



Asbestos & Lead Based Paint Assessment

City of Spartanburg
369 Farley Street
Spartanburg, South Carolina

Prepared for:

The City of Spartanburg
440 South Church St., Suite B
Spartanburg, SC 29306-5234

Prepared by:

Apex Environmental Management, Inc.
7 Winchester Court
Mauldin, South Carolina 29662

Project Number: 0815-163

April 7, 2017





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- Hazard Communication

Apex Project Number 0815-163

April 7, 2017

Mr. Lynn Coggins
City of Spartanburg
440 South Church Street, Suite B
Spartanburg, SC 29306-5234

Reference: Asbestos and Lead-Based Paint Assessment Services
369 Farley Street
Spartanburg, South Carolina

Dear Mr. Coggins:

Apex Environmental Management, Inc. (Apex) is pleased to provide the results of our assessment services for the referenced property.

This report and the associated attachments summarize our evaluation of the conditions observed at the project site. The findings presented by Apex are based upon sampling performed in the subject building. There is a chance that undetected ACM may exist in the building between walls or in other areas that would only be exposed during demolition or structural renovations. Should material be discovered that could potentially contain asbestos during the demolition process, additional samples of the material should be collected by a licensed asbestos inspector and submitted to an accredited laboratory for analytical interpretation. Our recommendations are based on the guidelines presented in EPA and/or OSHA regulations.

Please note that this document is not a specification for asbestos removal. It does not contain means and methods for abatement. Quantities are estimates and contractors must verify amounts prior to bidding or removal. If you are planning an abatement project, please contact Apex to discuss the requirements. Use of this document without the express written consent of Apex is at the sole risk of the user and or/abatement contractor.

The conclusions and/or recommendations contained in this report are based on our understanding of the applicable standards at the time this report was prepared. No warranty, expressed or implied, is made. If you have any questions please feel free to contact us at (864) 404-3210.

Respectfully submitted,
APEX ENVIRONMENTAL MANAGEMENT, INC.

Ben Oliver
Project Manager

Rebecca W. Shultz, CIH, CSP
President

Appendices

ASBESTOS AND LEAD BASED PAINT ASSESSMENT

**CITY OF SPARTANBURG
369 FARLEY STREET
SPARTANBURG, SOUTH CAROLINA**

APEX PROJECT NO. 0815-163

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SECTION I

Asbestos & Lead Evaluation Report

ASBESTOS/LEAD EVALUATION REPORT APEX PROJECT NUMBER: 0815-163
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Date:	4/7/2017	Page Number:	1 of 4
Client:	City of Spartanburg	Client Contact:	Mr. Lynn Coggins
Client Address:	440 South Church St., Suite B Spartanburg, SC 29306-5234	Client Phone Number:	(864) 596-2914
Project:	Asbestos and Lead Evaluation		
Property Address:	369 Farley Street Spartanburg, SC		
Assessor:	Ben Oliver	Date of Assessment:	3/24/2017
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approx. 60 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Crawlspace	Approximate Square Footage:	1,425 SF

EXTERIOR BUILDING MATERIALS

- Pitched roof with silver and black sealant on metal.
- Pitched roof with shingles and no felt.
- Wooden siding with no felt.
- Portion of windows are missing.
- Wooden windows with glazing.
- Wooden doors with no caulk.
- Two chimneys with mastic assumed positive.

INTERIOR BUILDING MATERIALS

- Popcorn ceiling texture over drywall.
- Wooden 12"x12" ceiling tile with no mastic.
- Wooden floors and ceilings.
- Wooden wall panels.
- Drywall with joint compound and tape walls and ceilings.
- Multiple types and layers of vinyl flooring with and without mastics.

SCOPE OF THE SURVEY

The objectives of the asbestos and lead assessment included the following:

- Identification of suspect asbestos-containing material (ACM) and lead based paints (LBP) in readily observable locations. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- Suspect ACM analysis by polarized light microscopy (PLM) utilizing CEI Labs (CEI) as an NVLAP certified laboratory, their accreditation number is 101768-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Lead inspection by a lead inspector certified by the Environmental Protection Agency and licensed to conduct LBP surveys in South Carolina.
- In situ analysis of suspected lead based paints by X-ray fluorescence (XRF).
- Presenting the results in a report identifying confirmed ACMs and LBPs.

METHODS

Asbestos Containing Materials

In order to determine if the suspect materials observed during the visual survey contained asbestos, representative bulk samples were collected and placed in sealed packages. Thirty-five (35) bulk samples were collected during the survey and submitted to CEI in Cary, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) coupled with dispersion staining (Method No. EPA 600/M4-82-020, Dec. 1982). CEI participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 101768-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. In accordance with South Carolina Regulation 61-86.1, non-friable organically bound materials that are reported to be non-asbestos containing by PLM analysis must also be analyzed by Transmission Electron Microscopy (TEM). Eleven (11) samples were analyzed using TEM.

Lead-Based Paint

Lead painted surfaces were analyzed in place using X-ray fluorescence. Painted surfaces were selected based on color of topcoat, underlying layers and substrate on which it was painted.

RESULTS

Asbestos Containing Materials

The EPA defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos. OSHA defines ACM as a material containing any amount of asbestos. Materials were analyzed to contain less than 1% asbestos and it should be noted that OSHA asbestos regulations will apply. Provided below is a general discussion of the asbestos containing materials identified in the residence. The *Asbestos PLM & TEM Data Table* is provided in Appendix II.

