

ASBESTOS BUILDING INSPECTION

LOCATION:

**UNIVERSITY SERVICES BUILDING
617 SW MONTGOMERY STREET
PORTLAND, OREGON 97201**

JULY 7, 2008

FORENSIC ANALYTICAL PROJECT NO. PJ5563

PREPARED FOR:

PORTLAND STATE UNIVERSITY
PO BOX 13175
PORTLAND, OREGON 97403

PREPARED BY:



Forensic Analytical Consulting Services, Inc.
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TABLE OF CONTENTS

1. INTRODUCTION
2. FINDINGS
3. RECOMMENDATIONS
4. METHODS
5. LIMITATIONS

APPENDICES

APPENDIX A: COMPLETE SAMPLE INVENTORY

APPENDIX B: SITE DRAWINGS

APPENDIX C: LABORATORY REPORTS AND CHAIN OF CUSTODY FORMS

APPENDIX D: GLOSSARY OF TERMS

APPENDIX E: INSPECTOR ACCREDITATION

1.0 INTRODUCTION

Forensic Analytical Specialties, Inc. performed an inspection to identify asbestos-containing building materials at the property located at 617 SW Montgomery Street, Portland, Oregon. Dan Rouse, Noal Kraft, and Robin Sharpe conducted the field investigation on May 9, 2008 at the direction of Kate Vance of Portland State University.

The purpose of the inspection is to determine whether ACM is present in the structures onsite. The subject property consists of a three-story building with two basements totaling 61,695 sq. ft.

This report presents the results of the asbestos inspection conducted by Forensic Analytical Consulting Services, Inc. for the above referenced project. Results of the inspection are summarized in Appendix A.

Drawings depicting ACM and sample locations are presented in Appendix B. A detailed laboratory report and chain of custody forms are contained in Appendix C.

2.0 FINDINGS

The results of the samples indicate that asbestos was detected at the site. A complete table of the samples taken and materials assumed to contain asbestos can be found in Appendix A.

3.0 RECOMMENDATIONS

Materials for which sample analysis by PLM results in greater than one percent asbestos (for any one sample collected from a homogeneous material) are classified as ACM under regulations promulgated by, but not limited to, the following agencies: federal EPA and federal OSHA.

The agencies use the following definitions:

Federal EPA (Oregon DEQ): materials containing greater than one percent asbestos are ACM
Federal OSHA (OR-OSHA): materials containing greater than one percent asbestos are ACM

For detailed regulatory requirements in specific situations, Forensic Analytical should be consulted, or the applicable regulations should be examined.

All materials identified were classified by condition. Materials in "Good" condition should be maintained in place following the OR-OSHA operations and maintenance requirements. Materials in "Fair" condition should have patch and repair activities performed to address any damaged areas. Materials in "Poor" condition should be addressed through removal, repair and/or encapsulation.

4.0 METHODS

Materials suspected of containing asbestos were sampled in accordance with the federal EPA AHERA protocols. Materials determined by the inspector to be non-suspect, such as wood, metal, glass, and fiberglass insulation, were not sampled. Destructive sample techniques were not used during the inspection. Additional suspect building materials may be present in areas that were inaccessible, unsafe to inspect, or obscured from view during the inspection process.

Suspect materials were grouped and classified as homogeneous materials based on their appearance, usage, and age of the building. Representative samples of each homogeneous material were collected for laboratory analysis. Where previous sample data exists, one confirming sample was collected of materials that previously tested positive. Additionally, where multiple samples of a given homogeneous material were collected, the set was analyzed to first positive.

The unique sample description ID was developed specifically for PSU. The sample ID includes; the PSU building ID; the homogeneous material number; followed by a unique material code (FT = Floor Tile); and lastly the sample number.

Samples were collected in such a manner as to minimize release of the material into the surroundings. Material type, sample number, sample location and other pertinent information were recorded at the time of sampling. Each sample was placed in a sample container labeled with a unique sample number and submitted to Forensic Analytical's NVLAP-accredited laboratory for analysis under chain of custody documentation. Samples were analyzed in accordance with EPA Method 600/R-93-116, using PLM with dispersion staining and using visual area estimation to determine percent asbestos content. This method allows for the identification of the primary types of asbestos used in building materials. The lower limit of detection for this method is one percent. Samples containing less than one percent asbestos by PLM with visual area estimation are reported as Trace.

5.0 LIMITATIONS

Forensic Analytical did not inspect subsurface areas for asbestos. ACM such as underground waterproofing coatings, asbestos-cement water pipe, electrical ducts, or other subsurface materials or equipment may be present beneath the site. Forensic Analytical did not disassemble building equipment; such as fans, ducts, elevator equipment, and electrical equipment. Consequently, equipment may contain untested gaskets, internal components, overspray of building materials and the like. If the aforementioned materials or any other untested suspect materials are encountered during construction or maintenance activities, they should be assumed to be asbestos-containing materials and not disturbed, unless sampling and analysis of the materials proves otherwise.

Forensic Analytical has performed this asbestos sampling in accordance with generally accepted methods and practices of the profession, and consistent with that level of care and skill ordinarily exercised by reputable environmental consultants under similar conditions and circumstances. No other representation, guarantee or warranty, express or implied, is included or intended in this asbestos inspection report.

Respectfully submitted,

Reviewed by,



Dan Rouse



Noal Kraft

APPENDIX A

COMPLETE SAMPLE INVENTORY

SAMPLE ID #	MATERIAL DESCRIPTION	SAMPLE LOCATION	MATERIAL LOCATION	ASB. % AND TYPE	APPROX. QUANTITY	CONDITION
USB-01-TSI-1	Pipe Fitting	USB - 405	USB - Throughout Building	2% Amosite	Not Quantified	Fair
USB-01-TSI-2	Pipe Fitting	USB - 108	USB - Throughout Building	*	Not Quantified	Fair
USB-01-TSI-3	Pipe Fitting	USB - C104	USB - Throughout Building	*	Not Quantified	Fair
USB-02-FT-1	Floor Tile, 12" x 12" Beige w/ Brown Specks, and Black Mastic	USB - C401	Throughout Building as Depicted on Drawings	5% Chrysotile Mastic	4,135 sq. ft.	Good
USB-03-CT-1	Ceiling Tile, 2' x 4' Fissured w/ Pinholes	USB - C401	Throughout Building as Depicted on Drawings	2% Chrysotile Tile		
USB-04-CB-1	Cove Base, 4" Brown, and Tan Mastic	USB - C401	-	ND	-	-
USB-05-CT-1	Ceiling Tile, 2' x 4' Gouged w/ Pinholes	USB - 401	-	ND	-	-
USB-06-CTX-1	Ceiling Texture, Thick	USB - 402K	USB - 202E, 402K, 402Q	2% Chrysotile	425 sq. ft.	Good
USB-06-CTX-3	Ceiling Texture, Thick	USB - 402Q	USB - 202E, 402K, 402Q	*	425 sq. ft.	Good
USB-08-SU-1	Sink Undercoating, Black	USB - 402P	USB - 202T, 402P	2% Chrysotile Mastic	Two Sinks	Good
USB-09-CM-1	Carpet Mastic, Yellow	USB - 402N	-	ND	-	-
USB-10-PL-1	Plaster, Wall	USB - 402	-	ND	-	-
USB-10-PL-2	Plaster, Wall	USB - 202F	-	ND	-	-

ND – Non-Detected

* - This sample is part of a set in which one or more of the samples contains asbestos.

