fibers  Client Sample ID: 23  Client Sample Descrip	Fibrous Glass - 3544.000 otion: ers	Cellulos 75 % -0062 Layer	- Mineral	- Synthetic -	-	Other -	-	07/31/2014 Ryan Brown	Asbestos NAI Matrix 25 %
paper backing with paint, white  Other Fibers  Client Sample ID: 23  Client Sample Descrip  Asbestos Mineral Fibe	Fibrous Glass - 3544.000 otion: ers	Cellulos 75 % -0062 Layer	Mineral se Wool	Synthetic - Sample ID:	- S62	Other -	- Date Analyzed:		Matrix 25 %  Percent Asbestos
paper backing with paint, white  Other Fibers  Client Sample ID: 23  Client Sample Descrip  Asbestos Mineral Fiber  Layer 01  vinyl tile, off-white	Fibrous Glass - 3544.000 otion: ers	Cellulos 75 % -0062 Layer	Mineral Wool - Chrysotile	Synthetic - Sample ID:	- S62	Other -	- Date Analyzed:		Asbestos NAI Matrix 25 % Percent Asbestos
paint, white Other Fibers  Client Sample ID: 23 Client Sample Descrip Asbestos Mineral Fibe Layer 01 vinyl tile, off-white Layer 02	Fibrous Glass - 3544.000 otion: ers	Cellulos 75 %  -0062  Layer Percent: 90 % 10 %	Mineral Wool - Chrysotile Trace 3 % Mineral	Synthetic - Sample ID:	- S62	Other -	- Date Analyzed:		Asbestos NAI Matrix 25 %

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890	)						Rep	ort Number:	141890R01
								Report Date:	07/31/2014
Client Sample ID: 23 Client Sample Descrip	544.000 tion:	-0063		Sample ID:	S63		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibe	ers_	Layer Percent: (	Chrysotile	Amosite	Crocidolite		7 <b>, C</b>		Percent Asbestos:
Layer 01									
rubbery material, bro	own	85 %	-	-	-				NAD
Layer 02									
mastic, brown		5 %	-	-	-				NAD
Layer 03									
fibrous particulate, g	ray	10 %	-	-	-				NAD
Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 %
Layer 02	-	-	-	-	Talc	Trace	-		100 %
Layer 03	-	50 %	-	-		-	-		50 %
Client Sample ID: 23 Client Sample Descrip	544.000 tion:	-0064		Sample ID:	S64		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibe		Layer					,	,	Percent
		Percent: (	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
compressed fibers, quith paint, white	gray	100 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral			0.11			
	Glass -	Cellulose 25 %	Wool 50 %	Synthetic -		Other -	-		Matrix 25 %
Client Sample ID: 23	544.000	-0065		Sample ID:	S65		Date Analyzed:	07/31/2014	
Client Sample Descript		-0005		oampie ib.	000		Analyst:	Ryan Brown	
Asbestos Mineral Fibe		Layer					<b></b>	,	Percent
		Percent: (	Chrysotile	Amosite	Crocidolite				Asbestos:
Homogeneous									
loose granular particulate, gray with mastic, brown	1	100 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral						
	Glass	Cellulose		Synthetic		Other			Matrix
	5 %	5 %	-	-		-	-		90 %
Client Sample ID: 23	544.000	-0066		Sample ID:	S66		Date Analyzed:	07/31/2014	
Client Sample Descript				Jap.			Analyst:	Ryan Brown	
Asbestos Mineral Fibe	ers	Layer Percent: (	Chrysotile	Amosite	Crocidolite		<b>y</b> -	•	Percent Asbestos:
Layer 01									
paint, white		25 %	-	-	-				NAD
Layer 02									
compact chalky mate with paper, white	erial	75 %	-	-	-				NAD
Other Fibers	Fibrous		Mineral	0 " "		Other			
	Glass	Cellulose		Synthetic		Other			Matrix
Layer 01	-	-	-	-		-	-		100 % 98 %
Layer 02	-	2 %	_	-					

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## LabCor Portland, Inc.

