Asbestos Survey and Limited Lead Paint Inspection

Five Structures

Grandview Lumber Property

Prepared for:

Grandview School District

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Sample Inventories	2.1
Laboratory Data	Not Numbered
AHERA Certificates	Not Numbered

June 2019
Project No.: 64583.003 Phase No.: 0001

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GENERAL INFORMATION

BUILDING DATA

Five Structures

710 Wine Country Road

Prosser, WA

CLIENT DATA

Grandview School District

913 West 2nd Street

Grandview, WA 98930

SURVEY SCOPE

PBS Engineering and Environmental Inc. (PBS) has performed asbestos surveys of accessible areas of five structures located at 710 Wine Country Road in Grandview, Washington, in accordance with WAC 296-62-07721 and compiled a report with the following information:

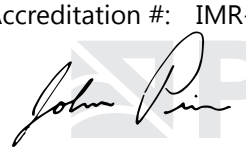
- The type, location, and approximate quantity of suspect asbestos-containing materials
- Bulk sampling of selected suspect building materials
- Lead paint sampling
- Suspect polychlorinated biphenyl (PCB) light ballast inspection
- Inspection summary
- Laboratory analytical data of bulk material sampled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

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

A second asbestos survey was performed and a report provided for the old store on the east end of this property.

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.

John Price
Project Manager/Prime Inspector
Accreditation #: IMR-19-7830A



Signature Date

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INSPECTION SUMMARY

DATES	SURVEYED BY	ACTIVITY
5/16/2019	John Price	Visual Inspection, Survey, and Sample

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.

Result	Material (type)	Location	Approx. Quantity
(+)	Gypsum Wallboard/Joint Compound	Building #5, north side of building, interior walls	400 SF
(+)	Vinyl Floor Tile/Mastic - 9-inch beige	Building #5, NE area of building, floor	160 SF

MATERIALS THAT TESTED NEGATIVE FOR ASBESTOS

Samples of the following materials did not contain asbestos based on testing by a NVLAP participating laboratory. 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)	Location
Asphalt Impregnated Paper	Building #3, under composition 3-tab shingles
Asphalt Impregnated Paper	Building #4, under cedar shakes
Asphalt Impregnated Paper	Building #4, under composition 3-tab shingles
Caulk - white	Building #1, around door frame
Caulk - white	Building #3, around door frames and on siding
Caulk - white	Building #5, esterior around east window
Composition Shingles - brown (3)	Building #4, under metal roof
Composition Shingles - green (1)	Building #3, under metal roof
Composition Shingles - red/brown (2)	Building #3, under metal roof
Stapled-on Ceiling Tile	Building #5, NW room, ceiling

INSPECTION SUMMARY

BACKGROUND

On May 10, 2019, PBS performed a pre-demolition asbestos survey and lead paint inspection of the five storage buildings on the property located at 710 Wine Country Road in Grandview, Washington. The survey was requested by Wenaha Group in anticipation of demolition and renovation.

The five buildings are described as follows:

- Building #1 – Older pole building structure which was framed with newer wood framing, trusses and purloins with metal siding. A lean-to structure was constructed along the north side of the building. One older wood door was re-used on the building, with some caulking around the framing. The remainder of the building is wood, metal, and concrete floor slab.
- Building #2 – Newer pole building structure with no suspect asbestos-containing materials.
- Building #3 – Old wood building with the east bay being on a concrete slab and the west end of the building being elevated on wood piers. Aside from some caulk around some door framing on the north side of the building, the two sections (east and west) have original composition 3-tab roofing with tar paper under corrugated metal roofing.
- Building #4 – Older wood building with as many as six additions to the original building which appears to be on the west end, north side of the building. The entire building is built on multiple elevations/pours of concrete floor slabs. Only some tar paper under cedar shakes and older composition roofing under corrugated metal roofing were observed.
- Building #5 – Older wood framed building on a concrete floor slab. This building is on a separate parcel and appears to have been some sort of service building with an open concrete floor shop and an office/service counter area and a restroom on the north end of the building. Floor tile, gypsum wallboard, and ceiling tiles were present inside the building with some caulking on the exterior windows and door.