SAMPLE ID #	MATERIAL DESCRIPTION	SAMPLE LOCATION	MATERIAL LOCATION	ASB. % AND TYPE	APPROX. QUANTITY	CONDITION
USB-10-PL-3	Plaster, Wall	USB - 202Q	-	ND	-	-
USB-10-PL-4	Plaster, Wall	USB - C302	-	ND	-	-
USB-10-PL-5	Plaster, Wall	USB - 304	-	ND	-	-
USB-11-CT-1	Ceiling Tile, 2' x 4' (2" x 2" Pattern) Gouged w/ Pinholes	USB - C202	-	ND	-	-
USB-12-FT-1	Floor Tile, 12" x 12" Black, and Black Mastic	USB - 202J	-	ND	-	-
USB-13-FM-1	Floor Material, Black	USB - Elevator	-	ND	-	-
USB-14-DST-1	Duct Seam Tape, White	USB - 304	Throughout on HVAC System	95% Chrysotile	Not Quantified	Good
USB-15-CT-1	Ceiling Tile, 2' x 4', (2" x 2" Pattern) Fissured w/ Pinholes, Newer	USB - 302N	-	ND	-	-
USB-16-FS-1	Firestop, Red	USB - 113	-	ND	-	-
USB-17-CT-1	Ceiling Tile, 2' x 4' Pinholes	USB - 111D	-	ND	-	-
USB-18-FT-1	Floor Tile, 12" x 12" Off-White w/ Green Streaks, and Black Mastic	USB - 111E	USB - 2, 2A, 111E	500% Chrysotile Tile ND Mastic	765 sq. ft.	Good

ND – Non-Detected

* - This sample is part of a set in which one or more of the samples contains asbestos.

SAMPLE ID #	MATERIAL DESCRIPTION	SAMPLE LOCATION	MATERIAL LOCATION	ASB. % AND TYPE	APPROX. QUANTITY	CONDITION
USB-19-FT-1	Floor Tile, 12" x 12" Tan Marbled, and Black Mastic	USB - 111D	USB - 102, 110, 111D, 114A, 114B	2% Chrysotile Tile ND Mastic	870 sq. ft.	Good
USB-20-FM-1	Floor Material, Mauve Marbled	USB - 112	-	ND	-	-
USB-21-TSI-1	Pipe Insulation, Rigid, Yellow	USB - 108	USB - Throughout Building	2% Amosite	Not Quantified	Fair
USB-21-TSI-2	Pipe Insulation, Rigid, Yellow	USB - C104	USB - Throughout Building	*	Not Quantified	Fair
USB-21-TSI-3	Pipe Insulation, Rigid, Yellow	USB - C104	USB - Throughout Building	*	Not Quantified	Fair
USB-22-FP-1	Fireproofing, Sprayed-On	USB - 1C	USB - 207, 307, 407, S501, Rooftop Elevator Room	5% Chrysotile	490 sq. ft.	Good
USB-22-FP-2	Fireproofing, Sprayed-On	USB - 1C	USB - 207, 307, 407, S501, Rooftop Elevator Room	*	490 sq. ft.	Good
USB-22-FP-3	Fireproofing, Sprayed-On	USB - 1C	USB - 207, 307, 407, S501, Rooftop Elevator Room	*	490 sq. ft.	Good
USB-23-DWJC-1	Drywall & Joint Compound	USB - 1A	-	ND	-	-
USB-23-DWJC-2	Drywall & Joint Compound	USB - 1E	-	ND	-	-
USB-23-DWJC-3	Drywall & Joint Compound	USB - 1	-	ND	-	-
USB-24-CT-1	Ceiling Tile, 2' x 4' Textured	USB - 3	-	ND	-	-

ND – Non-Detected

* - This sample is part of a set in which one or more of the samples contains asbestos.

SAMPLE ID #	MATERIAL DESCRIPTION	SAMPLE LOCATION	MATERIAL LOCATION	ASB. % AND TYPE	APPROX. QUANTITY	CONDITION
USB-25-TSI-1	Tank Insulation	USB - 1E, East Side	USB - 1E, East Side	5% Amosite	30 sq. ft.	Good
USB-25-TSI-2	Tank Insulation	USB - 1E, East Side	USB - 1E, East Side	* 2% Chrysotile	30 sq. ft.	Good
USB-25-TSI-3	Tank Insulation	USB - 1E, East Side	USB - 1E, East Side	*	30 sq. ft.	Good
USB-26-TSI-1	Tank Insulation	USB - 1E, NE	USB - 1E, NE	5% Amosite	25 sq. ft.	Good
USB-26-TSI-2	Tank Insulation	USB - 1E, NE	USB - 1E, NE	*	25 sq. ft.	Good
USB-26-TSI-3	Tank Insulation	USB - 1E, NE	USB - 1E, NE	*	25 sq. ft.	Good
USB-27-TSI-1	Cementitious Pipe Insulation	USB - 1	-	ND	-	-
USB-27-TSI-2	Cementitious Pipe Insulation	USB - 1	-	ND	-	-
USB-27-TSI-3	Cementitious Pipe Insulation	USB - 1	-	ND	-	-
USB-28-FT-1	Floor Tile, 12" x 12" Light Blue Specked	USB - 101B	-	ND	-	-
USB-29-FT-1	Floor Tile, 12" x 12" Black w/ White Specks, and Black Mastic	USB - 101B	-	ND	-	-
USB-30-BUR-1	Built-Up Roofing	USB - Roof	-	ND	-	-
USB-31-BUR-2	Built-Up Roofing	USB - Roof, Elevator Shaft Roof	-	ND	-	-
USB-32-RP-1	Roof Patch & Repair	USB - Roof, Elevator Shaft Roof	USB - Roof, around Joints and Seams	10% Chrysotile Mastic	1,500 sq. ft.	Fair

ND – Non-Detected

* - This sample is part of a set in which one or more of the samples contains asbestos.