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#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890							oort Number: Report Date:	
Client Sample ID: 23544.00 Client Sample Description:	0-0067		Sample ID:	S67		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	ı
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		•	•	Percent Asbestos
Layer 01 paint, white with fine	20 %	_	_	_				NA
compact powder  Layer 02								
compact chalky material with paper, white	80 %	-	-	-				NA
Other Fibers Fibrou		Mineral se Wool	Synthetic		Other			Matrix
Layer 01 -	_	-	-		-	-		100 %
Layer 02 -	2 %	-	-		-	-		98 %
Client Sample ID: 23544.00 Client Sample Description:	0-0068		Sample ID:	S68		Date Analyzed: Analyst:	07/31/2014 Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		7 and you		Percent Asbestos
Homogeneous fibrous cement, gray	100 %	15 %	_	_				15 %
Other Fibers Fibrou		Mineral						
Glass -		se Wool	Synthetic -		Other -	-		Matrix 85 %
Client Sample ID: 23544.00	0-0069		Sample ID:	S69		Date Analyzed:	07/31/2014	
Client Sample Description:			•			Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite		•		Percent Asbestos
Homogeneous fibrous cement, gray	100 %	15 %	-	-				15 %
Other Fibers Fibrou	IS	Mineral						
Glass	S Cellulo -	se Wool	Synthetic -		Other -	-		Matrix 85 %
Client Sample ID: 23544.00	0-0070		Sample ID:	S70		Date Analyzed:	07/31/2014	
Client Sample Description: <u>Asbestos Mineral Fibers</u>	Layer					Analyst:	Ryan Brown	Percent
Homogeneous		Chrysotile	Amosite	Crocidolite				Asbestos
paint, beige with powder, off-white	100 %	-	-	-				NA
Other Fibers Fibrou		Mineral se Wool	Synthetic		Other			Matrix
-	-	-	-		-	-		100 %
Client Sample ID: 23544.00	0-0071		Sample ID:	S71		Date Analyzed:	07/31/2014	
Client Sample Description:						Analyst:	Ryan Brown	
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite				Percent Asbestos
Homogeneous  paint, beige with  powder, off-white	100 %	-	-	-				NAI
Other Fibers Fibrou Glass	S Cellulo	Mineral se Wool	Synthetic		Other			Matrix
-	-	-	-		-	-		100 %

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#### LabCor Portland Inc

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

#### **BULK SAMPLE ASBESTOS ANALYSIS**

Phone: (503) 224-5055 Fax: (503) 228-8282 http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 141890 Report Number: 141890R01

Report Date: 07/31/2014

Client Sample ID:23544.000-0072Sample ID:S72Date Analyzed:07/31/2014Client Sample Description:Analyst:Ryan Brown

Asbestos Mineral Fibers Layer Percent

Percent: Chrysotile Amosite Crocidolite Asbestos:
Homogeneous

paint, beige with 100 % - - - NAD

powder, off-white

Other Fibers Fibrous Mineral

Glass Cellulose Wool Synthetic Other Matrix

Client Sample ID:23544.000-0073Sample ID:S73Date Analyzed:07/31/2014Client Sample Description:Analyst:Ryan Brown

Asbestos Mineral Fibers Layer Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

Homogeneous fibrous cement, gray 100 % 15 % - - - 15 %

 Other Fibers
 Fibrous
 Mineral

 Glass Cellulose
 Wool
 Synthetic
 Other

 Matrix

Client Sample ID: 23544.000-0074 Sample ID: S74 Date Analyzed: 07/31/2014

Client Sample ID:23544.000-0074Sample ID:S74Date Analyzed:07/31/2014Client Sample Description:Analyst:Ryan Brown

Asbestos Mineral Fibers Layer Percent

Percent: Chrysotile Amosite Crocidolite Asbestos:

Homogeneous

paint, beige with 100 % - - - NAD powder, off-white

 Other Fibers
 Fibrous
 Mineral

 Glass
 Cellulose
 Wool
 Synthetic
 Other

Glass Cellulose Wool Synthetic Other Matrix

This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous. "Misc" is miscellaneous. "NAD" is No Asbestos Detected. Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.

Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.

Asbestos detection interferences may result from material binders.

Qualitative and quantitative TEM analysis may be recommended for difficult samples.

Quantitative analysis by PLM point count or TEM is 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 Brown Analyst

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Phase 0004

Project No.:

23544.000

#### Engineering + Environmental

141890

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Individuals signing this form warrant to original. The Receiver should complet package immediately to Sender.	hat the information provided is co le the form, keep a copy and retur	orrect and complete. The Se on the original to the Sender.	ider should ke Receiver shall	ep a copy and send the report damage of
SENDER		RECEIVER	1.1	
Date Sent: July 24, 2014		Date Received: _	7/24	<u>14 _ 1:20 pm</u>
PBS Engineering + Environm	nental	Company: Lab Co	r W Corbett A	lva Sta A
4412 SW Corbett Avenue Portland, OR 97239		, wandoo.	d, OR 9723	
503.248.1939, Fax: 866.727.0	)140 <sub>1</sub>	503-22	•	· <u>-</u>
Marmonn K	ellan	= Paulin	allo	
Name	1/24/14	Name fully		nzaly
Authorized Signature	Date	Authorized Signatu	ire	Date
Sender's ID No.	<b>Brief Description</b>	Receive	's ID No.	
23544.000-0001				
23544.000-0002				<del>-</del>
23544.000-0003			_	
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23544.000-0013				

23544.000-0014



#### Engineering + Environmental

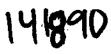
141890

2 of 4.

## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES 23544.000-0015 23544.000-0016 23544.000-0017 23544.000-0018 23544.000-0019 23544.000-0020 23544.000-0021 23544.000-0022 23544.000-0023 23544.000-0024 23544.000-0025 23544.000-0026 23544.000-0027 23544.000-0028 23544.000-0029 23544.000-0030 23544.000-0031 23544.000-0032 23544.000-0033 23544.000-0034 23544.000-0035 23544.000-0036 23544.000-0037 23544.000-0038 23544.000-0039



#### Engineering + Environmental

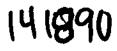


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## TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES 23544.000-0040 23544.000-0041 23544.000-0042 23544.000-0043 23544.000-0044 23544.000-0045 23544.000-0046 23544.000-0047 23544.000-0048 23544.000-0049 23544.000-0050 23544.000-0051 23544.000-0052 23544.000-0053 23544.000-0054 23544.000-0055 23544.000-0056 23544.000-0057 23544.000-0058 23544.000-0059 23544.000-0060 23544.000-0061 23544.000-0062 23544.000-0063 23544.000-0064



#### Engineering + Environmental



4 of 4

TRANS	SMITTAL AND CHAIN OF CUSTO	DY FOR ASBESTOS	BULK SAMPLES
23544.000-0065	·		
23544.000-0066		·	
23544.000-0067			
23544.000-0068			
23544.000-0069			
23544.000-0070			
23544.000-0071			
23544.000-0072			
23544.000-0073			<del></del>
23544.000-0074			**
requests prior notifica	nclosed 74 sample(s) for asbestos of ation if samples will be disposed.  s by: AM/PM		h dispersion staining. PBS
•	he results to the above address.		
SPECIAL INSTRUC	TIONS:		(anh)
			(Kolyc)



#### LABORATORY REPORT

PBS Environmental - Portland, OR 4412 Southwest Corbett Ave. Portland, OR 97239

Attn: Harmony Kilby Phone: 503-248-1939 Fax: 866-727-0140

Email: harmony.kilby@pbsenv.com

RJ Lee Group Job No.: PA250720140011 Samples Received: July 25, 2014 Report Date: July 29, 2014

