
**ASBESTOS SURVEY FOR DEMOLITION
602 W 4TH STREET
DELTA, COLORADO 81416**

Prepared for:

**City of Delta
Attn: Ellen Michelson
360 Main Street
Delta, Colorado 81416**

Prepared by:

**Christopher Lakin, P.E.
Certified Asbestos Inspector #13283**

September 8, 2015

Project No. COD08282015

**PLATEAU, INC.
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
CONSULTING FIRM # ACF-14973**



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TABLE 1 – ASBESTOS RESULTS FOR HOMOGENEOUS MATERIALS

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ACRONYMS

Commonly Used Acronyms

ACBM	Asbestos Containing Building Materials
ACM	Asbestos Containing Materials
AHERA	Asbestos Hazard Emergency Response Act
CDPHE	Colorado Department of Public Health and Environment
EPA	Environmental Protection Agency
HA	Homogeneous Area
HEPA	High Efficiency Particulate Air
HVAC	Heating Ventilation and Air Conditioning
NESHAP	National Emission Standards for Hazardous Air Pollutants
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PCM	Phase Contrast Microscopy
PLM	Polarized Light Microscopy
RBM	Regulated Building Material
TEM	Transmission Electron Microscopy
TSI	Thermal System Insulation

1.0 INTRODUCTION

Plateau, Inc. was retained by Ms. Ellen Michelson with the City of Delta to perform an asbestos survey for the purpose of demolition of an unoccupied residential structure located on 602 W. 4th Street, Delta, Colorado. Mr. Christopher Lakin, certified by the EPA and CDPHE, retains certification in accordance with regulatory guidelines and is identified by CDPHE as Asbestos Inspector #13283. The inspection was conducted in accordance with applicable EPA, OSHA and CDPHE regulations and was performed on August 28, 2015. All accessible materials were sampled in general accordance with AHERA regulations.

2.0 ASBESTOS METHODOLOGY

The purpose of the asbestos inspection was to identify the condition of friable and Category II non-friable asbestos materials that are present in the residence and will be affected by the demolition. All materials were inspected and testing in accordance with Colorado Reg. 8, Part B. During the asbestos materials survey, Plateau, Inc. performed the following tasks:

- Inspected accessible areas for suspected asbestos materials;
- Determined friability of suspected asbestos materials by touching;
- Developed a sampling plan for each material based on the homogeneous material type, friability, accessibility, and material locations;
- Assessed the condition and potential hazards of the suspected asbestos materials;
- Collected samples of suspected homogeneous and non-homogeneous materials in accordance of Colorado Reg. 8, Part B and submitted them for laboratory analysis by Polarized Light Microscopy (PLM); and,
- Documented findings and inspection protocol in accordance with accepted industry standards.

3.0 ASBESTOS INSPECTION PROCEDURE

Asbestos sampling is conducted by segregating building materials into sampling units call homogeneous areas. A homogeneous area is defined as a material that is uniform in texture and color and appears identical in every other respect. Homogeneous suspect asbestos materials were identified by visually inspecting the following systems:

- Surface Systems
- Insulation Systems
- Miscellaneous Systems

Based on Mr. Lakin’s inspection, the following types of suspect asbestos- containing materials were identified:

- Wall Systems, Gypsum, Stucco
- Floor Systems, Sheet Flooring, Tiles
- Miscellaneous
 - Roofing
 - Laminate
 - Concrete

3.1 Asbestos Sample Collection

The EPA and CDPHE regulate the minimum number of samples to be collected of each suspect material as outlined on Table 1, Sampling Minimums.

TABLE 1 – SAMPLING MINIMUMS

MATERIAL	HOMOGENEOUS AREA SIZE	UNITS	MINIMUM SAMPLE AMOUNT
SURFACING	LESS THAN 1,000	SF	3
SURFACING	1,000 TO 5,000	SF	5
SURFACING	MORE THAN 5,000	SF	7
THERMAL SYSTEM INSULATION		LF/ SF/EA	3
MISCELLANEOUS MATERIALS		LF/SF/EA	1

SF – Square Feet LF – Linear Feet EA – Each

Mr. Lakin collected bulk samples of the suspected friable and non-friable asbestos materials in a random and representative manner as defined by the U.S. Environmental Protection Agency (EPA) statistical sampling methods. To prevent cross contamination, equipment is washed in between the collection process. The collected samples were packaged in sealed baggies and labeled appropriately.