Suspect asbestos containing materials that were identified to be asbestos containing include:

- Approximately 1,575 SF of silver and black metal roof sealant.
- Approximately 3 wooden windows with glazing.
- Approximately 225 SF of 9"x9" beige speckled pattern floor tile with mastic.
- Approximately 30 SF of 12"x12" sand dollar pattern self-stick floor tile.
- Approximately 12 LF of mastic/tar on two chimneys assumed positive.

Lead Based Paint

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms per cubic meter (30 $\mu\text{g}/\text{m}^3$) during an eight-hour workday and a permissible exposure level of fifty micrograms per cubic meter (50 $\mu\text{g}/\text{m}^3$) for employees.

Currently, SCDHEC defines LBP as paint containing in excess of, or equal to, 1.0 mg/cm^2 . The laboratory analytical results and chain-of-custody are included in the Lead Analysis Reports in Appendix A. The approximate locations of the paint samples collected and analytical results are presented in the Tables included with this report .

Several surfaces in the building tested positive for lead in excess of the regulatory definition:

- Exterior white wooden siding.
- Exterior brown wooden window frame.
- Exterior green wooden door frame.
- Interior beige wooden bead board wall.
- Interior brown wooden door.
- Interior white wooden window sill.
- Interior pink wooden bead board wall.
- Interior beige concrete chimney/fireplace.
- Interior white wooden bead board ceiling.

RECOMMENDATIONS AND DISCUSSION

Asbestos Containing Materials

If the above referenced asbestos materials are to be disturbed by renovations or demolition, the asbestos must be removed in accordance with EPA, State of South Carolina and OSHA asbestos regulations. The State of South Carolina, Department of Health and Environmental Control (DHEC) has specific regulations that must be adhered to during asbestos removal/abatement projects.

Apex recommends the following:

1. Abate the asbestos containing materials in the structure prior to renovation or demolition.
2. Follow applicable asbestos regulations during renovation or demolition of the structure. You

should be aware that stringent requirements are imposed upon anyone renovating or demolishing a structure in which ACM will be disturbed. This work must be performed in accordance with OSHA asbestos regulations, 29 CFR 1910 & 1926, and NESHAP asbestos regulations 40 CFR 61, subpart M. South Carolina regulations require the accreditation of personnel who work in the asbestos field and notification and permitting fees for asbestos removal projects. There is a 10 working day notification period required prior to abatement of asbestos in a facility. Failure to take proper precautions and actions to protect human health and the environment can result in penalties, danger to personnel, and construction delays.

Lead Based Paint

Currently the South Carolina Department of Health and Environmental Control (SCDHEC) define LBP as paint containing greater than 1.0 milligrams per square centimeter (mg/cm^2) lead or in excess of, or equal to, 0.5 percent lead. Building materials identified as being painted with LBP should be segregated from the other building materials and recycled or disposed of in a municipal lined landfill. The removed wastes would need to be containerized and further tested by Toxic Characteristic Leaching procedures (TCLP) to determine if the waste is classified as hazardous. The remaining building materials that are not painted with LBP may be disposed of in a construction and demolition landfill. However, the landfills should be contacted to determine their specific disposal requirements.

Occupational Safety and Health Administration Lead Regulations apply to actions initiated on lead containing materials. This regulation applies to lead concentrations greater than the analytical limit of detection. This regulation sets exposure levels on airborne lead and does not reference the percent lead in paint. Therefore, initial personal air monitoring should be conducted on workers performing work on surfaces which have a lead concentration of $0.1 \text{ mg}/\text{cm}^2$ or above to satisfy the OSHA requirements. If a baseline exposure lower than the OSHA Action Level of 30 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) is established, personal air monitoring may be terminated. The full OSHA lead standard should be referenced for compliance.

A copy of this report must be submitted to SCDHEC at least ten (10) working days prior to demolition when applying for a demolition permit.

SECTION II

Asbestos & LBP Data Tables

ASBESTOS SURVEY FIELD DATA SHEET

Project Name: COS 369 Farley Street ACM/LBP

Sampled By: Ben Oliver

Project Location: 369 Farley Street Spartanburg SC

Project Manager: Ben Oliver

Project Number: 0815-163

Date: 3/24/2017

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Metal Roof	Silver and black metal roof sealant	PLM - 10% Chrysotile	Non-Friable	Good	1,575 SF
2						
3						
4	Back Left and Right Lower Roofs	Roof shingles (6 layers) and no felt	PLM - NAD	Non-Friable	Good	300 SF
5			TEM - <1% Chry (Black Shingle)			
6						
7	Wooden Windows	Window Glazing	PLM - 10% Chrysotile	Non-Friable	Good	3 EA
8						
9	Throughout	Popcorn Ceiling Texture	PLM - NAD	Friable	Good	230 SF
10						
11						
12						
13	Throughout Except Front Right Bedroom	Drywall with joint compound and tape	PLM - NAD	Friable	Good	1,175 SF
14						
15						
16						
17						
18	Front Left Room	Rock pattern vinyl floor with no mastic	PLM - NAD	Non-Friable	Good	180 SF
19			TEM - NAD			
20						
21	Left Kitchen Top Layer and Left Bathroom Bottom Layer	9"x9" beige speckled pattern floor tile with mastic	PLM - 10% Chry (floor tile) 5% Chry (mastic)	Non-Friable	Good	225 SF
22						
23						