SAMPLE ID #	MATERIAL DESCRIPTION	SAMPLE LOCATION	MATERIAL LOCATION	ASB. % AND TYPE	APPROX. QUANTITY	CONDITION
USB-33-SV-1	Sheet Vinyl, Tan w/ Multicolored Specks	USB - Clean Copy, Restroom	-	ND	-	-
USB-34-SU-1	Sink Undercoating, Grey	USB - Clean Copy, Back Room	-	ND	-	-
USB-06-CTX-2	Ceiling Texture, Thick	USB - 402Q	202E, 402K, 402Q	*	425 sq. ft.	Good
USB-07-Cb-1	Cove Base, 4" Grey, and White Adhesive	USB - 402K	-	ND	-	-

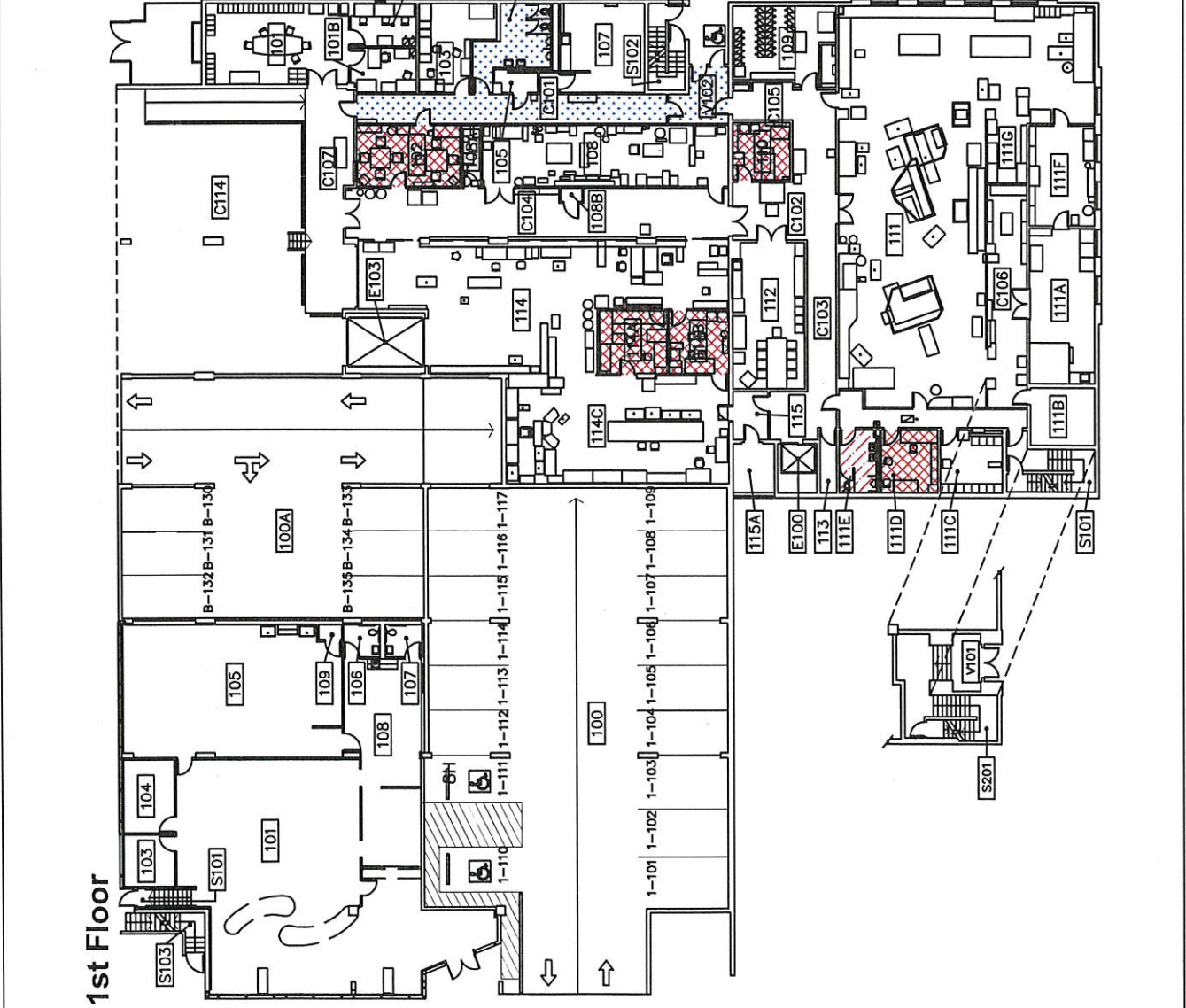
ND – Non-Detected

* - This sample is part of a set in which one or more of the samples contains asbestos.

