



## **Asbestos Assessment**

City of Spartanburg  
1010 Carson Avenue  
Spartanburg, South Carolina 29306

### ***Prepared for:***

The City of Spartanburg  
440 South Church St., Suite B  
Spartanburg, South Carolina 29306

### ***Prepared by:***

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

Project Number: 0123-01

May 12, 2023





**Apex Project Number 0123-01**

May 12, 2023

Mr. Martin Livingston  
City of Spartanburg  
440 South Church Street, Suite B  
Spartanburg, SC 29306

Reference: Asbestos Assessment Services  
1010 Carson Avenue  
Spartanburg, South Carolina 29306

Dear Mr. Livingston:

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.**

Stephanie Hamby  
Project Manager

Rebecca W. Shultz, CIH, CSP  
President

Appendices

7 Winchester Court  
Mauldin, SC 29662  
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**ASBESTOS ASSESSMENT**

**CITY OF SPARTANBURG  
1010 CARSON AVENUE  
SPARTANBURG, SOUTH CAROLINA 29306**

**APEX PROJECT NO. 0123-01**

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**SECTION I**

**Asbestos Evaluation Report**

<b>ASBESTOS EVALUATION REPORT</b> <b>APEX PROJECT NUMBER: 0123-01</b>
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Date:	4/25/2023	Page Number:	1 of 4
Client:	City of Spartanburg	Client Contact:	Mr. Martin Livingston
Client Address:	440 South Church Street Suite B Spartanburg, SC 29306	Client Phone Number:	(864) 580-5323
Project:	Asbestos Assessment	Parcel ID No.:	7-16-10-051.00
Property Address:	1010 Carson Avenue Spartanburg, SC 29306		
Assessor:	Stephanie Hamby	Date of Assessment:	4/25/2023
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approximately 90 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Crawlspace, CMU Block	Approximate Square Footage	1,600 SF

**EXTERIOR BUILDING MATERIALS**

- Pitched roof with 2 layer of shingles and 1 layer of felt.
- Grey caulk located sporadically around CMU block foundation
- Transite and felt located under vinyl siding.
- Mixture of glazing and caulk located on windows
- Assume Chimney to be ACM.

**INTERIOR BUILDING MATERIALS**

- Ceiling texture throughout the ceiling.
- Multiple types of flooring throughout.
- Drywall sporadic throughout the walls over plaster walls.
- Plaster on ceiling throughout.
- Carpet over wood floors.
- Plywood under vinyl floorings.
- Several piles of household debris throughout.
- Wood paneling located over wood siding in front right room.

## **SCOPE OF THE SURVEY**

The objectives of the asbestos assessment included the following:

- Identification of suspect asbestos-containing material (ACM) 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 EMSL Analytical, Inc. (EMSL) as an NVLAP certified laboratory, their accreditation number is 200841-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Presenting the results in a report identifying confirmed ACMs.

## **METHODS**

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. Forty-two (42) bulk samples were collected during the survey and submitted to EMSL in Pineville, 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). EMSL participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 200841-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. Fifty-two (52) samples were analyzed due to layering by PLM and positive stop methods. 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.

[Click here to enter text.](#)

## **RESULTS**

The EPA defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos. OSHA defines ACM as a material containing detectable amounts of asbestos. A specific *PLM and TEM Data Table* is located in Appendix II of this report and identifies positive materials and designates approximate quantities. Provided below is a general discussion of the asbestos containing materials presumed to be positive in the residence.

The residence was found to have damage to the side porch. Several piles of household debris were located throughout the residence. A full assessment was conducted.

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

- Approximately 2,000 SF of white transite beneath the vinyl siding
- Approximately 8 LF of assumed chimney tar.

## **RECOMMENDATIONS AND DISCUSSION**

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. 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. Perimeter asbestos air monitoring should be performed during abatement by demolition activities and a visual clearance at the conclusion of the project.
3. 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.