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
24	Left Bathroom Top Layer	12"x12" sand dollar pattern self-stick floor tile	PLM - 2% Chry (floor tile)	Non-Friable	Good	30 SF
25			NAD (mastic)			
26			TEM - <1% Chry (mastic)			
27	Left Kitchen Pantry	Cream square pattern vinyl floor with no mastic	PLM - NAD	Non-Friable	Good	15 SF
28			TEM - NAD			
29			TEM - NAD			
30	Left Kitchen Entry Door Threshold	Yellow/Green pattern vinyl floor with mastic	PLM -NAD	Non-Friable	Good	5 SF
31			TEM - <1% Chrysotile			
32			TEM - <1% Chrysotile			
33	Right Bathroom Hallway	Tan/Square flower pattern vinyl floor with no mastic	PLM - NAD	Non-Friable	Good	15 SF
34			TEM - <1% Chrysotile			
35			TEM - <1% Chrysotile			
Assumed	Chimneys	Chimney mastic on 2 chimneys	Assumed	Non-Friable	Good	12 LF

NAD = No Asbestos Detected

LF = Linear Feet

EA = Each

Amos = Amosite

Bold = Positive For Asbestos

SF = Square Feet

Chry = Chrysotile

**FIELD DATA SHEET
LBP ANALYSIS**

Project Name: COS 369 Farley Street ACM/LBP

Sampled By: Ben Oliver

Project Location: 369 Farley Street, Spartanburg SC

Project Manager: Ben Oliver

Project Number: 0815-163

Date: 3/24/2017

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/cm ²)
1	N/A	Standardization	N/A	N/A	184.00
2		Calibration			1.19
3					1.08
4					1.11
5	Exterior	Siding	White	Wood	0.79
6	Exterior	Siding	Brown	Wood	0.01
7	Exterior	Siding	White	Wood	3.01
8	Exterior	Window Frame	Brown	Wood	1.81
9	Exterior	Porch Frame	Green	Wood	0.10
10	Exterior	Door Frame	Green	Wood	2.85
11	Exterior	Door	White	Wood	0.36
12	Interior	Wall	Beige	Wooden Bead Board	2.80
13	Interior	Door	Brown	Wood	1.11
14	Interior	Window Sill	White	Wood	1.43
15	Interior	Window Frame	White	Wood	0.88
16	Interior	Wall	Pink	Wooden Bead Board	Insufficient Test
17	Interior	Wall	Pink	Wooden Bead Board	1.63
18	Interior	Chimney/Fireplace	Beige	Concrete	1.61
19	Interior	Wall	Beige	Drywall	0.00
20	Interior	Door Frame	White	Wood	0.85
21	Interior	Wall	Yellow	Wooden Bead Board	0.57
22	Interior	Door Frame	Blue	Wall	0.00
23	Interior	Ceiling	White	Wooden Bead Board	2.03
24	Interior	Door	Green	Wood	0.25
25		Calibration	N/A	N/A	1.14
26					0.97
27					1.12

Bold is Lead Based Paint

SECTION III

Laboratory Analytical Results



March 31, 2017

Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

CLIENT PROJECT: COS 369 Farley St ACM & LBP; 0815-163
CEI LAB CODE: A17-4517

Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on March 27, 2017. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director





ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Apex Environmental Management

CLIENT PROJECT: COS 369 Farley St ACM & LBP; 0815-163

CEI LAB CODE: A17-4517

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 03/31/17

TOTAL SAMPLES ANALYZED: 23

SAMPLES >1% ASBESTOS: 5

TEL: 866-481-1412

www.ceilabs.com



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: COS 369 Farley St ACM & LBP; 0815-163 CEI LAB CODE: A17-4517

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A2361095	Silver,Black	Metal Roof Sealant	Chrysotile 10%
2		A2361096		Sample Not Analyzed per COC	
3		A2361097		Sample Not Analyzed per COC	
4	Layer 1	A2361098A	Multi-Colored, Black	Roof Shingle	None Detected
	Layer 2	A2361098A	Gray,Black	Roof Shingle	None Detected
		A2361098B	Black	Roof Shingle	None Detected
		A2361098C	Black	Roof Shingle	None Detected
		A2361098D	Black	Roof Shingle	None Detected
		A2361098E	Black	Roof Shingle (Felt)	None Detected
5	Layer 1	A2361099A	Multi-Colored, Black	Roof Shingle	None Detected
	Layer 2	A2361099A	Gray,Black	Roof Shingle	None Detected
		A2361099B	Black	Roof Shingle	None Detected
		A2361099C	Black	Roof Shingle	None Detected
		A2361099D	Black	Roof Shingle	None Detected
		A2361099E	Black	Roof Shingle (Felt)	None Detected
6		A2361100		Sample Submitted for TEM Analysis	
7		A2361101	Gray	Window Glazing	Chrysotile 10%
8		A2361102		Sample Not Analyzed per COC	
9		A2361103		Sample Not Analyzed per COC	
10		A2361104	White	Popcorn Ceiling Texture	None Detected
11		A2361105	White	Popcorn Ceiling Texture	None Detected
12		A2361106	White	Popcorn Ceiling Texture	None Detected
13	Layer 1	A2361107	White,Beige	Joint Compound	None Detected
	Layer 2	A2361107	White	Tape	None Detected
	Layer 3	A2361107	White	Drywall	None Detected
14	Layer 1	A2361108	White,Beige	Joint Compound	None Detected
	Layer 2	A2361108	White	Drywall	None Detected
15	Layer 1	A2361109	White	Joint Compound	None Detected
	Layer 2	A2361109	Gray	Drywall	None Detected