APPENDIX B

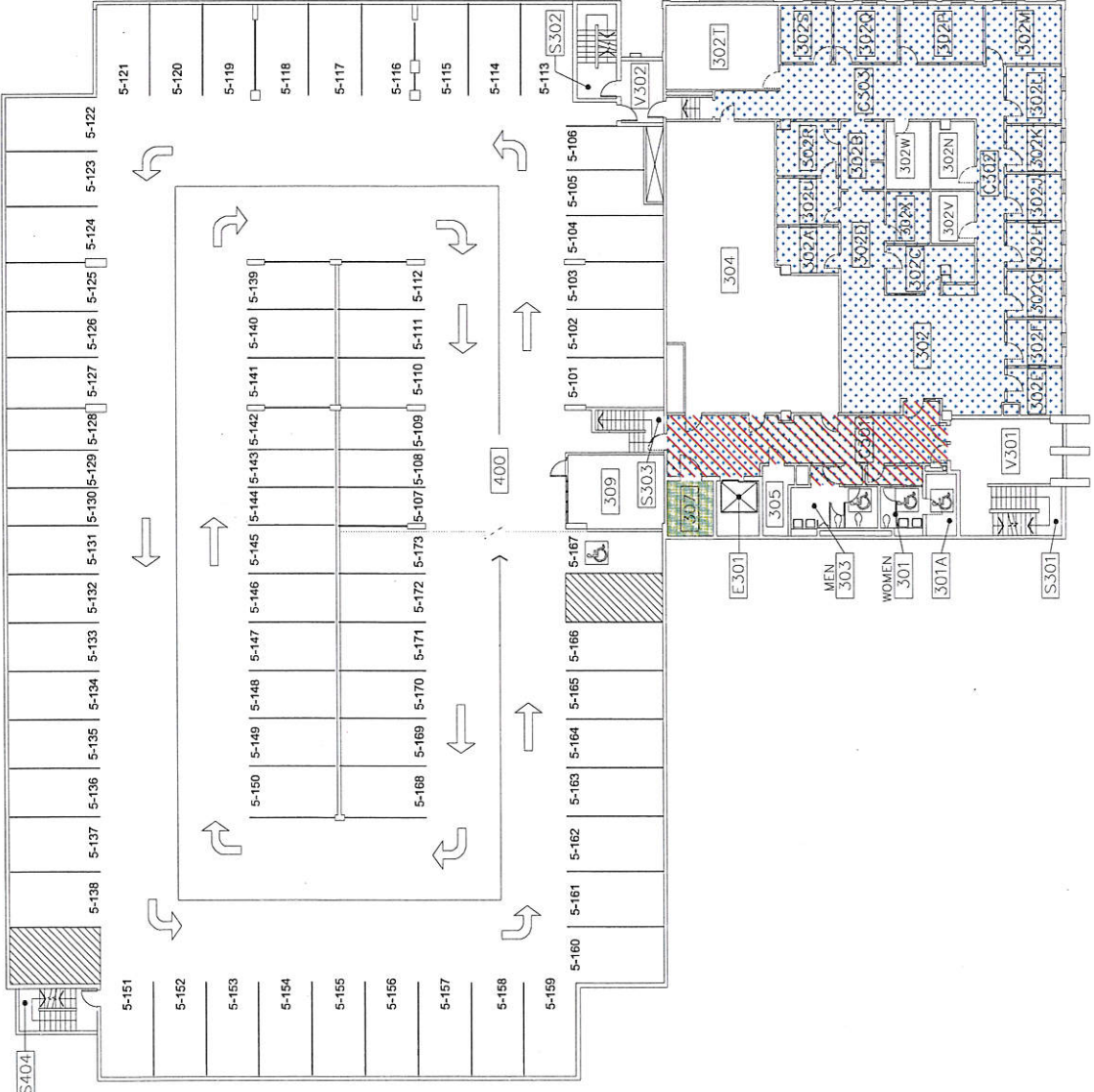
SITE DRAWING(S)

-  Floor Tile, 12" x 12" Beige w/ Brown Specks, and Black Mosaic
 -  Ceiling Tile, 2' x 4' Flissured w/ Pinholes**
 -  Acoustical Ceiling Texture
 -  Floor Tile, 12" x 12" Off White w/ Green Streaks**
 -  Floor Tile, 12" x 12" Tan Marbled
 -  Spray-Applied Fireproofing
- ACM not shown:
 Pipe Filling Insulation
 Sink Undercoating, Black
 Duct Seam Tape
 Rigid Pipe Insulation
 Roof Tank Insulation
 Roof Patch & Repair Material



- Floor Tile, 12" x 12" Beige w/ Brown Specks, and Black Mastic
- Ceiling Tile, 2" x 4" Fissured w/ Pinholes**
- Acoustical Ceiling Texture
- Floor Tile, 12" x 12" Off White w/ Green Streaks**
- Floor Tile, 12" x 12" Tan Marbled
- Sprey-Applied Fireproofing
- ACM not shown:
- Pipe Fitting Insulation
- Sink Undercoating, Black
- Duct Seam Tape
- Rigid Pipe Insulation
- Rigid Tank Insulation
- Roor Patch & Repair Material