3.2 Asbestos Sample Analysis

The bulk samples of suspected asbestos materials were submitted under chain of custody to an independent laboratory for analysis. EMSL Analytical Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) (Lab Code 200828-0). Individual layers of the samples were analyzed by PLM (Polarized Light Microscopy), a bulk sample analysis method established by the National Voluntary Laboratory Accreditation Program (NVLAP), to determine asbestos type and content. Bulk samples were analyzed using EPA Method 600/R-93/116. Unused portions of the samples are archived for 60 days, unless the client requests special handling. By regulation, any single positive asbestos sample classifies the entire homogeneous material as asbestos - containing and additional analysis is not required.

4.0 ASBESTOS REGULATORY CRITERIA

According to the Occupational Safety and Health Administration (OSHA), the EPA, and the Colorado Department of Public Health and Environment (CDPHE), samples with asbestos concentrations greater than 1 percent are classified as asbestos containing and are a regulated material. If a building structure is scheduled for renovation or demolition, samples that contain a "trace" amount of asbestos (less than 1 percent) must be further analyzed by a more accurate point-count analysis to determine if they surpass the 1 percent threshold, or the materials must be assumed to contain asbestos and be classified as a regulated material.

The EPA and OSHA distinguish between friable and non-friable forms of asbestos materials. Friable materials can be crumbled or reduced to powder by hand pressure when dry. Non-friable materials cannot be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friable materials are more likely to be released into the air, especially if impacted or damaged during normal use, renovation, or demolition of a building. Therefore, the distinction between friable and non-friable asbestos materials is important. The EPA further segregates non-friable asbestos materials into Category I or Category II. Category I non-friable asbestos materials include floor tiles and roofing felts. Removal of these asbestos materials is not required prior to demolition

as long as they are in good condition. Category II asbestos materials are all other non-friable asbestos materials and must be removed prior to normal demolition or renovation.

Whether removed or remaining in a structure during demolition, the confirmed or presumed asbestos materials are subject to EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) and OSHA regulations. In 40CFR61.145, NESHAP requires that each owner or operator of a demolition activity provide the administrator with written notice of intent. The CDPHE has implemented the NESHAP program. The scope of work requires a Colorado State demolition permit that cannot be issued at this time, see results below.

5.0 ASBESTOS INSPECTION RESULTS

Results of the asbestos analyses for the homogeneous material collected from the residence are summarized below and in Table 2. Table 2 presents Plateau, Inc.'s homogeneous material identifier and laboratory results for asbestos content, Laboratory reports for the samples are presented in Appendix B.

5.1 602 W. 4th Street, Delta, Colorado

Plateau, Inc. collected twenty five (25) samples of suspect building materials from the residence.

PLEASE REFERENCE TABLE 2 – ASBESTOS RESULTS FOR HOMOGENEOUS MATERIALS

Of the twenty five samples –

- **Four samples contained asbestos above the regulatory guidelines. The four samples are sheet flooring products located in the kitchen, living room, northeast bedroom, southeast bedroom and hallway. These floorings will require abatement according to Colorado Reg. 8, Part B. Colorado Reg. 8, Part B also requires Plateau to provide final visual inspection and clearance air monitoring. Upon successful results established by the regulation, Plateau will sign the demolition permit application.**
- **Five samples contained asbestos below the regulatory guidelines. The material is the plaster behind the gypsum drywall located in the living room, kitchen, southeast bedroom, northeast bedroom. This material will require removal according to OSHA guidelines. It is the responsibility of the owner to inform the demolition contractor of this finding. Final visual inspection and air monitoring are not required upon removal of this material.**

6.0 CONCLUSIONS AND RECOMMENDATIONS

Asbestos containing materials are regulated by the Colorado Department of Public Health and Environment (CDPHE), the U.S. Environmental Protection Agency (EPA), and the Occupational Safety and Health Administration (OSHA). Colorado Reg. 8, Part B requires demolition permits for projects that require the removal of any load bearing member. A Colorado State demolition permit application is not included with this report.

7.0 LIMITATIONS

This report was prepared for the use of assessing the potential asbestos building materials in a residence located at 602 W. 4th Street, Delta, Colorado. Observations made were not intrusive and limited to readily visible or exposed building materials within the residence. Our services were performed with no destruction for sampling; thus, our services are not intended to guarantee or certify the absence of asbestos.

The accuracy and reliability of environmental studies are a reflection of the number and type of samples taken and extent of the analyses conducted, and are thus inherently limited to and dependent upon the resources expended. An independent laboratory performed laboratory analysis. Plateau, Inc. is not responsible for the accuracy of data presented by others.