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: COS 369 Farley St ACM & LBP; 0815-163 CEI LAB CODE: A17-4517

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
16	Layer 1	A2361110	White	Joint Compound	None Detected
	Layer 2	A2361110	Gray	Drywall	None Detected
17	Layer 1	A2361111	White	Joint Compound	None Detected
	Layer 2	A2361111	White	Tape	None Detected
	Layer 3	A2361111	White	Drywall	None Detected
18		A2361112	Patterned,Tan	Linoleum	None Detected
19		A2361113	Patterned,Tan	Linoleum	None Detected
20		A2361114		Sample Submitted for TEM Analysis	
21		A2361115A	Beige	Floor Tile	Chrysotile 10%
		A2361115B	Black	Mastic	Chrysotile 5%
22		A2361116		Sample Not Analyzed per COC	
23		A2361117		Sample Not Analyzed per COC	
24		A2361118A	Patterned,Tan	Floor Tile	Chrysotile 2%
		A2361118B	Clear,Yellow	Mastic	None Detected
25		A2361119A		Sample Not Analyzed per COC	
		A2361119B	Clear,Yellow	Mastic	None Detected
26		A2361120A		Sample Not Analyzed per COC	
		A2361120B		Sample Submitted for TEM Analysis	
27		A2361121	Cream, Patterned	Linoleum	None Detected
28		A2361122	Cream, Patterned	Linoleum	None Detected
29		A2361123		Sample Submitted for TEM Analysis	
30		A2361124	Yellow,Green	Linoleum	None Detected
31		A2361125	Yellow,Green	Linoleum	None Detected
32		A2361126		Sample Submitted for TEM Analysis	
33		A2361127	Tan,Patterned	Linoleum	None Detected
34		A2361128	Tan,Patterned	Linoleum	None Detected



Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: COS 369 Farley St ACM & LBP; 0815-163 **CEI LAB CODE:** A17-4517

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
35		A2361129		Sample Submitted for TEM Analysis	



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Apex Environmental Management
 7 Winchester Court
 Mauldin, SC 29662

CEI Lab Code: A17-4517
Date Received: 03-27-17
Date Analyzed: 03-30-17
Date Reported: 03-31-17

Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1 A2361095	Metal Roof Sealant	Heterogeneous	15%	Cellulose	60%	Tar	10% Chrysotile
		Silver,Black			5%	Silicates	
		Non-fibrous			10%	Paint	
		Bound					
2 A2361096	Sample Not Analyzed per COC						
3 A2361097	Sample Not Analyzed per COC						
4 Layer 1 A2361098A	Roof Shingle	Heterogeneous	25%	Fiberglass	40%	Tar	None Detected
		Multi-Colored, Black			35%	Silicates	
		Fibrous Bound					
Layer 2 A2361098A	Roof Shingle	Heterogeneous	25%	Fiberglass	40%	Tar	None Detected
		Gray,Black			35%	Silicates	
		Fibrous Bound					
A2361098B	Roof Shingle	Heterogeneous	40%	Cellulose	40%	Tar	None Detected
		Black			20%	Silicates	
		Fibrous Bound					
A2361098C	Roof Shingle	Heterogeneous	50%	Cellulose	35%	Tar	None Detected
		Black			15%	Silicates	
		Fibrous Bound					
A2361098D	Roof Shingle	Heterogeneous	45%	Cellulose	35%	Tar	None Detected
		Black			20%	Silicates	
		Fibrous Bound					



ASBESTOS BULK ANALYSIS

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Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
A2361098E	Roof Shingle (Felt)	Homogeneous Black Fibrous Bound	80%	Cellulose	20%	Tar	None Detected
5 Layer 1 A2361099A	Roof Shingle	Heterogeneous Multi-Colored, Black Fibrous Bound	25%	Fiberglass	40%	Tar	None Detected
					35%	Silicates	
Layer 2 A2361099A	Roof Shingle	Heterogeneous Gray,Black Fibrous Bound	25%	Fiberglass	40%	Tar	None Detected
					35%	Silicates	
A2361099B	Roof Shingle	Heterogeneous Black Fibrous Bound	40%	Cellulose	40%	Tar	None Detected
					20%	Silicates	
A2361099C	Roof Shingle	Heterogeneous Black Fibrous Bound	50%	Cellulose	35%	Tar	None Detected
					15%	Silicates	
A2361099D	Roof Shingle	Heterogeneous Black Fibrous Bound	45%	Cellulose	35%	Tar	None Detected
					20%	Silicates	
A2361099E	Roof Shingle (Felt)	Homogeneous Black Fibrous Bound	80%	Cellulose	20%	Tar	None Detected
6 A2361100	Sample Submitted for TEM Analysis						