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

The survey is intended to satisfy Washington State Department of Labor and Industries (L&I) regulations in Washington Administrative Code (WAC) 296-62-07721 and Yakima Regional Clean Air Agency requirements in Regulation 1 subsection 3.07F to perform and asbestos survey prior to demolition or renovation. The survey is also intended to satisfy L&I hazard communication requirements.

INSPECTION SUMMARY

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). Seventeen bulk samples of building materials, suspected of containing asbestos, were collected and submitted under chain of custody to Lab/Cor Eugene, Inc. of Eugene, Oregon, for polarized light microscopy (PLM) analysis. The following materials were found to contain asbestos:

Building #5

- Joint compound on gypsum wallboard assemblies – 2% asbestos was identified in the joint compound layers on the remaining gypsum wallboard walls on the north side of Building #5. This material is damaged along edges where sections of the walls were previously removed. The joint compound would be considered friable during demolition and renovation work. Additional analysis may be performed which could result in the total asbestos concentration of the wallboard system in being less than one percent (<1%) asbestos. See the regulatory conversation below for additional information.
- Asbestos-containing vinyl floor tile was observed in the northeast area of the building. The black mastic under the floor tile contains <1% asbestos. The tile is significantly damaged along the edges of the section of flooring. It is possible that dust from the floor tile has been spread throughout the building.

No ACM was identified in Buildings #1, #3, or #5. No suspect ACM was observed in Building #2, so no samples were collected from this building.

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

Asbestos Regulations

WAC 296-62-077 requires proper removal and handling of ACM by licensed and trained asbestos abatement contractors prior to building renovation or demolition.

Regulations define ACM as any material containing more than one percent asbestos. Although materials with <1% asbestos are not considered by regulatory agencies to be an ACM, they still have some asbestos content, and WAC has specific requirements for situations in which workers may encounter, disturb, or remove materials containing any concentration of asbestos. For the sake of hazard communication, these materials are included in the asbestos-containing materials section of this report.

L&I does require training for workers who impact materials with any amount of asbestos, if that impact could result in airborne fiber concentrations over the permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter (f/cc) of air.

Refer to WAC 296-62-077 for additional information.

INSPECTION SUMMARY

LEAD-BASED PAINT

LEAD SUMMARY

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

Seven paint chip samples were collected from representative building components from Buildings #1, #3, #4, and #5 and submitted under chain of custody to EMSL Analytical, Inc of San Leandro, California, for analysis of lead content via flame atomic absorption (FLAA). The concentration of lead in the samples range from below the level of detection to 4.3% or 43,000 parts per million (ppm).

See the lead sample inventory section for representative building components and corresponding results.

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

Lead-Containing Paint Regulations

The Consumer Product Safety Commission limit for lead in consumer paint products is 0.009 percent or 90 ppm or greater. The Department of Housing and Urban Development (HUD) and the EPA define lead-based paint as that which contains 0.5 percent or 5,000 ppm. Under L&I, any lead concentration in paint that may become airborne during construction operations triggers requirements in the Lead in Construction Standard WAC 296-155-176 to protect employees impacting the paint.

PCB BALLASTS AND MERCURY LAMPS/SWITCHES

Polychlorinated Biphenyls (PCBs)/Mercury Investigation

PBS conducted a visual inspection of the residence for suspect PCB lamp ballasts, mercury-containing fluorescent lamp tubes, and mercury-containing thermostat switches. PBS did not observe any of these materials. 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.

Photo 1. Building #1, view from north of building.

Photo 2. Building #1, view of interior west side of building.

Photo 3. Building #2, view from southeast of building.

Photo 4. Building #2, view from east side of building showing interior.

Photo 5. Building #3, view from northeast side of building.

Photo 6. Building #3, view of west interior of building.

Photo 7. Building #4, view from southeast showing west end of building.

Photo 8. Building #4, view from northwest showing north side of building.

Photo 9. Building #4, showing south side of original structure on east end of building.

Photo 10. Building #4, view from inside west bay showing east wall of another (second) addition to the original building in Photo 9 above.

Photo 11. Building #5, view from southeast of building.

Photo 12. Building #5, view of north interior showing gypsum wallboard with asbestos-containing joint compound and area of asbestos-containing 9-inch vinyl floor tile.