**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 Data Tables**



**ASBESTOS SURVEY FIELD DATA SHEET  
PLM & TEM ANALYSIS**

Project Name: COS 844 Carson Avenue ACM

Sampled By: Stephanie Hamby

Project Location: 1010 Carson Avenue, Spartanburg, SC 29306

Project Manager: Stephanie Hamby

Project Number: 0123-01

Date: 4/25/2023

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Roof	2 Layers of Shingles, 1 Felt	PLM - NAD	Non-Friable	Good	2,400 SF
2						
3			TEM - NAD			
4	Under Vinyl Siding	Transite Under Vinyl Siding	PLM - 20% Chrys	Non-Friable	Good	2,000 SF
5						
6						
7	Foundation Walls - Sporadic	Caulk	PLM - NAD	Non-Friable	Good	10 LF
8						
9			TEM - NAD			
10	Exterior Windows	Glaze	PLM - NAD	Non-Friable	Good	5 EA
11						
12			TEM - NAD			
13	Exterior Windows	Caulk	PLM - NAD	Non-Friable	Good	6 EA
14						
15			TEM - NAD			
16	Hallway & Bathroom Floor	Brown/Gray Marble Roll Vinyl w/ Glue	PLM - NAD	Non-Friable	Good	155 SF
17						
18			TEM - NAD			
19	Room w/ Fireplace	12x12 Self Stick Flooring, White w/ Diamond Pattern	PLM - NAD	Non-Friable	Good	1,760 SF
20						
21			TEM - NAD			
22	Kitchen	Brown Square Pattern Roll Vinyl	PLM - NAD	Non-Friable	Good	125 SF
23						
24			TEM - NAD			

**ASBESTOS SURVEY FIELD DATA SHEET  
PLM & TEM ANALYSIS**

Project Name: COS 844 Carson Avenue ACM

Sampled By: Stephanie Hamby

Project Location: 1010 Carson Avenue, Spartanburg, SC 29306

Project Manager: Stephanie Hamby

Project Number: 0123-01

Date: 4/25/2023

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
25	Bathroom	Tan Roll Vinyl	PLM - NAD	Non-Friable	Good	25 SF
26			TEM - NAD			
27						
28	Ceiling & Behind Drywall	Plaster	PLM - NAD	Non-Friable	Good	3,400 SF
29						
30						
31	Walls & Ceiling Sporadic	Drywall, Joint Compound & Tape	PLM - NAD	Non-Friable	Good	2,500 SF
32						
33						
34						
35						
36	Ceiling Throughout	Ceiling Texture	PLM - NAD	Non-Friable	Good	1,600 SF
37						
38						
39						
40						
41	Ceiling & Behind Drywall	Plaster	PLM - NAD	Non-Friable	Good	-
42						
<b>Assumed</b>	<b>Chimney</b>	<b>Tar</b>	<b>Assumed</b>	<b>Non-Friable</b>	<b>Good</b>	<b>8 LF</b>

NAD = No Asbestos Detected

LF = Linear Feet

EA = Each

**Bold = Positive For Asbestos**

SF = Square Feet

Chry = Chrysotile

**SECTION III**

**Laboratory Analytical Results & Chain of Custody**



# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

EMSL Order: 412304562

Customer ID: AXEM25

Customer PO: 0123-01

Project ID: City of Spartanburg

**Attention:** Stephanie Hamby  
Apex Environmental Management  
7 Winchester Court  
Mauldin, SC 29662

**Phone:** (864) 918-1433

**Fax:**

**Received Date:** 04/26/2023 10:00 AM

**Analysis Date:** 04/28/2023

**Collected Date:**

**Project:** 0123-01 COS 1010 Carson Avenue (City of Spartanburg)

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-White Shingle <small>412304562-0001</small>	Roof - Two Layers of Shingles	White/Black Fibrous Homogeneous	10% Glass	5% Quartz 15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
1-Black Shingle <small>412304562-0001A</small>	Roof - Two Layers of Shingles	Black Fibrous Heterogeneous	20% Glass	10% Ca Carbonate 70% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached tar.</i>					
1-Felt <small>412304562-0001B</small>	Roof - Two Layers of Shingles	Black Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
2-White Shingle <small>412304562-0002</small>	Roof - 1 Felt	White/Black Fibrous Homogeneous	15% Glass	5% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	None Detected
2-Black Shingle <small>412304562-0002A</small>	Roof - 1 Felt	Black Fibrous Heterogeneous	20% Glass	5% Ca Carbonate 75% Non-fibrous (Other)	None Detected
<i>Result includes a small amount of inseparable attached tar.</i>					
2-Felt <small>412304562-0002B</small>	Roof - 1 Felt	Black Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
4-Transite <small>412304562-0003</small>	Under Vinyl Siding - Transit W/ Wrap	Gray Fibrous Homogeneous		10% Quartz 70% Non-fibrous (Other)	20% Chrysotile
4-Wrap <small>412304562-0003A</small>	Under Vinyl Siding - Transit W/ Wrap	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5-Transite <small>412304562-0004</small>	Under Vinyl Siding - Transit W/ Wrap				Positive Stop (Not Analyzed)
5-Wrap <small>412304562-0004A</small>	Under Vinyl Siding - Transit W/ Wrap	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6-Transite <small>412304562-0005</small>	Under Vinyl Siding - Transit W/ Wrap				Positive Stop (Not Analyzed)
6-Wrap <small>412304562-0005A</small>	Under Vinyl Siding - Transit W/ Wrap	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7 <small>412304562-0006</small>	Foundation Pucks - Hard Caulk	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
8 <small>412304562-0007</small>	Foundation Pucks - Hard Caulk	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
10 <small>412304562-0008</small>	Exterior Windows - Glaze	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected

Initial report from: 05/01/2023 12:41:32



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**Customer ID:** AXEM25  
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**Project ID:** City of Spartanburg

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11 412304562-0009	Exterior Windows - Glaze	Gray/White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
13 412304562-0010	Exterior Windows - Caulk	White Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
14 412304562-0011	Exterior Windows - Caulk	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
16-Vinyl Flooring 412304562-0012	Hallway Floor and Bathroom - Brown/Gray Marble	Tan Non-Fibrous Homogeneous	<1% Cellulose	15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
16-Mastic 412304562-0012A	Hallway Floor and Bathroom - Brown/Gray Marble	Yellow Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
17-Vinyl Flooring 412304562-0013	Hallway Floor and Bathroom - Roll Vinyl Flooring	Brown/Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
17-Mastic 412304562-0013A	Hallway Floor and Bathroom - Roll Vinyl Flooring	Yellow Non-Fibrous Homogeneous	<1% Cellulose	2% Ca Carbonate 98% Non-fibrous (Other)	None Detected
19 412304562-0014	Room with Fireplace - 12x12 White with Diamond self stick Vinyl	Tan/Black Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
20 412304562-0015	Room with Fireplace - 12x12 White with Diamond self stick Vinyl	Tan/Black Non-Fibrous Homogeneous	2% Synthetic	15% Ca Carbonate 83% Non-fibrous (Other)	None Detected
22 412304562-0016	Kitchen - Brown Square Pattern Roll Vinyl	Brown Non-Fibrous Homogeneous	<1% Glass	15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
23 412304562-0017	Kitchen - Brown Square Pattern Roll Vinyl	Gray Non-Fibrous Homogeneous	2% Glass	15% Ca Carbonate 83% Non-fibrous (Other)	None Detected
25 412304562-0018	Master Bathroom - Tan Roll Vinyl	Tan Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
26 412304562-0019	Master Bathroom - Tan Roll Vinyl	Tan Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
28-Plaster 412304562-0020 <i>No skim coat present.</i>	Ceiling and Behind drywall - Plaster and skim coat	Gray Non-Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
29-Plaster 412304562-0021 <i>No skim coat present.</i>	Ceiling and Behind drywall - Plaster and skim coat	Gray Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
30-Skim Coat 412304562-0022	Ceiling and Behind drywall - Plaster and skim coat	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
30-Plaster 412304562-0022A	Ceiling and Behind drywall - Plaster and skim coat	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
31-Tape 412304562-0023	Walls and Ceiling Spurdre - DW, J.C. and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected

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**EMSL Order:** 412304562  
**Customer ID:** AXEM25  
**Customer PO:** 0123-01  
**Project ID:** City of Spartanburg

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
31-Joint Compound 412304562-0023A	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
31-Drywall 412304562-0023B	Walls and Ceiling Spuradre - DW, J.C. and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
32-Texture 412304562-0024 <i>No drywall present.</i>	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		25% Ca Carbonate 5% Mica 70% Non-fibrous (Other)	None Detected
32-Tape 412304562-0024A	Walls and Ceiling Spuradre - DW, J.C. and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
32-Joint Compound 412304562-0024B	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
33-Joint Compound 412304562-0025 <i>No tape present.</i>	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
33-Drywall 412304562-0025A	Walls and Ceiling Spuradre - DW, J.C. and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
34-Tape 412304562-0026	Walls and Ceiling Spuradre - DW, J.C. and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
34-Joint Compound 412304562-0026A	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
34-Drywall 412304562-0026B	Walls and Ceiling Spuradre - DW, J.C. and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
35-Joint Compound 412304562-0027 <i>No tape present.</i>	Walls and Ceiling Spuradre - DW, J.C. and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
35-Drywall 412304562-0027A	Walls and Ceiling Spuradre - DW, J.C. and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
36 412304562-0028	Ceiling - Ceiling Texture	White Non-Fibrous Homogeneous		25% Ca Carbonate 5% Mica 70% Non-fibrous (Other)	None Detected
37 412304562-0029	Ceiling - Ceiling Texture	White Non-Fibrous Homogeneous		25% Ca Carbonate 5% Mica 70% Non-fibrous (Other)	None Detected
38 412304562-0030	Ceiling - Ceiling Texture	White Non-Fibrous Homogeneous		25% Ca Carbonate 5% Mica 70% Non-fibrous (Other)	None Detected
39 412304562-0031	Ceiling - Ceiling Texture	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
40 412304562-0032	Ceiling - Ceiling Texture	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
41-Skim Coat 412304562-0033	Ceiling and Behind Drywall - Plaster and Skim coat	White Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected

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**EMSL Order:** 412304562  
**Customer ID:** AXEM25  
**Customer PO:** 0123-01  
**Project ID:** City of Spartanburg

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
41-Plaster <i>412304562-0033A</i>	Ceiling and Behind Drywall - Plaster and Skim coat	Gray Non-Fibrous Homogeneous	5% Cellulose	3% Quartz 92% Non-fibrous (Other)	None Detected
42-Skim Coat <i>412304562-0034</i>	Ceiling and Behind Drywall - Plaster and Skim coat	White Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected
42-Plaster <i>412304562-0034A</i>	Ceiling and Behind Drywall - Plaster and Skim coat	Gray Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

*Kelsie Dwyer (23)*  
*Maggie Pasour (29)*

Lee Plumley, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 05/01/2023 12:41:32



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**EMSL Order:** 412304562

**Customer ID:** AXEM25

**Customer PO:** 0123-01

**Project ID:** City of Spartanburg

**Attention:** Stephanie Hamby  
Apex Environmental Management  
7 Winchester Court  
Mauldin, SC 29662

**Phone:** (864) 918-1433  
**Fax:**  
**Received Date:** 04/26/2023 10:00 AM  
**Analysis Date:** 05/08/2023  
**Collected Date:**

**Project:** 0123-01 COS 1010 Carson Avenue (City of Spartanburg)

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
3-White Shingle 412304562-0035	Roof - 2 Layers of Shingle, 1 Felt	White/Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
3-Black Shingle 412304562-0036	Roof - 2 Layers of Shingle, 1 Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
3-Felt 412304562-0037	Roof - 2 Layers of Shingle, 1 Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9 412304562-0038	Foundation Pucks - Hard Caulk	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
12 412304562-0039	Exterior Windows - Glaze	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
15 412304562-0040	Exterior Windows - Caulk	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
18-Vinyl Flooring 412304562-0041	Hallway Floor and Bathroom - Brown/Gray Marble Roll Vinyl Flooring	Gray Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
18-Mastic 412304562-0042	Hallway Floor and Bathroom - Brown/Gray Marble Roll Vinyl Flooring	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
21 412304562-0043	Room with Fireplace - 12x12 White with Diamond self stick Vinyl	Beige Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
24 412304562-0044	Kitchen - Brown Square Pattern Roll Vinyl	Brown/Tan Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
27 412304562-0045	Master Bathroom - Tan Roll Vinyl	Gray Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 05/08/2023 14:06:59





# EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com> / [charlottelab@emsl.com](mailto:charlottelab@emsl.com)

<b>EMSL Order:</b> 412304562
<b>Customer ID:</b> AXEM25
<b>Customer PO:</b> 0123-01
<b>Project ID:</b> City of Spartanburg

<b>Attention:</b> Stephanie Hamby Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	<b>Phone:</b> (864) 918-1433 <b>Fax:</b> <b>Received Date:</b> 04/26/2023 10:00 AM <b>Analysis Date:</b> 05/08/2023 <b>Collected Date:</b>
<b>Project:</b> 0123-01 COS 1010 Carson Avenue (City of Spartanburg)	

## Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
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Analyst(s)

Derrick Young (11)

Lee Plumley, Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 05/08/2023 14:06:59