Plateau, Inc. performed the survey in a manner consistent with the level of care and expertise exercised by members of the asbestos inspection and assessment profession. Plateau, Inc. does not imply or guarantee that every suspect asbestos material on or in the building has been identified or sampled. Historically, asbestos has been used extensively in the United States. This inspection is intended to identify those components that are reasonably suspect and hence most likely to be asbestos materials in quantities subject to regulation based on existing industry and regulatory standards. If additional asbestos materials or asbestos-suspect materials are encountered, work should be stopped and an additional asbestos inspection performed.

Thank you for your business. If we can be of further service, please do not hesitate to call us, 970.252.1363.

Sincerely,

Plateau, Inc.
Christopher Lakin, P.E.
Certified Asbestos Inspector # 13283

CL:kl

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SUMMARY OF FEDERAL AND STATE ASBESTOS REGULATIONS

OSHA: U.S. Department of Labor, Occupational Safety, and Health Administration, including but not limited to:

- Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite;
- Final Rules Title 29, Part 1910, Section 1325 and Part 1926, Section 1101 of the Code of Federal Regulations;
- Respiratory Protection Standard Title 29, Part 1910, Section 134 of the Code of Federal Regulations;
- Construction Industry Title 29, Part 1926, of the Code of Federal Regulations;
- Access to Employee Exposure and Medical Records Title 29, Part 1910, Section 2 of the Code of Federal Regulations;
- Hazard Communication Title 29, Part 1926 Section 59 of the Code of Federal Regulations; and
- Specifications for Accident Prevention Signs and Tags Title 29, Part 1910, Section 145 of the Code of Federal Regulations.

DOT: U.S. Department of Transportation, including but not limited to:

- Hazardous Substances Title 29, Part 171 and 172 of the Code of Federal Regulations.

EPA: U.S. Environmental Protection Agency, including but not limited to:

- Asbestos Hazard Emergency Response Act (AHERA) Regulation;
- Asbestos Containing Materials in Schools Final Rule & Notice Title 40, Part 763 Sub-part E of the Code of Federal Regulations;
- Training Requirements of (AHERA) Regulation;
- Asbestos Containing Materials in Schools Final Rule & Notice Title 40, Part 763, Sub-part E, Appendix C of the Code of Federal Regulations;

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- National Emission Standard for Hazardous Air Pollutants (NESHAPS); and
- National Emission Standard for Asbestos Title 40, Part 61, Sub-part A, Sub-part M (Revised Sub-part B) of the Code of Federal Regulations.

CDPHE: Colorado Department of Public Health and Environment, including but not limited to:

- Air Quality Control Commission, Regulation No. 8, Part B “Emissions Standards for Asbestos”; and
- Hazardous Materials and Waste Management Division, 6 CCR 1007-2, Section 5 “Asbestos Waste Management.”

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TABLE 2

ASBESTOS RESULTS FOR HOMOGENEOUS MATERIALS

KEY - RED INK = COLORADO REGULATED MATERIAL

BLUE INK = OSHA REGULATED MATERIAL

SAMPLE/MATERIAL	LAB RESULT	LOCATION OF MATERIAL
1. MISC-3, MISCELLANEOUS, SHEET FLOORING, YELLOW PATTERN	15% CHRYSOTILE	KITCHEN
2. MISC-5, MISCELLANEOUS, SHEET FLOORING, YELLOW/GOLD LARGE PATTERN	15% CHRYSOTILE	LIVING ROOM, NORTHEAST BEDROOM
3. MISC-4, MISCELLANEOUS, SHEET FLOORING, GREENISH	15% CHRYSOTILE	SOUTHEAST BEDROOM
4. MISC-6, MISCELLANEOUS, SHEET FLOORING, PINK/GREEN BLOCKS	10% CHRYSOTILE	HALLWAY
5. MISC-7, MISCELLANEOUS, 12X12 BROWN TILES	NON-DETECT	BATHROOM
6. MISC-7A, MISCELLANEOUS, SHEET FLOORING UNDER TILES	NON-DETECT	BATHROOM
7. MISC-8, MISCELLANEOUS, LAMINATE COUNTERTOP	NON-DETECT	KITCHEN
8. SS-4, SURFACE SYSTEM, TROWEL TEXTURE ON PLASTER	0.75% CHRYSOTILE	LIVING ROOM
9. SS-4, SURFACE SYSTEM, TROWEL TEXTURE ON PLASTER	0.75% CHRYSOTILE	LIVING ROOM
10. SS-4, SURFACE SYSTEM, TROWEL TEXTURE ON PLASTER	0.25% CHRYSOTILE	LIVING ROOM
11. SS-4, SURFACE SYSTEM, TROWEL TEXTURE ON PLASTER	≤0.25% CHRYSOTILE	LIVING ROOM