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ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
7 A2361101	Window Glazing	Heterogeneous	75%	Binder			10% Chrysotile
		Gray	10%	Calc Carb			
		Non-fibrous	5%	Paint			
		Bound					
8 A2361102	Sample Not Analyzed per COC						
9 A2361103	Sample Not Analyzed per COC						
10 A2361104	Popcorn Ceiling Texture	Heterogeneous	10%	Talc	55%	Calc Carb	None Detected
		White			25%	Foam	
		Non-fibrous			10%	Paint	
		Bound					
11 A2361105	Popcorn Ceiling Texture	Heterogeneous	10%	Talc	55%	Calc Carb	None Detected
		White			25%	Foam	
		Non-fibrous			10%	Paint	
		Bound					
12 A2361106	Popcorn Ceiling Texture	Heterogeneous	10%	Talc	55%	Calc Carb	None Detected
		White			25%	Foam	
		Non-fibrous			10%	Paint	
		Bound					
13 Layer 1 A2361107	Joint Compound	Heterogeneous	10%	Talc	80%	Calc Carb	None Detected
		White, Beige			5%	Silicates	
		Non-fibrous			5%	Paint	
		Bound					
Layer 2 A2361107	Tape	Heterogeneous	90%	Fiberglass	10%	Binder	None Detected
		White Fibrous Bound					



ASBESTOS BULK ANALYSIS

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Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 3 A2361107	Drywall	Heterogeneous White Fibrous Bound	10% 5%	Cellulose Fiberglass	80% 5%	Gypsum Silicates	None Detected
14 Layer 1 A2361108	Joint Compound	Heterogeneous White,Beige Non-fibrous Bound	10%	Talc	80% 5% 5%	Calc Carb Silicates Paint	None Detected
Lab Notes: No tape present.							
Layer 2 A2361108	Drywall	Heterogeneous White Fibrous Bound	10% 5%	Cellulose Fiberglass	80% 5%	Gypsum Silicates	None Detected
15 Layer 1 A2361109	Joint Compound	Homogeneous White Non-fibrous Bound	10%	Talc	85% 5%	Calc Carb Silicates	None Detected
Lab Notes: No tape present.							
Layer 2 A2361109	Drywall	Heterogeneous Gray Fibrous Bound	10% 5%	Cellulose Fiberglass	80% 5%	Gypsum Silicates	None Detected
16 Layer 1 A2361110	Joint Compound	Homogeneous White Non-fibrous Bound	10%	Talc	85% 5%	Calc Carb Silicates	None Detected
Lab Notes: No tape present.							
Layer 2 A2361110	Drywall	Heterogeneous Gray Fibrous Bound	10% 5%	Cellulose Fiberglass	80% 5%	Gypsum Silicates	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Apex Environmental Management
 7 Winchester Court
 Mauldin, SC 29662

CEI Lab Code: A17-4517
Date Received: 03-27-17
Date Analyzed: 03-30-17
Date Reported: 03-31-17

Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
17 Layer 1 A2361111	Joint Compound	Homogeneous	10%	Talc	85%	Calc Carb	None Detected
		White			5%	Silicates	
		Non-fibrous Bound					
Layer 2 A2361111	Tape	Heterogeneous	90%	Fiberglass	10%	Binder	None Detected
		White					
		Fibrous Bound					
Layer 3 A2361111	Drywall	Heterogeneous	10%	Cellulose	80%	Gypsum	None Detected
		White	5%	Fiberglass	5%	Silicates	
		Fibrous Bound					
18 A2361112	Linoleum	Heterogeneous	20%	Cellulose	50%	Vinyl	None Detected
		Patterned, Tan	5%	Fiberglass	25%	Binder	
		Fibrous Bound					
19 A2361113	Linoleum	Heterogeneous	20%	Cellulose	50%	Vinyl	None Detected
		Patterned, Tan	5%	Fiberglass	25%	Binder	
		Fibrous Bound					
20 A2361114	Sample Submitted for TEM Analysis						
21 A2361115A	Floor Tile	Homogeneous			90%	Vinyl	10% Chrysotile
		Beige					
		Non-fibrous Bound					
A2361115B	Mastic	Homogeneous			95%	Vinyl	5% Chrysotile
		Black					
		Non-fibrous Bound					



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Apex Environmental Management
 7 Winchester Court
 Mauldin, SC 29662

CEI Lab Code: A17-4517
Date Received: 03-27-17
Date Analyzed: 03-30-17
Date Reported: 03-31-17

Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS			ASBESTOS %	
			Fibrous	Non-Fibrous			
22 A2361116	Sample Not Analyzed per COC						
23 A2361117	Sample Not Analyzed per COC						
24 A2361118A	Floor Tile	Homogeneous Patterned, Tan Non-fibrous Bound	98%	Vinyl		2% Chrysotile	
A2361118B	Mastic	Homogeneous Clear, Yellow Non-fibrous Bound	100%	Mastic		None Detected	
25 A2361119A	Sample Not Analyzed per COC						
A2361119B	Mastic	Homogeneous Clear, Yellow Non-fibrous Bound	100%	Mastic		None Detected	
26 A2361120A	Sample Not Analyzed per COC						
A2361120B	Sample Submitted for TEM Analysis						
27 A2361121	Linoleum	Heterogeneous Cream, Patterned Fibrous Bound	20% 5%	Cellulose Fiberglass	50% 25%	Vinyl Binder	None Detected
28 A2361122	Linoleum	Heterogeneous Cream, Patterned Fibrous Bound	20% 5%	Cellulose Fiberglass	50% 25%	Vinyl Binder	None Detected



ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Apex Environmental Management
 7 Winchester Court
 Mauldin, SC 29662

CEI Lab Code: A17-4517
Date Received: 03-27-17
Date Analyzed: 03-30-17
Date Reported: 03-31-17

Project: COS 369 Farley St ACM & LBP; 0815-163

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
29 A2361123	Sample Submitted for TEM Analysis						
30 A2361124	Linoleum	Heterogeneous Yellow,Green Fibrous Bound	40%	Cellulose	35%	Vinyl Tar	None Detected
Lab Notes: No mastic present.							
31 A2361125	Linoleum	Heterogeneous Yellow,Green Fibrous Bound	40%	Cellulose	35%	Vinyl Tar	None Detected
Lab Notes: No mastic present.							
32 A2361126	Sample Submitted for TEM Analysis						
33 A2361127	Linoleum	Heterogeneous Tan,Patterned Fibrous Bound	20%	Cellulose	50%	Vinyl Binder	None Detected
34 A2361128	Linoleum	Heterogeneous Tan,Patterned Fibrous Bound	20%	Cellulose	50%	Vinyl Binder	None Detected
35 A2361129	Sample Submitted for TEM Analysis						



LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate


METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

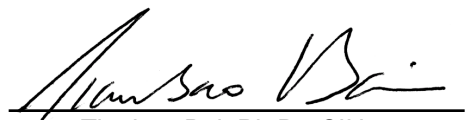
REPORTING LIMIT: <1% by visual estimation

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. Estimated measurement of uncertainty is available on request.

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

ANALYST: 
Taylor B. Metcalf

APPROVED BY: 
Tianbao Bai, Ph.D., CIH
Laboratory Director



35 A17-4517
A2361095-
A2361129



107 New Edition Court, Cary, NC 27511
Tel: 866-481-1412; Fax: 919-481-1442

ASBESTOS CHAIN OF CUSTODY

LAB USE ONLY:
CEI Lab Code:
CEI Lab I.D. Range:

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #:	Job Contact: Ben Oliver
Company: Apex Environmental Management, Inc.	Email / Tel: boliver@apex-ehs.com
Address: 7 Winchester Court Mauldin, South Carolina 29662	Project Name: COS 369 Farley St ACM & LBP
Email: boliver@apex-ehs.com	Project ID# 0815-163
Tel: 864-404-3210 Fax: 864-404-3213	PO #:
STATE SAMPLES COLLECTED IN: South Carolina	

GENERAL INSTRUCTIONS		
POSITIVE STOP ANALYSIS	<input checked="" type="checkbox"/>	PLM DUE DATE: / /
ANALYZE NOB'S BY TEM	<input checked="" type="checkbox"/>	TEM DUE DATE: / /

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR AHERA	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR NIOSH	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-13			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS: Utilize Positive Stop During Analysis			<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples
Relinquished By:	Date/Time	Received By:	Date/Time
<i>[Signature]</i>	3-24-17	<i>[Signature]</i>	3 27 17 9:20

Samples will be disposed of 30 days after analysis

ASBESTOS SAMPLING FORM



COMPANY CONTACT INFORMATION	
Company: <u>Apex Environmental Mgt.</u>	Job Contact: <u>Ben Oliver</u>
Project Name: <u>COS 369 Farley St. ACM+LBP</u>	
Project ID #: <u>0815-163</u>	Tel: <u>864-640-1147</u>

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/ AREA	TEST			
			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
1	Silver and Black metal roof sealant		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
2			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
3	Roof shingles (6 layers) and no felt.		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
4			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
5	Window glazing		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
6			PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
7	Popcorn ceiling texture		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
8			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
9	Drywall with joint compound and tape		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
10			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
11	Rock pattern vinyl floor with no mastic		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
12			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
13	9"x9" beige speckled pattern floor tile and mastic		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
14			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
15	12"x12" sand dollar pattern self-stick floor tile		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
16			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
17	Cream square pattern vinyl floor with no mastic		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
18			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
19	Yellow/green pattern		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
20			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
21	9"x9" beige speckled pattern floor tile and mastic		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
22			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
23	12"x12" sand dollar pattern self-stick floor tile		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
24			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
25	Cream square pattern vinyl floor with no mastic		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
26			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
27	Yellow/green pattern		PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
28			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>
29	9"x9" beige speckled pattern floor tile and mastic		PLM	<input type="checkbox"/>	TEM	<input checked="" type="checkbox"/>
30			PLM	<input checked="" type="checkbox"/>	TEM	<input type="checkbox"/>



April 6, 2017

Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

CLIENT PROJECT: COS 369 Farley St ACM & LBP; 0815-163
CEI LAB CODE: T17-0617

Dear Customer:

Enclosed are asbestos analysis results for TEM bulk samples received at our laboratory on March 30, 2017. The samples were analyzed for asbestos using transmission electron microscopy (TEM) per Chatfield Method.

Sample results containing > 1% asbestos are considered asbestos-containing materials (ACMs) per the EPA regulatory requirements. The detection limit for the TEM Chatfield method is <1% depending on the processed weight and constituents of the sample.

Thank you for your business and we look forward to continuing good relations. If you have any questions, please feel free to call our office at 919-481-1413.

Kind Regards,

A handwritten signature in black ink, appearing to read "Tianbao Bai".