**Asbestos Bulk Building Materials - Chain of Custody**

EMSL Order Number / Lab Use Only

Pineville, NC 28134  
PHONE: (704) 525-2205  
EMAIL: charlottelab@EMSL.com

**EMSL ANALYTICAL, INC.**  
LABORATORY PRODUCTS TRAINING

Customer Information	Customer ID:	Billing ID:
	Company Name: <b>Apex Environmental Management</b>	Company Name: <b>Apex Environmental Management</b>
	Contact Name: <b>Stephanie Hamby</b>	Billing Contact: <b>Rebecca Shultz</b>
	Street Address: <b>7 Winchester Court</b>	Street Address: <b>7 Winchester Court</b>
	City, State, Zip: <b>Mauldin SC 29662</b> Country: <b>US</b>	City, State, Zip: <b>Mauldin SC</b> Country: <b>US</b>
	Phone: <b>864-918-1433</b>	Phone: <b>8644043210</b>
Email(s) for Report: <b>shamby@apex-ehs.com</b>	Email(s) for Invoice:	

**Project Information**

Project Name/No: **0123-01 COS 1010 Carson Avenue** Purchase Order:

EMSL LIMS Project ID: (if applicable, EMSL will provide) US State where samples collected: **SC** State of Connecticut (CT) must select project location:  Commercial (Taxable)  Residential (Non-Taxable)

Sampled By Name: **Stephanie Hamby** Sampled By Signature: *[Signature]* Date Sampled: **4-25-23** No. of Samples in Shipment: **42**

Turn-Around-Time (TAT)  
 3 Hour  6 Hour  24 Hour  32 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week  
 Please call ahead for large projects and/or turnaround times 6 Hours or Less. \*32 Hour TAT available for select tests only; samples must be submitted by 11:30am

**Test Selection**

**PLM - Bulk (reporting limit)**

PLM EPA 600/R-93/116 (<1%)  
 PLM EPA NOB (<1%)  
 POINT COUNT  
 400 (<0.25%)  1,000 (<0.1%)  
 POINT COUNT w/ GRAVIMETRIC  
 400 (<0.25%)  1,000 (<0.1%)  
 NIOSH 9002 (<1%)  
 NYS 198.1 (Friable - NY)  
 NYS 198.6 NOB (Non-Friable - NY)  
 NYS 198.8 (Vermiculite SM-V)

**TEM - Bulk**

TEM EPA NOB  
 NYS NOB 198.4 (Non-Friable - NY)  
 TEM EPA 600/R-93/116 w Milling Prep (0.1%)

**Other Tests (please specify)**

Positive Stop - Clearly Identified Homogeneous Areas (HA)

Sample Number	HA Number	Sample Location	Material Description
1		Roof	2 layers of shingles
2			1 felt
3			
4		under vinyl siding	Transit w/wrap
5			
6			
7		Foundation pucks	Hard caulk
8			
9			
10		Exterior windows	Glue

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

**7966 2119 5003 3044**

Method of Shipment: <b>Fedex</b>	Sample Condition Upon Receipt:
Relinquished by: <i>[Signature]</i> Date/Time: <b>4-25-23 4:00pm</b>	Received by: <i>[Signature]</i> Date/Time: <b>4-26-23 1000 Ex</b>
Relinquished by:	Received by:
Date/Time:	Date/Time:

Controlled Document - Asbestos Bulk R7 9/14/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are Incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.



**EMSL ANALYTICAL INC.**  
LABORATORY PRODUCTS TRAINING

**Asbestos Bulk Building Materials - Chain of Custody**

EMSL Order Number / Lab Use Only

EMSL Analytical, Inc.  
10801 Southern Loop Blvd

Pineville, NC 28134  
PHONE: (704) 525-2205  
EMAIL: charlottelab@EMSL.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Sample Number	HA Number	Sample Location	Material Description
11		Exterior windows	Glaze
12		└	+
13		Exterior windows	Caulk
14		└	└
15		└	└
16		Hallway Floor & Bathroom	Brown/Gray marble
17		└	roll vinyl flooring
18		└	└
19		Room w/ Fireplace	12x12 white w/
20		└	diamond self stick
21		└	vinyl.
22		Kitchen	Brown square
23		└	pattern roll vinyl
24		└	└
25		Master Bathroom	Tan roll vinyl
26		└	└
27		└	└
28		Ceiling & Behind drywall	Plaster & skim coat
29		└	└
30		└	└
31		Walls & ceiling sprayer	DW, J.C. Glaze
32		└	└
33		└	└
34		└	└
35		└	└

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - Asbestos Bulk R7 09/14/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

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# Asbestos Bulk Building Materials - Chain of Custody

EMSL Analytical, Inc.  
10801 Southern Loop Blvd

EMSL Order Number / Lab Use Only

**EMSL ANALYTICAL, INC.**  
LABORATORY • PRODUCTS • TRAINING

[Empty rectangular box for Order Number / Lab Use Only]

Pineville, NC 28134  
PHONE: (704) 525-2205  
EMAIL: charlottelab@EMSL.com

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special Instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.)