3rd Floor









4th Floor

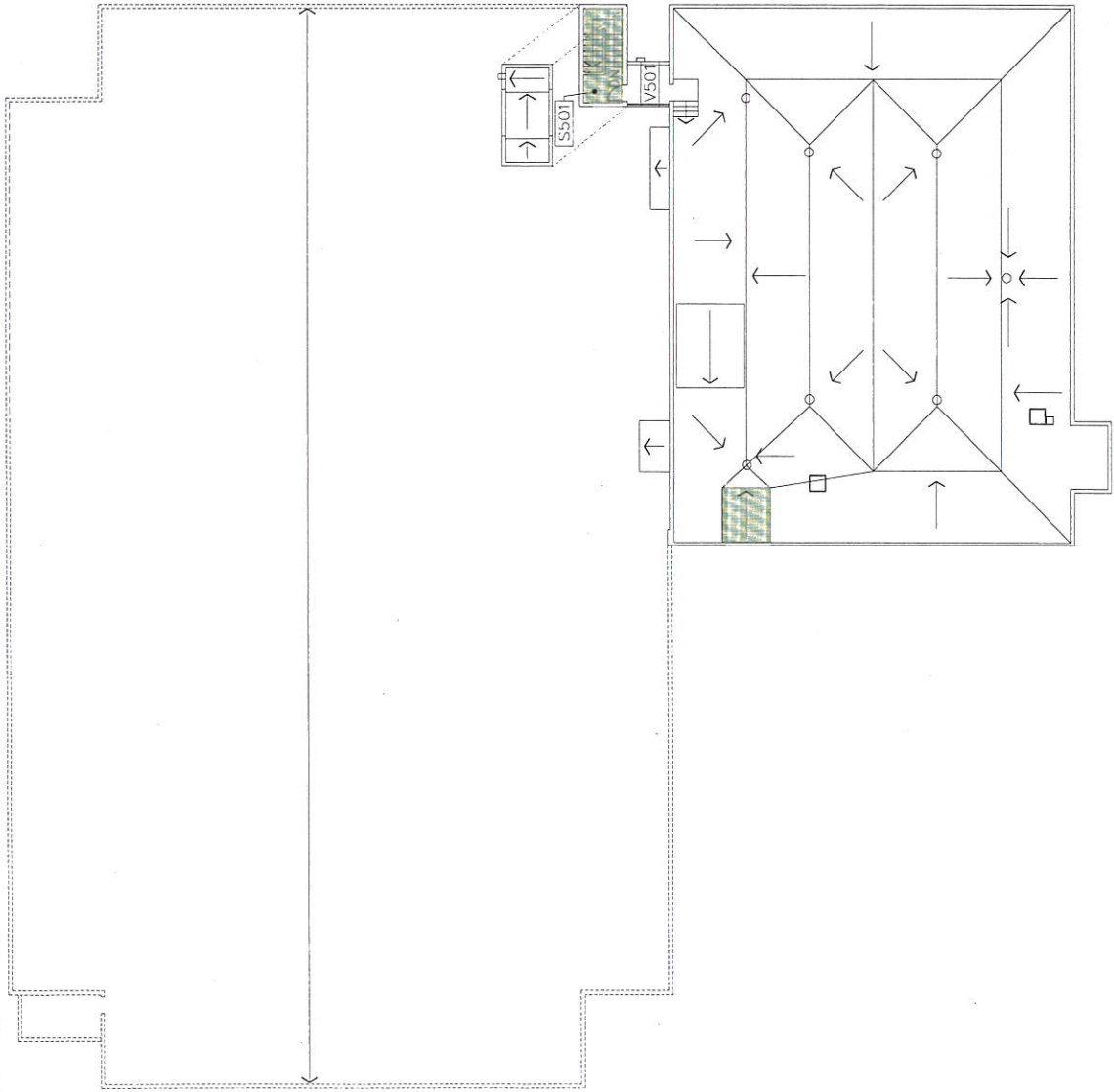


- Floor Tile, 12" x 12" Beige w/ Brown Specks, and Black Mastic
 - Ceiling Tile, 2' x 4' Fisured w/ Pinholes**
 - Acoustical Ceiling Texture
 - Floor Tile, 12" x 12" Off White w/ Green Streaks**
 - Floor Tile, 12" x 12" Tan Marbled
 - Spray-Applied Fireproofing
- ACM not shown:
 Pipe Filling Insulation
 Sink Undercoating, Black
 Duct Seam Tape
 Rigid Pipe Insulation
 Roof Tank Insulation
 Roof Patch & Repair Material

** - This material contains a trace amount of asbestos

Roof Plan

-  Floor Tile, 12" x 12" Beige w/ Brown Specks, and Black Mosaic
 -  Ceiling Tile, 2' x 4' Fissured w/ Pinholes**
 -  Acoustical Ceiling Texture
 -  Floor Tile, 12" x 12" Off White w/ Green Streaks**
 -  Floor Tile, 12" x 12" Tan Marbled
 -  Spray-Applied Fireproofing
- ACM not shown:
 Pipe Fitting Insulation
 Sink Undercoating, Black
 Duct Seam Tape
 Rigid Pipe Insulation
 Roof Patch & Repair Material

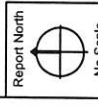


** - This material contains a trace amount of asbestos



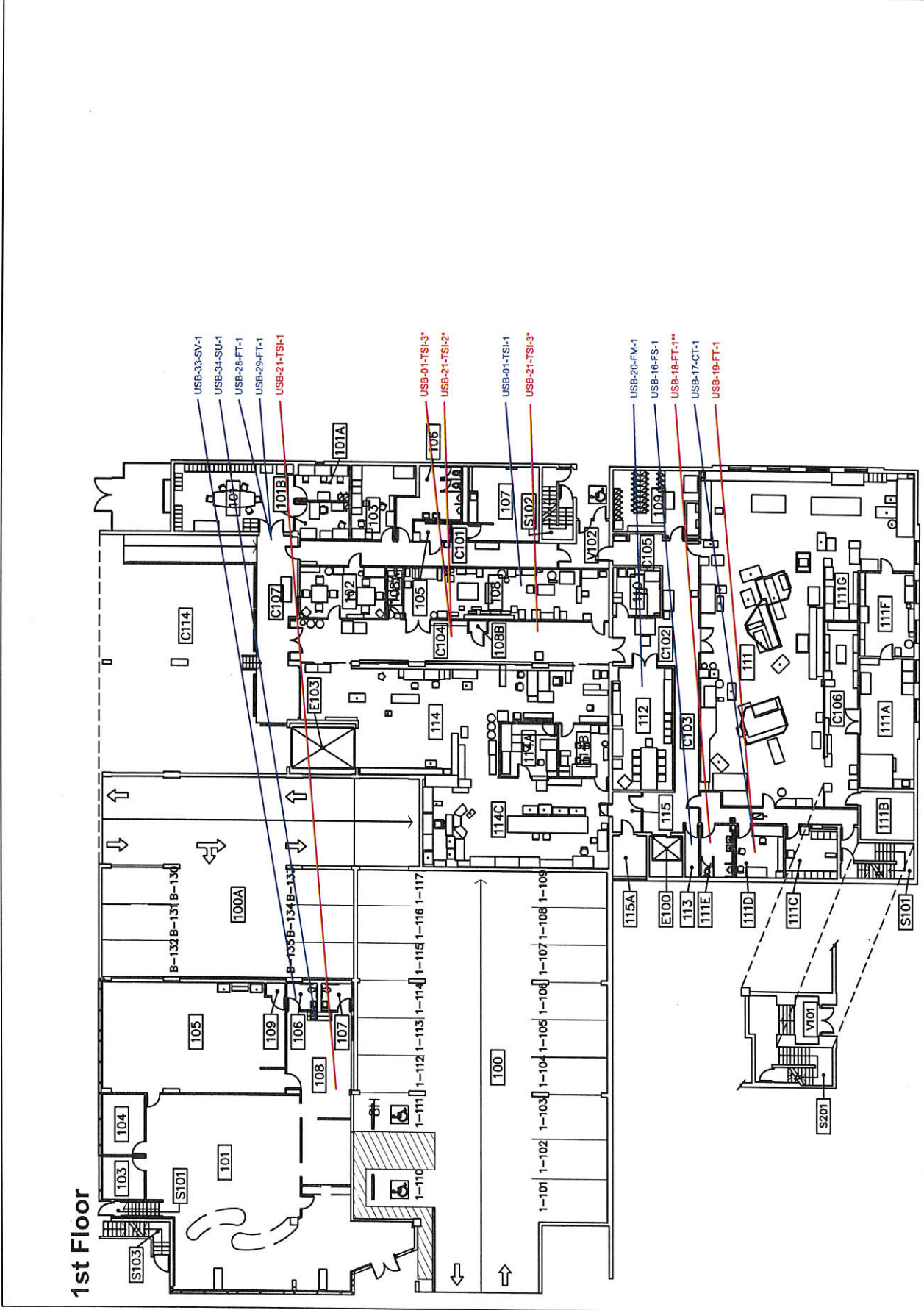
Forensic Analytical
 17400 SW Upper Boones Ferry Road, Suite 245
 Portland, Oregon 97224
 503/595.1001
 503/595.1006 fax
 www.forensicanalytical.com

Sample ID # Key
 ABC-00-T-1
 No Scale
 Report North



University Services Building
 1st Floor
 Samples Locations

CLIENT: PSU
 PROJECT: University Services Building
 LOCATION: 817 SW Montgomery St
 PORTLAND, Oregon 97201
 PROJECT #: P35563
 DATE: 7-7-08
 DRN BY: CFC
 PAGE #: SAM - 2/7



.. This sample is part of a set in which one of the samples tested positive for asbestos.
 ** - This sample contained a trace amount of asbestos.