Tianbao Bai, Ph.D., CIH
Laboratory Director



ASBESTOS ANALYTICAL REPORT
By: Transmission Electron Microscopy

Prepared for

Apex Environmental Management

CLIENT PROJECT: COS 369 Farley St ACM & LBP; 0815-163

CEI LAB CODE: T17-0617

TEST METHOD: Bulk Chatfield
EPA 600 / R93 / 116

REPORT DATE: 04/06/17

TEL: 866-481-1412

www.ceilabs.com



ASBESTOS BULK ANALYSIS

By: TRANSMISSION ELECTRON MICROSCOPY

Client: Apex Environmental Management
 7 Winchester Court
 Mauldin, SC 29662

CEI Lab Code: T17-0617
Date Received: 03-30-17
Date Analyzed: 04-05-17
Date Reported: 04-06-17

Project: COS 369 Farley St ACM & LBP; 0815-163

TEM BULK CHATFIELD / EPA 600 / R93 / 116

Client ID Lab ID	Material Description	Sample Weight (g)	Organic Material %	Acid Soluble Material %	Acid Insoluble Material %	Asbestos %
6 T60745	Multi-Colored, Black Roof Shingle	0.486	20.4	36.8	42.8	None Detected
6 T60746	Gray, Black Roof Shingle	0.433	23.6	38.3	38.1	None Detected
6 T60747	Black Roof Shingle	0.527	45.9	5.3	48.8	None Detected
6 T60748	Black Roof Shingle	0.478	56.9	14	29.1	<1% Chrysotile
6 T60749	Black Roof Shingle	0.739	68.3	3	28.7	None Detected
6 T60750	Black Roof Shingle (Felt)	0.372	96	2.4	1.6	<1% Chrysotile
20 T60751	Patterned, Tan Linoleum	0.522	51.5	11.5	37	None Detected
26 T60752	Clear, Yellow Mastic	0.108	48.1	45.4	6.5	<1% Chrysotile
29 T60753	Cream, Patterned Linoleum	0.384	55.7	9.6	34.7	None Detected
32 T60754	Yellow, Green Linoleum	0.361	66.8	26.9	6.3	<1% Chrysotile
35 T60755	Tan, Patterned Linoleum	0.461	59.9	8	32.1	<1% Chrysotile



LEGEND: None

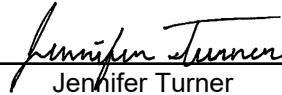
METHOD: CHATFIELD & EPA/600/R-93/116

LIMIT OF DETECTION: Varies with the weight and constituents of the sample (<1%)

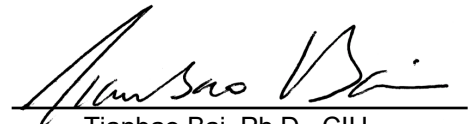
REGULATORY LIMIT: >1% by weight

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by CEI Labs, Inc. CEI Labs makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Estimated measurement of uncertainty is available on request. Samples were received in acceptable condition unless otherwise noted.

ANALYST:


Jennifer Turner

APPROVED BY:


Tianbao Bai, Ph.D., CIH
Laboratory Director

35) A17-4517
 A2361095-
 A2361129



107 New Edition Court, Cary, NC 27511
 Tel: 866-481-1412; Fax: 919-481-1442

ASBESTOS CHAIN OF CUSTODY

LAB USE ONLY: (11)
 CEI Lab Code: T17-0617
 CEI Lab I.D. Range: T60745 - T60755

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #:	Job Contact: Ben Oliver
Company: Apex Environmental Management, Inc.	Email / Tel: boliver@apex-ehs.com
Address: 7 Winchester Court	Project Name: COS 369 Farley St ACM & LBP
Mauldin, South Carolina 29662	Project ID# 0815-163
Email: boliver@apex-ehs.com	PO #:
Tel: 864-404-3210 Fax: 864-404-3213	STATE SAMPLES COLLECTED IN: South Carolina

GENERAL INSTRUCTIONS		
POSITIVE STOP ANALYSIS	<input checked="" type="checkbox"/>	PLM DUE DATE: / /
ANALYZE NOB'S BY TEM	<input checked="" type="checkbox"/>	TEM DUE DATE: / /

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	24 HR	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR AHERA	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR NIOSH	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS: Utilize Positive Stop During Analysis		<input checked="" type="checkbox"/> Accept Samples
		<input type="checkbox"/> Reject Samples
Relinquished By:	Date/Time	Received By:
<i>[Signature]</i>	3-24-17	<i>[Signature]</i>
		3 2717 9:20

Samples will be disposed of 30 days after analysis

[Signature] 3-30-17 10:45

47-451-
717-0617

ASBESTOS SAMPLING FORM



COMPANY CONTACT INFORMATION	
Company: <u>Apex Environmental Mgt.</u>	Job Contact: <u>Ben Oliver</u>
Project Name: <u>COS 369 Farley St. ACM+LBP</u>	
Project ID #: <u>0815-163</u>	Tel: <u>864-640-1147</u>