Code	Material	Location	Results	Lab
64583.003-0001	Caulk	#1; north side; around door frame; white putty		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rubbery material, white with coating, gray	No Asbestos Detected	
64583.003-0002	Composition Shingles (1)	#3; NE corner; gray/green 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rocky fibrous tar, black/green/white with coating, brown	No Asbestos Detected	
	Layer 2	rocky fibrous tar, black/green/white with coating, brown	No Asbestos Detected	
	Layer 3	rocky fibrous tar, black/green/white with coating, brown	No Asbestos Detected	
64583.003-0003	Asphalt Impregnated Paper	#3; south side; tar paper under 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	fibrous tar, black	No Asbestos Detected	
	Layer 2	tar, black/brown	No Asbestos Detected	
64583.003-0004	Composition Shingles (1)	#3; south side; gray/green 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rocky fibrous tar, black with coating, brown	No Asbestos Detected	
	Layer 2	paint, gray	No Asbestos Detected	
	Layer 3	rocky fibrous tar, black with coating, brown	No Asbestos Detected	
64583.003-0005	Asphalt Impregnated Paper	#3; south side; tar paper under 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	loose paint, gray	No Asbestos Detected	
	Layer 2	loose fibrous tar, black	No Asbestos Detected	

Code	Material	Location	Results	Lab
64583.003-0006	Composition Shingles (2)	#3; SW corner; red/brown 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rocky fibrous tar, black/red with coating, brown	No Asbestos Detected	
	Layer 2	rocky fibrous tar, black/red with coating, brown	No Asbestos Detected	
64583.003-0007	Composition Shingles (2)	#3; north side; red/brown 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	paint, tan	No Asbestos Detected	
	Layer 2	rocky fibrous tar, black/gray	No Asbestos Detected	
64583.003-0008	Caulk	#3; north side; west door; white putty		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rubbery material, white with paint, tan/green	No Asbestos Detected	
64583.003-0009	Caulk	#3; north side; center door; white putty		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	rubbery material, white with coating, tan/gray	No Asbestos Detected	
64583.003-0010	Asphalt Impregnated Paper	#4; east end; shake roof; tar paper under cedar shakes		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	compressed fibers, black/brown	No Asbestos Detected	
64583.003-0011	Composition Shingles (3)	#4; north side; west bay; brown 3-tab		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	coating, brown	No Asbestos Detected	
	Layer 2	rocky fibrous tar, black/green	No Asbestos Detected	
64583.003-0012	Asphalt Impregnated Paper	#4; north side; east end; tar paper		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	paint, gray	No Asbestos Detected	
	Layer 2	fibrous tar, black	No Asbestos Detected	
	Layer 3	tar, black with coating, gray	No Asbestos Detected	

Code	Material	Location	Results	Lab
64583.003-0013	Vinyl Floor Tile/Mastic	#5; NE corner; 9-inch beige with black mastic		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	hard vinyl, gray	2% Chrysotile	
	Layer 2	mastic, black	<1% Chrysotile	
64583.003-0014	Gypsum Wallboard/Joint Compound	#5; east side; gypsum with joint compound		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	paint, gray with fine compact powder, off-white	2% Chrysotile	
	Layer 2	fine compact powder, off-white with paper, white	2% Chrysotile	
	Layer 3	compact chalky material with paper, white	No Asbestos Detected	
64583.003-0015	Gypsum Wallboard/Joint Compound	#5; west end; gypsum with joint compound		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	paint, green with fine compact powder, off-white	2% Chrysotile	
	Layer 2	fine compact powder, off-white	2% Chrysotile	
	Layer 3	compact chalky material with paper, white	No Asbestos Detected	
64583.003-0016	Stapled-on Ceiling Tile	#5; NW storage closet; 12"x24" white tile		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	coating, white	No Asbestos Detected	
	Layer 2	compressed fibers, brown	No Asbestos Detected	
64583.003-0017	Caulk	#5; east window; white putty		LabCor Eugene, Inc.
	Layer:	**Description:**	**Analysis:**	
	Layer 1	hard compact powder, off-white	No Asbestos Detected	

LabCor Eugene, Inc.
2620 River Road., Suite D
Eugene, OR 97404

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (541) 654-8656
http://www.labcoreug.net