APPENDIX C

**LABORATORY ANALYSIS REPORTS
AND CHAIN OF CUSTODY RECORDS**



Bulk Asbestos Analysis

(EPA Method 600/R-93-116, Visual Area Estimation)

Forensic Analytical Consulting Svcs
 Noal Kraft
 17400 SW Upper Boones Ferry Rd
 Suite 245
 Durham, OR 97224

Client ID: PE21
Report Number: B114000
Date Received: 06/17/08
Date Analyzed: 06/20/08
Date Printed: 06/20/08
First Reported: 06/20/08

Job ID/Site: PJ5563; Kate Vance University Services Building (USB) 3 floors and 2 basements
 617 SW Montgomery St Portland OR 97201

FASI Job ID: PE21
Total Samples Submitted: 54
Total Samples Analyzed: 42

Date(s) Collected:

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-01-TSI-1	10767459						
Layer: Off-White Semi-Fibrous Material		Amosite	2 %				
Layer: Off-White Woven Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)	Fibrous Glass (25 %)	Synthetic (5 %)					
USB-01-TSI-2	10767460						
Comment: Sample not analyzed due to prior positive result in series.							
USB-01-TSI-3	10767461						
Comment: Sample not analyzed due to prior positive result in series.							
USB-02-FT-1	10767462						
Layer: Beige Tile		Chrysotile	2 %				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
USB-03-CT-1	10767463						
Layer: Beige Fibrous Tile		Chrysotile	Trace				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (2 %)	Fibrous Glass (90 %)						
USB-04-CB-1	10767464						
Layer: Brown Non-Fibrous Material			ND				
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-05-CT-1	10767465						
Layer: Grey Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %)	Fibrous Glass (45 %)						

Report Number: B114000

Date Printed: 06/20/08

Client Name: Forensic Analytical Consulting Svcs

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-06-CTX-1	10767466						
Layer: Off-White Semi-Fibrous Material		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
USB-06-CTX-2	10767467						
Comment: Sample not analyzed due to prior positive result in series.							
USB-06-CTX-3	10767468						
Comment: Sample not analyzed due to prior positive result in series.							
USB-07-CB-1	10767469						
Layer: Brown Non-Fibrous Material			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-08-SU-1	10767470						
Layer: Black Mastic		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
USB-09-CM-1	10767471						
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (Trace)							
USB-10-PL-1	10767472						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-10-PL-2	10767473						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-10-PL-3	10767474						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-10-PL-4	10767475						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B114000

Date Printed: 06/20/08

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-10-PL-5	10767476						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-11-CT-1	10767477						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
USB-12-FT-1	10767478						
Layer: Black Tile			ND				
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-13-FM-1	10767479						
Layer: Black Tile			ND				
Layer: Tan Woven Backing			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)							
USB-14-DST-1	10767480						
Layer: Grey Fibrous Material		Chrysotile	95 %				
Total Composite Values of Fibrous Components:		Asbestos (95%)					
Cellulose (2 %)							
USB-15-CT-1	10767481						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
USB-16-FS-1	10767482						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (10 %)							
USB-17-CT-1	10767483						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
USB-18-FT-1	10767484						
Layer: Off-White Tile		Chrysotile	Trace				
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							

Report Number: B114000

Date Printed: 06/20/08

Client Name: Forensic Analytical Consulting Svcs

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-19-FT-1	10767485						
Layer: Tan Tile		Chrysotile	2 %				
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
USB-20-FM-1	10767486						
Layer: Brown Tile			ND				
Layer: Yellow Mastic			ND				
Layer: Tan Woven Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)							
USB-21-TSI-1	10767487						
Layer: Off-White Semi-Fibrous Material		Amosite	2 %				
Layer: Off-White Woven Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace) Fibrous Glass (25 %) Synthetic (5 %)							
USB-21-TSI-2	10767488						
Comment: Sample not analyzed due to prior positive result in series.							
USB-21-TSI-3	10767489						
Comment: Sample not analyzed due to prior positive result in series.							
USB-22-FP-1	10767490						
Layer: Off-White Semi-Fibrous Material		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
USB-22-FP-2	10767491						
Comment: Sample not analyzed due to prior positive result in series.							
USB-22-FP-3	10767492						
Comment: Sample not analyzed due to prior positive result in series.							
USB-23-DWJC-1	10767493						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (10 %)							
USB-23-DWJC-2	10767494						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B114000

Date Printed: 06/20/08

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-23-DWJC-3	10767495						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (10 %)							
USB-24-CT-1	10767496						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-25-TSI-1	10767497						
Layer: Off-White Semi-Fibrous Material		Amosite	5 %	Chrysotile	2 %		
Total Composite Values of Fibrous Components:		Asbestos (7%)					
Cellulose (Trace) Fibrous Glass (25 %) Synthetic (5 %)							
USB-25-TSI-2	10767498						
Comment: Sample not analyzed due to prior positive result in series.							
USB-25-TSI-3	10767499						
Comment: Sample not analyzed due to prior positive result in series.							
USB-26-TSI-1	10767500						
Layer: Off-White Semi-Fibrous Material		Amosite	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace) Fibrous Glass (5 %) Synthetic (5 %)							
USB-26-TSI-2	10767501						
Comment: Sample not analyzed due to prior positive result in series.							
USB-26-TSI-3	10767502						
Comment: Sample not analyzed due to prior positive result in series.							
USB-27-TSI-1	10767503						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-27-TSI-2	10767504						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-27-TSI-3	10767505						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Report Number: B114000

Date Printed: 06/20/08

Client Name: Forensic Analytical Consulting Svcs

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-28-FT-1	10767506						
Layer: Blue Tile			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-29-FT-1	10767507						
Layer: Black Tile			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
USB-30-BUR-1	10767508						
Layer: Silver Paint			ND				
Layer: Black Mastic			ND				
Layer: Black Tar Stones			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Beige Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Fibrous Glass (35 %)							
Comment: Bulk complex sample.							
USB-31-BUR-2	10767509						
Layer: Black Tar Stones			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (30 %)							
Comment: Bulk complex sample.							
USB-32-RP-1	10767510						
Layer: Grey Mastic		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
USB-33-SV-1	10767511						
Layer: White Sheet Flooring			ND				
Layer: Fibrous Backing			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %) Fibrous Glass (5 %) Synthetic (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B114000

Date Printed: 06/20/08

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
USB-34-SU-1	10767512						
Layer: Grey Semi-Fibrous Material				ND			
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Synthetic (20 %)						



James Flores, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by Forensic Analytical at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by Forensic Analytical to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by Forensic Analytical. The client is solely responsible for the use and interpretation of test results and reports requested from Forensic Analytical. This report must not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government. Forensic Analytical is not able to assess the degree of hazard resulting from materials analyzed. Forensic Analytical reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.