12. SS-2, SURFACE SYSTEM, WHITE COMPOUND ON PLASTER	≤0.25% CHRYSOTILE	KITCHEN, SOUTHEAST BEDROOM, NORTHEAST BEDROOM
13. SS-2, SURFACE SYSTEM, WHITE COMPOUND ON PLASTER	0.25% CHRYSOTILE	KITCHEN, SOUTHEAST BEDROOM, NORTHEAST BEDROOM
14. SS-2, SURFACE SYSTEM, WHITE COMPOUND ON PLASTER	0.25% CHRYSOTILE	KITCHEN, SOUTHEAST BEDROOM, NORTHEAST BEDROOM
15. SS-3, SURFACE SYSTEM, SPONGE TEXTURE ON PLASTER	NON-DETECT	BACK HALLWAY, BATHROOM
16. SS-3, SURFACE SYSTEM, SPONGE TEXTURE ON PLASTER	NON-DETECT	BACK HALLWAY, BATHROOM
17. SS-3, SURFACE SYSTEM, SPONGE TEXTURE ON PLASTER	NON-DETECT	BACK HALLWAY, BATHROOM
18. MISC-12, MISCELLANEOUS, INSULATION WITH ASPHALTIC VAPOR RETARDER	NON-DETECT	ATTIC
19. SS-1, SURFACE SYSTEM, STUCCO	NON-DETECT	EXTERIOR
20. SS-1, SURFACE SYSTEM, STUCCO	NON-DETECT	EXTERIOR
21. SS-1, SURFACE SYSTEM, STUCCO	NON-DETECT	EXTERIOR
22. MISC-13, MISCELLANEOUS, CONCRETE FOUNDATION	NON-DETECT	EXTERIOR

602 W. 4TH STREET

602 W. 4TH STREET, DELTA, COLORADO

23. MISC-1, MISCELLANEOUS, SIDING, ASPHALT ON GABLES	NON-DETECT	EXTERIOR
24. MISC-2, MISCELLANEOUS, ROOFING	NON-DETECT	ROOF
25. MISC-2A, MISCELLANEOUS, ROOFING UNDERLAYMENT	NON-DETECT	ROOF

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Phone: (970) 252-1363
Fax:
Received: 08/31/15 9:30 AM
Analysis Date: 9/2/2015
Collected: 8/28/2015

Project: 602 W. 4th

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Linoleum 1 221505462-0001		Tan/Yellow Fibrous Homogeneous	5% Cellulose	80% Non-fibrous (other)	15% Chrysotile
1-Mastic 1 221505462-0001A		Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
1-Linoleum 2 221505462-0001B		Gray/Yellow Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (other)	None Detected
1-Mastic 2 221505462-0001C		Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
2-Linoleum 221505462-0002		Brown/Tan Fibrous Homogeneous	5% Cellulose	80% Non-fibrous (other)	15% Chrysotile
2-Mastic 221505462-0002A		Yellow Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
3 221505462-0003		Tan/Green Fibrous Homogeneous	5% Cellulose	80% Non-fibrous (other)	15% Chrysotile
4 221505462-0004		Tan/Peach Fibrous Homogeneous	10% Cellulose	80% Non-fibrous (other)	10% Chrysotile

Analyst(s)

Donna Nading (52)

Barbara Shepherd, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 09/02/2015 17:45:24

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Project: **602 W. 4th**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
5-Floor Tile 221505462-0005		Brown/Black Non-Fibrous Homogeneous	5% Synthetic	95% Non-fibrous (other)	None Detected
5-Mastic 221505462-0005A		Clear Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
6-Adhesive 221505462-0006		Clear Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
6-Flooring 221505462-0006A		Tan Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
7-Surfacing 221505462-0007		Brown/White Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (other)	None Detected
7-Adhesive 221505462-0007A		White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
8-Texture 1 221505462-0008		White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
8-Paint 221505462-0008A		Various Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
8-Texture 2 221505462-0008B		Blue Non-Fibrous Homogeneous	2% Fibrous (other)	30% Ca Carbonate 68% Non-fibrous (other)	None Detected
9-Texture 1 221505462-0009		White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
9-Paint 221505462-0009A		Various Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
9-Texture 2 221505462-0009B		Blue Non-Fibrous Homogeneous	2% Fibrous (other)	30% Ca Carbonate 68% Non-fibrous (other)	None Detected
10-Texture 1 221505462-0010		White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
10-Paint 221505462-0010A		Various Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
10-Texture 2 221505462-0010B		Blue Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
10-Plaster 221505462-0010C		Gray/White Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (other)	<1% Chrysotile