Client: PBS Engineering and Environmental
400 Bradley Blvd Ste 300
Richland, WA 99352

Report Number: 190382R01
Report Date: 05/16/2019
P.O. No: n/a

Job Number: **190382**
Project Name:
Project Number: 64583.003 Phase 0001
Project Notes:

Client Sample ID: **64583.003-0001** **Sample ID:** S1 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Homogeneous							
rubbery material, white with coating, gray	100 %	-	-	-			**NAD**

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

Client Sample ID: **64583.003-0002** **Sample ID:** S2 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Layer 01							
rocky fibrous tar, black/green/white with coating, brown	35 %	-	-	-			**NAD**
Layer 02							
rocky fibrous tar, black/green/white with coating, brown	35 %	-	-	-			**NAD**
Layer 03							
rocky fibrous tar, black/green/white with coating, brown	30 %	-	-	-			**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	20 %	-	-	-	-	80 %
Layer 02	-	20 %	-	-	-	-	80 %
Layer 03	-	20 %	-	-	-	-	80 %

Client Sample ID: **64583.003-0003** **Sample ID:** S3 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Layer 01							
fibrous tar, black	95 %	-	-	-			**NAD**
Layer 02							
tar, black/brown	5 %	-	-	-			**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	30 %	-	-	-	-	70 %
Layer 02	-	3 %	-	-	-	-	97 %

NVLAP TESTING
NVLAP Lab Code: 600145-0

LabCor Eugene, Inc.
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BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (541) 654-8656
http://www.labcoreug.net

Job Number: 190382

Report Number: 190382R01
Report Date: 05/16/2019

Client Sample ID: 64583.003-0004 **Sample ID:** S4 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
rocky fibrous tar, black with coating, brown	60 %	-	-	-	**NAD**
Layer 02					
paint, gray	5 %	-	-	-	**NAD**
Layer 03					
rocky fibrous tar, black with coating, brown	35 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	20 %	-	-	-	-	80 %
Layer 02	-	4 %	-	-	-	-	96 %
Layer 03	-	20 %	-	-	-	-	80 %

Client Sample ID: 64583.003-0005 **Sample ID:** S5 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
loose paint, gray	30 %	-	-	-	**NAD**
Layer 02					
loose fibrous tar, black	70 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	5 %	-	-	-	-	95 %
Layer 02	-	15 %	-	-	-	-	85 %

Client Sample ID: 64583.003-0006 **Sample ID:** S6 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
rocky fibrous tar, black/red with coating, brown	50 %	-	-	-	**NAD**
Layer 02					
rocky fibrous tar, black/red with coating, brown	50 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	20 %	-	-	-	-	80 %
Layer 02	-	20 %	-	-	-	-	80 %

NVLAP TESTING NVLAP Lab Code: 600145-0

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BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (541) 654-8656
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Job Number: **190382**

Report Number: 190382R01
Report Date: 05/16/2019

Client Sample ID: **64583.003-0007** **Sample ID:** S7 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Layer 01							
paint, tan	10 %	-	-	-			**NAD**
Layer 02							
rocky fibrous tar, black/gray	90 %	-	-	-			**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	20 %	-	-	-	-	80 %

Client Sample ID: **64583.003-0008** **Sample ID:** S8 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Homogeneous							
rubbery material, white with paint, tan/green	100 %	-	-	-			**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
	-	3 %	-	-	-	-	97 %

Client Sample ID: **64583.003-0009** **Sample ID:** S9 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Homogeneous							
rubbery material, white with coating, tan/gray	100 %	-	-	-			**NAD**

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

Client Sample ID: **64583.003-0010** **Sample ID:** S10 **Date Analyzed:** 05/15/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite			**Percent Asbestos:**
Homogeneous							
compressed fibers, black/brown	100 %	-	-	-			**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
	-	75 %	-	-	-	-	25 %

NVLAP TESTING NVLAP Lab Code: 600145-0

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BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

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Job Number: 190382

Report Number: 190382R01
Report Date: 05/16/2019

Client Sample ID: 64583.003-0011 **Sample ID:** S11 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
coating, brown	5 %	-	-	-	**NAD**
Layer 02					
rocky fibrous tar, black/green	95 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	100 %
Layer 02	-	20 %	-	-	-	-	80 %