Forensic Analytical

BULK SAMPLE REQUEST FORM

Page 1 of 6

Client: **PE21 FACS Portland** Phone: (503) 595-1001 PM: **Noal Kraft** Date: **5-9-08**
Portland State University

Contact: **Noal Kraft** Special Instructions: E-mail results to **NKraft@forensica.com** and **tracy@forensica.com**
 Site: **PJ5563** **Kate Vance** University Services Building (USB) Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other

Client No.: **C6007** FACS Job#: **PJ5563** Analysis: **PLM Standard** / Point Count / Flame AA (Pb) / Other: **Analysis bracketed sds to 1st positive**

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
USB-01-TSI-1	Pipe fitting	USB-405			250 total
2	(yellow)	108			
3	(yellow)	108 C104			
USB-02-FT-1	FT, 12x12, beige w/ brown specks (black)	C401			
USB-03-CT-1	CT, 2x1, FB/P	C401			
USB-04-CB-1	CB, 12x12 4", brown (tan)	C401			
USB-05-CT-1	CT, 2x1, O/P	401			
USB-06-CTX-1	CTX, thick	402K			
2		402Q			
3		402Q			

Shipped via: Fed Ex Airborne USPS US Mail Courier XXX Drop Off Other:

Relinquished by: *[Signature]* Received by: *[Signature]*

Date & Time: 6-16-08 Date & Time: 6/17/08 10:20 AM

Condition Acceptable No

WB Wallboard IC - Joint Compound FT - Floor Tile FTM - Floor Tile Matrix BSM - Baseboard Mosaic
 RSP - Resilient Sheet Flooring CT - Ceiling Tile SAAW - Spray-Applied Acoustical Material WT - Wall Texture



Forensic Analytical

BULK SAMPLE REQUEST FORM

Client: **PE21 FACS Portland** Phone: (503) 595-1001
 Portland State University

Contact: **Noal Kraft** PM: **Noal Kraft** Date: **5-9-08**

Site: **PJ5563** Kate Vance University Services Building (USB)
 Special Instructions: E-mail results to **NKraft@forensica.com** and **rtracy@forensica.com**

Client No.: **C6007** FACS Job#: **PJ5563**
 Analysis: **PLM Standard** / Point Count / Flame AA (Pb) / Other:

Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other
 3-Day

Sampled by: **DKR** Due Date & Time:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
USB-07-CB-1	CTX, thick CB, 4" grey (white)	VOID			
USB-08-SU-1	Sink Undercoating, black	402P			
USB-09-CM-1	Carpet mastic, yellow	402N			
USB-10-PL-1	Plaster, wall	402			
2		202F			
3		202D			
4		C302			
5		304			

WB - Wallboard IC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BRM - Baseboard Mastic
 RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Shipped via: Fed Ex Airborne UPS US Mail Courier XXX Drop Off Other:

Relinquished by: *[Signature]* Date & Time: 6-16-08

Received by: *[Signature]* Date & Time: 6/17/08 10:00 AM

Condition: Acceptable



Forensic Analytical

BULK SAMPLE REQUEST FORM

Client: **PE21 FACS Portland** / **Portland State University** Phone: (503) 595-1001
 Contact: **Noal Kraft** PM: **Noal Kraft** Date: **5-9-08**
 Site: **PJ5563** Kate Vance University Services Building (USB) and rtracy@forensica.com
 Client No.: **C6007** FACS Job#: **PJ5563** Special Instructions: E-mail results to NKraft@forensica.com and rtracy@forensica.com
 Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:
 Analytic: PLM Standard / Point Count / Flame AA (Pb) / Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
815	CT, 2x4, G/P, 2x2 pattern	C202			
819	FT, 12x12, black (black)	202J			
818	Fm, black	elevator			
817	Duct seam-tape, white	304			
816	CT, 2x4, 2x2 pattern (reversed)	302N			
820	Firestop, red	113			
801	CT, 2x4, pinhole	111D			
822	FT, 12x12, off-white w/ green streaks (black)	111E			
823	FT, 12x12, tan marbled (black)	111D			
824	Fm, mauve marbled	112			

WB - Wallboard IC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BSM - Backboard Mastic
 RSP - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture
 Shipped via: Fed Ex Airborne UPS US Mail Courier XXX Drop Off Other:
 Relinquished by: [Signature] Received by: [Signature]
 Date & Time: 6-16-08 Date & Time: 6/17/08 10:00 AM
 Condition Acceptable: [Signature]



Forensic Analytical

BULK SAMPLE REQUEST FORM

Page 4 of 6

Client: **PE21 FACS Portland** Phone: (503) 595-1001
Portland State University

Contact: **Noal Kraft** PM: **Noal Kraft** Date: **5-9-08**
 Special Instructions: E-mail results to **NKraft@forensica.com** and **rtracy@forensica.com**

Site: **PJ5563** **Kate Vance** University Services Building (USB)
 Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:

Client No.: **C6007** FACS Job#: **PJ5563**
 Analysis: **RJM Standard** Point Count / Flame AA (Pb) / Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
820 [USB-21-TS1-1]	Pipe Insulation, rigid (yellow)	USB-108		Fair	
2	↓	C104			
3	↓	C104			
825 [USB-22-FP-1]	Fireproofing, sprayed-on	IC			
2	↓	IC			
3	↓	IC			
826 [USB-20-TS1-1]	DN-3C	IA			
3	↓	IE			
3	↓	I			
USB-24-CF1	CT, 2x4, textured	3			

WB - Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Marble BDM - Backboard Mantle
 RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Shipped via: Fed Ex Airborne UPS US Mail Courier XXX Drop Off Other

Relinquished by: **KELSH** Date & Time: **6/16/08**

Received by: **aw** Date & Time: **6/17/08** Condition Acceptable **Yes** No

Client: **PE21 FACS Portland** Phone: (503) 595-1001
 Portland State University

Contact: **Noal Kraft** PM: **Noal Kraft** Date: **5-9-08**
 Phone: (503) 595-1001 and nkraft@forensica.com and ntracy@forensica.com

Site: **PJ5563** Kate Vance University Services Building (USB)
 FACS Job#: **PJ5563**

Client No.: **C6007**

Special Instructions: E-mail results to NKraft@forensica.com and ntracy@forensica.com

Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:

Analysis: PLM Standard Point Count / Flame AA (Pb) / Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
827 USB-25-TSI-1 ↓ 2 ↓ 3	Tank insulation	IE east side ↓ IE ↓ IE			30A
828 USB-26-TSI-1 ↓ 2 ↓ 3	Tank insulation	IE NE ↓ IE ↓ IE			
256 USB-27-TSI-1 ↓ 2 ↓ 3	Cementitious pipe ins.	↓ ↓ ↓			
	USB-28-TSI-1 FT. 2ND Lr Blue SPSD	101B			