Client Project: 23544.000 Phase 0004

Purchase Order No.: N/A Matrix: Solid

Prep/Analysis: EPA 3050B / EPA 7420

				Sample Concentration		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
LB23544.000-1001	PA250720140011-001	NP	Lead	0.0269	269	0.00956	95.6	07/29/2014	_
LB23544.000-1002	PA250720140011-002	NP	Lead	0.0100	100	0.00982	98.2	07/29/2014	_
LB23544.000-1003	PA250720140011-003	NP	Lead	0.329	3290	0.00963	96.3	07/29/2014	_
LB23544.000-1004	PA250720140011-004	NP	Lead	< 0.00981	< 98.1	0.00981	98.1	07/29/2014	_
LB23544.000-1005	PA250720140011-005	NP	Lead	0.0704	704	0.00964	96.4	07/29/2014	_
LB23544.000-1006	PA250720140011-006	NP	Lead	< 0.00972	< 97.2	0.00972	97.2	07/29/2014	_
LB23544.000-1007	PA250720140011-007	NP	Lead	< 0.00930	< 93.0	0.00930	93.0	07/29/2014	_
LB23544.000-1008	PA250720140011-008	NP	Lead	0.251	2510	0.00973	97.3	07/29/2014	_

#### Comments:

Report Qualifiers (Q).

P: PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)

N: NY ELAP Accredited (NY ELAP Lab Code 10884)

C: CA ELAP Accredited (CA ELAP Certificate 1970)

E = Value above highest calibration standard

J = Value below lowest calibration standard but above MDL (Method Detection Limit)

L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery

outside accepted recovery limits

H = Holding times for preparation or analysis exceeded

 $B = Analyte \ detected \ in \ the \ associated \ Method \ Blank$ 

S = Spike Recovery outside accepted limits

R = RPD (relative percent difference) outside accepted limits

D = RL (reporting limit verification) outside accepted limits

NP = Not Provided

- : 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

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

This laboratory operates in accord with ISO 17025:2005 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. This report may not be used to claim product endorsement by any laboratory accreditations agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

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

Philip Grindle
Philip Grindle



14

#### TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

	rant that the information provided is on the second return the form, keep a copy and return the second		
SENDER		RECEIVER	
Date Sent: July 24, 20	14	Date Received:	072514
PBS Engineering + Envir		Company: R.J. Lee Grand Address: 350 Hochber Monroeville.	erg Road
Portland, OR 97239 503.248.1939, Fax: 866.7	27.0140	724-325-17	
Jarmony Ki	llon	JASW (	men 10 00
Name KILLING	7/24/14	Name	072514
Authorized Signature	Date	Authorized Signature	Date
<b>Sender's ID No.</b> LB23544.000-1001	Brief Description	Receiver's ID	) No.
LB23544.000-1002			
LB23544.000-1003			
LB23544.000-1004			
LB23544.000-1005			
LB23544.000-1006			
LB23544.000-1007			
LB23544.000-1008			
ANALYSIS REQUESTED:		closed 8 sample(s) for LEAD content us prior notification if samples will be dis	
LEAD: Paint			
☐ Wipe	Please fax and mail the	e results to the above address.	
☐ Soil/Misc.			
☐ Air	TURNAROUND	DESIRED:	
☐ TCLP	72 Hour		
SPECIAL INSTRUCTION	S:		

**Project No.:** 

23544.000

Phase 0004

### THIS IS TO CERTIFY THAT

## RICH A. DUFRESNE

# HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE for ASBESTOS INSPECTOR REFRESHER

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

Course Date:

04/09/2014

Course Location:

Portland, OR

Certificate:

IR-14-0264A

PBS

Engineering + Environmental

**Expiration Date** 

04/09/2015

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

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

David Stover

David Stover, Director of Training

## THIS IS TO CERTIFY THAT

### **DEREK MAY**

# HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE for ASBESTOS INSPECTOR REFRESHER

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

Course Date:

04/09/2014

Course Location:

Portland, OR

Certificate:

IR-14-0009A

BS PBS

Engineering +
Environmental

**Expiration Date** 

04/09/2015

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

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

David Stover

David Stover, Director of Training