Client Sample ID: 64583.003-0012 **Sample ID:** S12 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
paint, gray	5 %	-	-	-	**NAD**
Layer 02					
fibrous tar, black	85 %	-	-	-	**NAD**
Layer 03					
tar, black with coating, gray	10 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	3 %	-	-	-	-	97 %
Layer 02	-	-	-	-	-	-	100 %
Layer 03	-	2 %	-	-	-	-	98 %

Client Sample ID: 64583.003-0013 **Sample ID:** S13 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
hard vinyl, gray	96 %	2 %	-	-	**2 %**
Layer 02					
mastic, black	4 %	Trace	-	-	**< 1 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	98 %
Layer 02	-	-	-	-	-	-	100 %

Comments: Chrysotile in Layer 02 may be due to contamination by Layer 01.

NVLAP TESTING
NVLAP Lab Code: 600145-0

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Eugene, OR 97404

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (541) 654-8656
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Job Number: 190382

Report Number: 190382R01
Report Date: 05/16/2019

Client Sample ID: 64583.003-0014 **Sample ID:** S14 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
paint, gray with fine compact powder, off-white	15 %	2 %	-	-	**2 %**
Layer 02					
fine compact powder, off-white with paper, white	10 %	2 %	-	-	**2 %**
Layer 03					
compact chalky material with paper, white	75 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	98 %
Layer 02	-	40 %	-	-	-	-	58 %
Layer 03	-	5 %	-	-	-	-	95 %

Client Sample ID: 64583.003-0015 **Sample ID:** S15 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
paint, green with fine compact powder, off-white	20 %	2 %	-	-	**2 %**
Layer 02					
fine compact powder, off-white	15 %	2 %	-	-	**2 %**
Layer 03					
compact chalky material with paper, white	65 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	-	-	-	-	-	98 %
Layer 02	-	50 %	-	-	-	-	48 %
Layer 03	1 %	5 %	-	-	-	-	94 %

Client Sample ID: 64583.003-0016 **Sample ID:** S16 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Layer 01					
coating, white	5 %	-	-	-	**NAD**
Layer 02					
compressed fibers, brown	95 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix
Layer 01	-	3 %	-	-	-	-	97 %
Layer 02	-	100 %	-	-	-	-	0 %

NVLAP TESTING NVLAP Lab Code: 600145-0

LabCor Eugene, Inc.
2620 River Road., Suite D
Eugene, OR 97404

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (541) 654-8656
http://www.labcoreug.net

Job Number: 190382

Report Number: 190382R01
Report Date: 05/16/2019

Client Sample ID: 64583.003-0017 **Sample ID:** S17 **Date Analyzed:** 05/16/2019
Client Sample Description: **Analyst:** Sarah Gallino

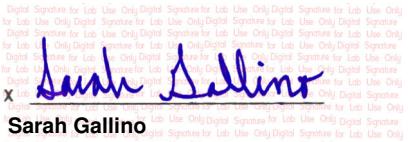
Asbestos Mineral Fibers	Layer Percent:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous					
hard compact powder, off-white	100 %	-	-	-	**NAD**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic		Other		Matrix
	-	-	-	-	Talc	4 %	-	96 %

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



Sarah Gallino

NVLAP TESTING NVLAP Lab Code: 600145-0

PBS 190382 1/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

Project No.: 64583.003 Phase 0001

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

SENDER

Date Sent: May 13, 2019

PBS Engineering and Environmental Inc.
400 Bradley Blvd., Suite 300
Richland, WA 99352
509.942.1600, Fax: 866.727.0140

Paige Price
Name

Paige Price 5/13/19 11:32
Authorized Signature **Date** **Time**

RECEIVER

Date Received: 5-14-19

Company: LabCor Eugene, Inc.
Address: 2620 River Rd. Suite D
Eugene, OR 97404
541.654.8656