WB Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBH - Backboard Mastic
 RSI - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Shipped via: Fed Ex Airborne UPS US Mail Courier XXX Drop Off Other:

Relinquished by: *[Signature]* Date & Time: 6-16-08

Received by: *[Signature]* Date & Time: 6/17/08 10:09 AM

Condition Acceptable: *[Signature]*



Forensic Analytical

BULK SAMPLE REQUEST FORM

Client: **PE21 FACS Portland** Sampled by: **DKR** PM: **Noal Kraft** Date: **5-9-08**
Portland State University

Contact: **Noal Kraft** Phone: **(503) 595-1001** Special Instructions: E-mail results to **NKraft@forensica.com** and **rtracy@forensica.com**

Site: **PJ5563** **Kate Vance** University Services Building (USB) Turnaround Time: 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:

Client No.: **C6007** FACS Job#: **PJ5563** Analysis: **PLM Standard** / Point Count / Flame AA (Pb) / Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
257 USB-24-PT-1	FT, AX12 BL w/wm SFS + BL	101B			
258 USB-30-BUR-1	Built-UP Roofing	Roof			
259 31-BUR-2	" " "	Roof - Elevator Shaft Roof			
258 32-PP-1	Roof P+R	" " "			
33-SU-1	SU, TAN w/multi-color SFS	Clean Copy - Restroom			
34-SU-1	Sink Under Vanity Grey	" " - back Room			

WB - Wallboard JC - Joint Compound FT - Floor Tile Mastic BBA - Sintered Masonry
 RSF - Facilitate Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture
 Shipped via: Fed Ex Airborne UPS US Mail Counter XXX Drop Off Other:

Relinquished by: *[Signature]* Date & Time: 6-16-08

Received by: *[Signature]* Date & Time: 6/17/08

Friable Yes/No Good / Fair / Poor Condition Acceptable

APPENDIX D

GLOSSARY OF TERMS

GLOSSARY OF TERMS

ACM - Asbestos-containing material: Any material containing more than one percent asbestos. This includes suspect and/or presumed ACM.

AHERA: Asbestos Hazard Emergency Response Act of 1986.

AHERA Building Inspector: A person who has successfully completed the training requirements for a building inspector established by EPA Asbestos Model Accreditation Plan; Interim Final Rule (40 CFR Part 763, Appendix C to Subpart E, I.B.3) and whose certification is current.

AHERA Project Designer: A person who has successfully completed the training requirements for an asbestos abatement project designer established by EPA regulations (40 CFR 763.90(g)) and whose certification is current.

Asbestos: Chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite and any of these minerals that have been chemically treated and/or altered.

Asbestos Building Inspection: A written report describing an inspection using the procedures contained in EPA regulations (40 CFR 763.86) to determine whether materials or structures to be worked on, renovated, removed, or demolished (including materials on the outside of structures) contain asbestos.

Authorized Person: Any person authorized by the employer and required by work duties to be present in regulated areas.

Chain of Custody Record: Legal documentation that follows samples from collection to the laboratory indicating who has been in possession of the samples.

Competent Person: A person capable of identifying asbestos hazards, selecting appropriate control strategies and having the authority to take prompt corrective measures. Additionally, for Class I and Class II work, one who is specially trained in a training course meeting the criteria of EPA's Model Accreditation Plan (40 CFR 763) for project designer or supervisor, or its equivalent and, for Class II work, who is trained in an operations and Maintenance O & M Course developed by EPA (40 CFR 76392 (a) (2)).

Contractor: The asbestos abatement contractor.

EPA: United States Environmental Protection Agency

Friable: Asbestos-containing material that can be crumbled, pulverized or reduced to powder when dry, by hand pressure.

HEPA - High-Efficiency Particulate Air (Filter): A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.

Intact: ACM that has not crumbled, been pulverized, or otherwise deteriorated so that its no longer likely to be bound within its matrix.

LF: Linear feet

NESHAPs: National Emission Standard for Hazardous Air Pollutants, 40 CFR part 61.

NVLAP: National Voluntary Laboratory Accreditation Program

OSHA: United States Department of Labor - Occupational Safety and Health Administration.

Owner: The legal entity, including a lessee, which exercises control over management and record keeping functions relating to a building and/or facility in which the abatement activities described in this document take place.

Owners Representative: A person authorized by the Owner to act on the Owners behalf.

PLM: Polarized Light Microscopy

PACM - Presumed Asbestos Containing Material: Thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as PACM may be rebutted through PLM analysis of samples obtained by certified inspectors.

Removal: All operations where ACM and/or PACM is taken out or stripped from structures or substrate, and includes demolition operations.

Sq. Ft.: Square feet

Surfacing Material: Material that is sprayed, troweled-on or otherwise applied to surfaces.

Suspect ACBM: Material that is suspected of containing asbestos that has not been sampled and analyzed for asbestos content.

TSI - Thermal System Insulation: ACM applied to pipes, fittings, boilers, breaching, tanks, ducts or other structural components to prevent heat loss or gain.

APPENDIX E

ACCREDITATION

Certificate of Completion

This is to certify that

Noal C. Kraft

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
USCA Title 35 / 40 CFR 763 (AHERA)

Certificate Number: 10267132


Instructor

EPA Provider Cert. Number: 1085



Jul 18, 2007

Date(s) of Training

Exam Score: NA

Expiration Date: Jul 17, 2008

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • (206) 285.3373 • fax (206) 285.3927

Certificate of Completion

This is to certify that

Dan K. Rouse

has satisfactorily completed
4 hours of refresher training as an
Asbestos Building Inspector

to comply with the training requirements of
WSCA Title III / 40 CFR 763 (AHCRA)

Certificate Number: 1029792



Instructor

EPA Provider Cert. Number: 1085



Jun 18, 2008

Date(s) of Training

Exam Score: NA

Expiration Date: Jun 18, 2009

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • (206) 285.3373 • fax (206) 285.3927

Certificate of Completion

This is to certify that

Robin Sharpe

has attended and successfully completed the requisite training for accreditation under TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR EPA AHERA (Asbestos Hazard Emergency Response Act), and ASHARA Model Accreditation Program requirements for **AHERA INSPECTOR REFRESHER**

as presented by

Bureau Veritas North America, Inc.



Allen George
INSTRUCTOR

Course Date: 04/29/08

Certification #: 08-1061

Certificate Expiration Date: 04/29/09



3800 NE Sandy Boulevard, Suite 101, Portland, Oregon 97232 • (971) 244-1200 • fax (971) 244-1209