Analyst(s)
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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11-Texture 221505462-0011		Blue Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
11-Plaster 221505462-0011A		Gray/White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	<1% Chrysotile
12-Texture 221505462-0012		White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
12-Skim Coat 221505462-0012A		White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected
12-Plaster 221505462-0012B		Gray/White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	<1% Chrysotile
13-Texture 1 221505462-0013		White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected
13-Texture 2 221505462-0013A		Blue Non-Fibrous Homogeneous	2% Fibrous (other)	20% Ca Carbonate 78% Non-fibrous (other)	None Detected
13-Plaster 221505462-0013B		Gray/White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	<1% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
14-Texture 1 221505462-0014		White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14-Paint 221505462-0014A		Various Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
14-Texture 2 221505462-0014B		Blue Non-Fibrous Homogeneous	2% Fibrous (other)	20% Ca Carbonate 78% Non-fibrous (other)	None Detected
14-Plaster 221505462-0014C		Gray/White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	<1% Chrysotile
15-Texture 221505462-0015		White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
15-Drywall 221505462-0015A		Brown/White Fibrous Homogeneous	25% Cellulose	50% Gypsum 25% Non-fibrous (other)	None Detected
16-Texture 1 221505462-0016		White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected
16-Texture 2 221505462-0016A		Pink Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected

Analyst(s)

Donna Nading (52)

Barbara Shepherd, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Denver, CO NVLAP Lab Code 200828-0

Initial report from 09/02/2015 17:45:24

**EMSL Analytical, Inc.**

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 CustomerPO:
 ProjectID:

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236 So. 3rd Street
#340
Montrose, CO 81401

Phone: (970) 252-1363
 Fax:
 Received: 08/31/15 9:30 AM
 Analysis Date: 9/2/2015
 Collected: 8/28/2015

Project: 602 W. 4th

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
17-Texture 221505462-0017		White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (other)	None Detected
17-Paint 221505462-0017A		Yellow/Pink Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
18-Brown fibrous layer 221505462-0018		Brown Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (other)	None Detected
18-Black Layer 221505462-0018A		Black Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
18-Insulation 221505462-0018B		Brown Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (other)	None Detected
19 221505462-0019		Gray/Tan Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
20 221505462-0020		Gray/Tan Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					
21 221505462-0021		Gray/Tan Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (other)	None Detected
Inseparable paint / coating layer included in analysis					

Analyst(s)

Donna Nading (52)

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Project: **602 W. 4th**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
22 221505462-0022		Gray Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (other)	None Detected
23 221505462-0023		Brown/Black Fibrous Homogeneous	30% Cellulose	70% Non-fibrous (other)	None Detected
24 221505462-0024		Black/Green Fibrous Homogeneous	10% Glass	90% Non-fibrous (other)	None Detected
25 221505462-0025		Brown/Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected

Analyst(s)
 Donna Nading (52)

Barbara Shepherd
 Barbara Shepherd, Laboratory Manager
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Project: 602 W. 4th

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy. Quantitation using 400 Point Count Procedure

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
10-Plaster 221505462-0010C		Gray/White Non-Fibrous Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile
11-Plaster 221505462-0011A		Gray/White Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<0.25% Chrysotile
12-Plaster 221505462-0012B		Gray/White Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	<0.25% Chrysotile
13-Plaster 221505462-0013B		Gray/White Non-Fibrous Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile
14-Plaster 221505462-0014C		Gray/White Non-Fibrous Homogeneous		99.75% Non-fibrous (other)	0.25% Chrysotile

Analyst(s)

William Nguyen (5)

Barbara Shepherd, Laboratory Manager
 or other approved signatory

Disclaimer: Some samples may contain asbestos fibers present in dimensions below PLM resolution limits. The limit of detection as stated in the method is 0.25%. EMSL Analytical Inc suggests that samples reported as <0.25% or none detected undergo additional analysis via TEM. The above test report relates only to the items tested. This report may not be reproduced, except in full, without written approval of EMSL Analytical Inc. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States Government. EMSL Analytical Inc., bears no responsibility for sample collection activities, analytical method limitations, or the accuracy of results when requested to separate layered samples. EMSL Analytical Inc., liability is limited to the cost of sample analysis. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.
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Initial report from 09/15/2015 13:40:41