Sarah Gallino
Name

Sarah Gallino 5-14-19 10:21am
Authorized Signature **Date** **Time**

Sender's ID No.	Brief Description	Receiver's ID No.
64583.003-0001		
64583.003-0002		
64583.003-0003		
64583.003-0004		
64583.003-0005		
64583.003-0006		
64583.003-0007		
64583.003-0008		
64583.003-0009		
64583.003-0010		
64583.003-0011		
64583.003-0012		
64583.003-0013		
64583.003-0014		

PBS 190382 2/2

TRANSMITTAL AND CHAIN OF CUSTODY FOR ASBESTOS BULK SAMPLES

64583.003-0015	_____	_____
64583.003-0016	_____	_____
64583.003-0017	_____	_____

Please analyze the enclosed 17 sample(s) for asbestos content using PLM with dispersion staining. PBS requests prior notification if samples will be disposed.

Request verbal results by: _____ AM/PM _____Date.

Please fax and mail the results to the above address.

TURNAROUND DESIRED: **3 Days**

SPECIAL INSTRUCTIONS: email results to: john.price@pbsusa.com
paige.price@pbsusa.com

LEAD SAMPLE INVENTORY

Code	Material	Analysis	Location	Lab
PAINT				
LB64583.003-1001	Paint	0.34%	#1; north side; exterior; door; wood; white	EMSL Laboratory
LB64583.003-1002	Paint	0.093%	#3; north side; exterior; wall; wood; beige; west section	EMSL Laboratory
LB64583.003-1003	Paint	<0.0080%	#3; north side; exterior; joist; wood; beige	EMSL Laboratory
LB64583.003-1004	Paint	4.3%	#4; interior; west end; original siding; wood; beige	EMSL Laboratory
LB64583.003-1005	Paint	0.70%	#4; exterior; north side; sliding door; wood; beige	EMSL Laboratory
LB64583.003-1006	Paint	0.069%	#4; exterior; south side;siding; wood; gray	EMSL Laboratory
LB64583.003-1007	Paint	0.044%	#5; interior; north side; door; wood; white	EMSL Laboratory

EMSL Analytical, Inc
464 McCormick Street, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.EMSL.com sanleandrolab@emsl.com

EMSL Order:	091910916
CustomerID:	PBSE34
CustomerPO:	
ProjectID:	

Attn: **Paige Price**
PBS Engineering & Environmental, Inc.
400 Bradley Blvd
Suite 106
Richland, WA 99352

Phone:	(509) 735-2698
Fax:	(509) 735-1867
Received:	05/14/19 9:00 AM
Collected:	05/14/2019

Project: **64583.003 PHASE 0001**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Weight*	*Lead Concentration*
LB64583.003-1001	*091910916-0001*	05/14/2019	05/14/2019	0.263 g	0.34 % wt
LB64583.003-1002	*091910916-0002*	05/14/2019	05/14/2019	0.2657 g	0.093 % wt
LB64583.003-1003	*091910916-0003*	05/14/2019	05/14/2019	0.2736 g	<0.0080 % wt
LB64583.003-1004	*091910916-0004*	05/14/2019	05/14/2019	0.2499 g	4.3 % wt
LB64583.003-1005	*091910916-0005*	05/14/2019	05/14/2019	0.2676 g	0.70 % wt
LB64583.003-1006	*091910916-0006*	05/14/2019	05/14/2019	0.2574 g	0.069 % wt
LB64583.003-1007	*091910916-0007*	05/14/2019	05/14/2019	0.2537 g	0.044 % wt

Julian Neagu, Lead Laboratory Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA A2LA Accredited Environmental Testing Cert #2845.09

Initial report from 05/14/2019 16:47:51

OrderID: 091910916

091910916

PBS

TRANSMITTAL AND CHAIN OF CUSTODY FOR LEAD BULK SAMPLES

Project No.: 64583.003 Phase 0001

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

SENDER

Date Sent: May 13, 2019

PBS Engineering and Environmental Inc.
400 Bradley Blvd., Suite 300
Richland, WA 99352
509.942.1600, Fax: 866.727.0140

Paige Price
Name

Paige Price 5/13/19
Authorized Signature **Date**

RECEIVER

Date Received: _____

Company: EMSL Laboratory
Address: 464 McCormick Street
San Leandro, CA 94577
(510)895-3675

Kevin Lares
Name

9AM
5-14-19 Fedex
Authorized Signature **Date**

Sender's ID No.	Brief Description	Receiver's ID No.
LB64583.003-1001		
LB64583.003-1002		
LB64583.003-1003		
LB64583.003-1004		
LB64583.003-1005		
LB64583.003-1006		
LB64583.003-1007		

ANALYSIS REQUESTED:

LEAD: ☑ Paint
☐ Wipe
☐ Soil/Misc.
☐ Air
☐ TCLP

Please analyze the enclosed 7 sample(s) for LEAD content using Atomic Absorption Method. PBS requests prior notification if samples will be disposed.