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/ AREA	TEST	
			PLM	TEM
1	Silver and Black metal		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	roof sealant		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3			<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Roof shingles (6 layers)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	and no felt		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6			<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Window glazing		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8			<input checked="" type="checkbox"/>	<input type="checkbox"/>
9			<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Popcorn ceiling texture		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11			<input checked="" type="checkbox"/>	<input type="checkbox"/>
12			<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Drywall with joint		<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	compound and tape		<input checked="" type="checkbox"/>	<input type="checkbox"/>
15			<input checked="" type="checkbox"/>	<input type="checkbox"/>
16			<input checked="" type="checkbox"/>	<input type="checkbox"/>
17			<input checked="" type="checkbox"/>	<input type="checkbox"/>
18	Rock pattern vinyl		<input checked="" type="checkbox"/>	<input type="checkbox"/>
19	floor with no mastic		<input checked="" type="checkbox"/>	<input type="checkbox"/>
20			<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	9"x9" beige speckled		<input checked="" type="checkbox"/>	<input type="checkbox"/>
22	pattern floor tile and		<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	mastic		<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	12"x12" sand dollar pattern		<input checked="" type="checkbox"/>	<input type="checkbox"/>
25	self-stick floor tile		<input checked="" type="checkbox"/>	<input type="checkbox"/>
26			<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Cream square pattern		<input checked="" type="checkbox"/>	<input type="checkbox"/>
28	vinyl floor with no		<input checked="" type="checkbox"/>	<input type="checkbox"/>
29	mastic		<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Yellow/green pattern		<input checked="" type="checkbox"/>	<input type="checkbox"/>

SECTION IV
Photographic Log

Asbestos & LBP Assessment
City of Spartanburg
369 Farley Street
Spartanburg, South Carolina



Photo 1 -- 369 Farley Street in Spartanburg, SC.



Photo 2 – Silver and black metal roof sealant.



Photo 3 – Roof shingles (6 layers) and no felt.



Photo 4 – Wooden window glazing.

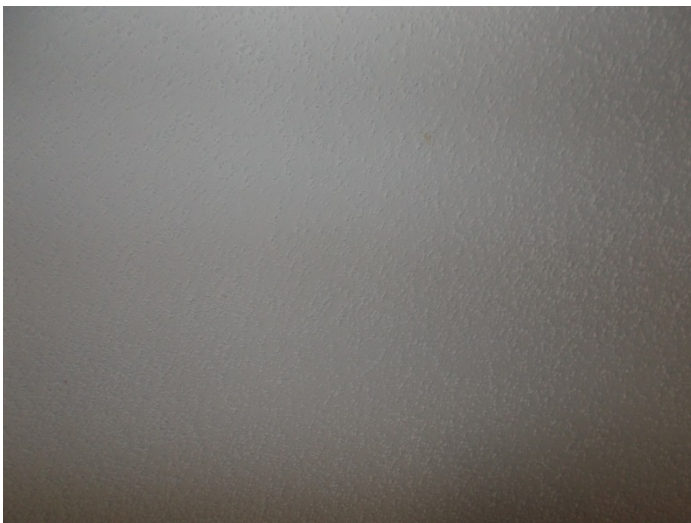


Photo 5 – Popcorn ceiling texture throughout.



Photo 6 – Drywall with joint compound and tape.

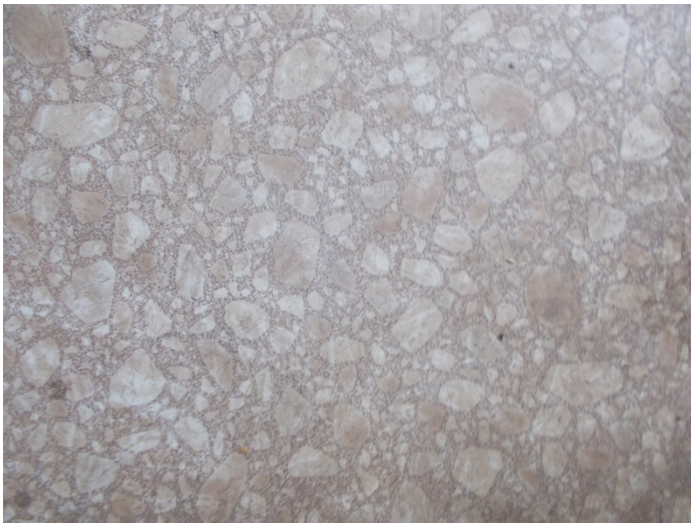


Photo 7 – Rock pattern vinyl floor with no mastic.



Photo 8 – 9"x9" beige speckled pattern vinyl floor tile with mastic.



Photo 9 – 12"x12" sand dollar pattern self-stick floor tile.



Photo 10 – Cream square pattern vinyl floor with no mastic.



Photo 11 – Yellow/Green pattern vinyl floor with mastic.



Photo 12 – Tan square flower pattern vinyl floor with no mastic.

SECTION V

SC DHEC Asbestos Inspector License

SCDHEC ISSUED
Asbestos ID Card

John Oliver



Expiration Date

AIRSAMPLER AS-00486 04/01/17
CONSULTBI BI-01528 04/08/17

This card is nontransferable and considered invalid if loaned or given to another person for identification. This card will also be invalid if altered or defaced. This card is property of SCDHEC. It must be returned to the department if the holder's accreditation is revoked or if this card is invalidated. Any person performing regulated asbestos activities without current accreditation shall be subject to legal sanction. This card must be returned upon expiration and/or issuance of a new card.

YOU MUST HAVE THIS IDENTIFICATION CARD WITH YOU ON THE JOB.

For information or corrections contact: SCDHEC - Asbestos Section
2600 Bull Street
Columbia, SC 29201
(803) 898-4289