Sample Number	HA Number	Sample Location	Material Description
36		Ceiling	Ceiling Texture
37		↓	↓
38			
39			
40			
41		Ceiling & Behind	Plaster &
42		Dry wall	Stems coat

Method of Shipment:		Sample Condition Upon Receipt:	
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Controlled Document - Asbestos Bulk R7 09/14/2021

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

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**SECTION IV**  
**Photographic Log**



Photo 1 – 1010 Carson Avenue located in Spartanburg, South Carolina 29306



Photo 2 – Side view of 1010 Carson Avenue. Porch has missing floor boards and steps unstable.



Photo 3 – Rear view of 1010 Carson Avenue.



Photo 4 – Top layer of vinyl siding over transite siding. Transite is over wood siding. Transite is ACM.



Photo 5 – Caulk located sporadically on foundation CMU blocks.

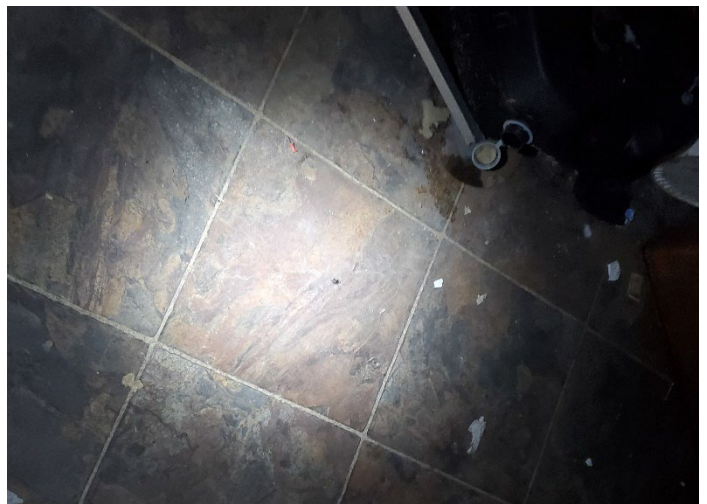


Photo 6 – Brown/Gray marble roll vinyl located in hallway and hallway bathroom.



Photo 5 – 12x12 white self-stick flooring with diamond pattern located in room with fireplace.



Photo 6 – Brown square with diamond pattern roll vinyl located in the kitchen.



Photo 7 – Tan roll vinyl located within master bathroom.

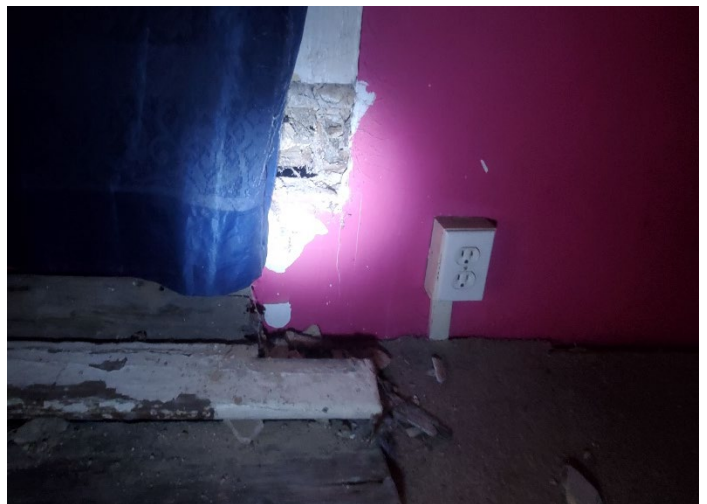


Photo 8 – Plaster located behind drywall walls and on ceiling.



Photo 9 – Textured ceiling located throughout.



Photo 10 – Chimney tar is assumed asbestos containing material.

**SECTION V**

**SC DHEC Asbestos Inspector License**



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# SCDHEC ISSUED

Asbestos ID Card

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**Stephanie Hamby**



**AIR SAMPLER  
CONSULT**

**AS-000632  
BI-01894**

**Expiration Date:  
08/04/23  
01/10/24**