Please fax and mail the results to the above address.

TURNAROUND DESIRED:

3 Days

SPECIAL INSTRUCTIONS: email results to: John.price@pbsusa.com
paige.price@pbsusa.com

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600145-0

LabCor Eugene

Eugene, OR

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-01-01 through 2019-12-31

Effective Dates

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

LabCor Eugene
2620 River Rd Suite D
Eugene, OR 97404
Sarah Gallino
Phone: 541-654-8656
Email: sgallino@labcoreug.net
http://www.labcoreug.net

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 600145-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

EMSL Analytical, Inc

464 McCormick Street, San Leandro, CA 94577

Laboratory ID: 101748

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

✓	**INDUSTRIAL HYGIENE**	Accreditation Expires: May 01, 2020
☐	**ENVIRONMENTAL LEAD**	Accreditation Expires:
✓	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires: May 01, 2020
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2005 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Beth Bair

Elizabeth Bair
Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision 16: 03/21/2018

Date Issued: 05/03/2018

AIHA Laboratory Accreditation Programs, LLC
SCOPE OF ACCREDITATION

EMSL Analytical, Inc
464 McCormick Street, San Leandro, CA 94577

Laboratory ID: **101748**
Issue Date: 05/03/2018

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Environmental Microbiology Laboratory Accreditation Program (EMLAP)

Initial Accreditation Date: 04/01/2005

EMLAP Category	Field of Testing (FoT)	Method	Method Description (*for internal methods only*)
Fungal	Air - Culturable	Micro-SOP-202 (formerly EMSL M005)	Detection and Enumeration of Culturable Fungi From Environmental Samples
	Bulk - Culturable	Micro-SOP-202 (formerly EMSL M005)	Detection and Enumeration of Culturable Fungi From Environmental Samples
	Surface - Culturable	Micro-SOP-202 (formerly EMSL M005)	Detection and Enumeration of Culturable Fungi From Environmental Samples
	Air - Direct Examination	Micro-SOP-201 (formerly 05-TP-003.7)	Standard Operating Procedure for the Analysis of Airborne Fungal Spores, Hyphal Fragments, Pollen, Insect Fragments, Skin Fragments and Fibrous Particulate by Optical Microscopy of Spore Trap Samples
	Bulk - Direct Examination	Micro-SOP-200 (formerly EMSL M041)	Standard Operating Procedure for the Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, Pollen, Insect Fragments and Fibrous Material From Surface Samples
	Surface - Direct Examination	Micro-SOP-200 (formerly EMSL M041)	Standard Operating Procedure for the Microscopic Examination of Fungal Spores, Fungal Structures, Hyphae, Pollen, Insect Fragments and Fibrous Material From Surface Samples
Bacterial	Air – Culturable	Micro-SOP-132 (formerly EMSL M009)	Detection and Enumeration of Culturable Bacteria from Environmental Samples
	Bulk - Culturable	Micro-SOP-132 (formerly EMSL M009)	Detection and Enumeration of Culturable Bacteria from Environmental Samples
	Surface - Culturable	Micro-SOP-132 (formerly EMSL M009)	Detection and Enumeration of Culturable Bacteria from Environmental Samples

EMLAP Category	Field of Testing (FoT)	Method	Method Description (*for internal methods only*)
Bacterial	Legionella	MICRO-SOP-105	ISO 11731:2017

A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: http://www.aihaaccreditedlabs.org

THIS IS TO CERTIFY THAT

JOHN PRICE

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: 01/10/2019

Course Location: Richland, WA

Certificate: IMR-19-7830A

PBS

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

Expiration Date: 01/10/2020

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

Greg Baker, Instructor