



Asbestos Assessment

City of Spartanburg
844 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 5, 2023





Apex Project Number 0123-01

May 5, 2023

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

Reference: Asbestos Assessment Services
844 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
864.404.3210 office
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ASBESTOS ASSESSMENT

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

APEX PROJECT NO. 0123-01

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SECTION I

Asbestos Evaluation Report

ASBESTOS EVALUATION REPORT APEX PROJECT NUMBER: 0123-01
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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.:	7-16-10-035.00
Property Address:	844 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:	Brick, Crawlspace	Approximate Square Footage	1,100 SF

EXTERIOR BUILDING MATERIALS

- Pitched roof with 1 layer of shingles and 1 layer of felt.
- Stone front wall on front of house.
- Transite and 2 layers of felt located under vinyl siding.
- 2 doors with no caulk.
- Top of chimney has been removed.
- Patches of plaster/skim coat located on foundation.

INTERIOR BUILDING MATERIALS

- No floor or drywall in back room.
- Kitchen has vinyl flooring.
- Flat skim coat located on ceiling over plywood in sporadically throughout.
- Textured skim coat located on ceiling over plywood back left room.
- Engineered plant wood throughout floors.
- White caulk located on doorways sporadically throughout.
- Two layers of drywall walls and plaster throughout walls.
- Building material debris located throughout.

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. Three (3) 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. Sixty-two (62) 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). Seven (7) 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 flooring to the room located to the end of the hallway. A full assessment was conducted.

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

- Approximately 1,600 SF of gray transite beneath the vinyl siding

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. 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: 844 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	Exterior Under Vinyl Siding	Transit with 2 felts	PLM - 15% Chrys(Transite), NAD (Felts)	Non-Friable	Good	1,600 SF
2						
3						
4	Roof	1 Shingle, 1 Felt	PLM - NAD	Non-Friable	Good	1,650 SF
5			TEM - NAD			
6						
7	Throughout Walls Over Plaster	Top layer of Drywall, Joint Compound & Tape	PLM - NAD	Non-Friable	Good	2,750 SF
8						
9						
10	Ceiling	Flat Skim Coat	PLM - NAD	Non-Friable	Good	540 SF
11						
12						
13	Ceiling	Textured Skim Coat	PLM - NAD	Non-Friable	Good	180 SF
14						
15						
16	Floor at Hallway Entry	White/Gray Roll Vinyl Flooring with Mastic	PLM - NAD	Non-Friable	Good	5 SF
17			TEM - NAD			
18						
19	Kitchen Area	Roll Vinyl with Glue	PLM - NAD	Non-Friable	Good	120 SF
20			TEM - NAD			
21						
22	Interior Doorways Sporadically Throughout	White Caulk	PLM - NAD	Non-Friable	Good	5 EA
23			TEM - NAD			
24						

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

Project Name: COS 844 Carson Avenue ACM

Sampled By: Stephanie Hamby

Project Location: 844 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	Behind Drywall Walls	Plaster	PLM - NAD	Non-Friable	Good	2,750 SF
26						
27						
28	Under First Layer of Drywall Sporadic Throughout	Second Layer of Drywall	PLM - NAD	Non-Friable	Good	2,750 SF
29						
30						
31	Exterior Foundation Patches	Plaster & Skim Coat	PLM - NAD	Non-Friable	Good	50 SF
32						
33						
34	Throughout Walls Over Plaster	Top layer of Drywall, Joint Compound & Tape	PLM - NAD	Non-Friable	Good	-
35						
36	Under First Layer of Drywall Sporadic	Lower Drywall Layer	PLM - NAD	Non-Friable	Good	-
37						
38	Under Drywall Walls	Plaster	PLM - NAD	Non-Friable	Good	-
39						

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

EMSL Order: 412304567

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: 04/27/2023 - 05/02/2023

Collected Date:

Project: 0123-01 COS 844 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-Transite <small>412304567-0001</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Gray Non-Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
1-Black Felt <small>412304567-0001A</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Black Fibrous Homogeneous	90% Cellulose	5% Mica 5% Non-fibrous (Other)	None Detected
1-Tan Felt <small>412304567-0001B</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Tan Fibrous Homogeneous	80% Glass	20% Non-fibrous (Other)	None Detected
2-Transite <small>412304567-0002</small>	Exterior under vinyl siding - Transit and 2 layers of felt				Positive Stop (Not Analyzed)
2-Black Felt <small>412304567-0002A</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Black Fibrous Homogeneous	90% Cellulose	5% Mica 5% Non-fibrous (Other)	None Detected
2-Tan Felt <small>412304567-0002B</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Tan Fibrous Homogeneous	80% Glass	20% Non-fibrous (Other)	None Detected
3-Transite <small>412304567-0003</small>	Exterior under vinyl siding - Transit and 2 layers of felt				Positive Stop (Not Analyzed)
3-Black Felt <small>412304567-0003A</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Black Fibrous Homogeneous	95% Cellulose	<1% Quartz 5% Non-fibrous (Other)	None Detected
3-Tan Felt <small>412304567-0003B</small>	Exterior under vinyl siding - Transit and 2 layers of felt	Tan Fibrous Homogeneous	75% Glass	20% Ca Carbonate 5% Non-fibrous (Other)	None Detected
4-Shingle <small>412304567-0004</small>	Roof - Shingles and felt	Black Fibrous Homogeneous	15% Glass	5% Quartz 80% Non-fibrous (Other)	None Detected
4-Felt <small>412304567-0004A</small>	Roof - Shingles and felt	Black Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
5-Shingle <small>412304567-0005</small>	Roof - Shingles and felt	Black Fibrous Homogeneous	15% Glass	10% Quartz 15% Ca Carbonate 60% Non-fibrous (Other)	None Detected
5-Felt <small>412304567-0005A</small>	Roof - Shingles and felt	Brown/Black Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
7-Tape <small>412304567-0006</small>	Throughout walls over plaster - DW, JC and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
7-Joint Compound <small>412304567-0006A</small>	Throughout walls over plaster - DW, JC and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
7-Drywall <small>412304567-0006B</small>	Throughout walls over plaster - DW, JC and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected

Initial report from: 05/02/2023 14:59:53



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

EMSL Order: 412304567
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
8-Tape 412304567-0007	Throughout walls over plaster - DW, JC and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
8-Joint Compound 412304567-0007A	Throughout walls over plaster - DW, JC and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
8-Drywall 412304567-0007B	Throughout walls over plaster - DW, JC and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
9-Tape 412304567-0008	Throughout walls over plaster - DW, JC and tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
9-Joint Compound 412304567-0008A	Throughout walls over plaster - DW, JC and tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
9-Drywall 412304567-0008B	Throughout walls over plaster - DW, JC and tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
10 412304567-0009	Ceiling - Flat Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
11 412304567-0010	Ceiling - Flat Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
12 412304567-0011	Ceiling - Flat Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
13 412304567-0012	Ceiling - Textured Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
14 412304567-0013	Ceiling - Textured Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
15 412304567-0014	Ceiling - Textured Skim Coat	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
16-Vinyl Flooring 412304567-0015	Entry wall Floor - Gray/white Roll vinyl Flooring with mastic	Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
16-Mastic/Leveler 412304567-0015A	Entry wall Floor - Gray/white Roll vinyl Flooring with mastic	Gray/Yellow Non-Fibrous Heterogeneous	2% Cellulose	5% Ca Carbonate 93% Non-fibrous (Other)	None Detected
17-Vinyl Flooring 412304567-0016	Entry wall Floor - Gray/white Roll vinyl Flooring with mastic	Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
17-Mastic/Leveler 412304567-0016A	Entry wall Floor - Gray/white Roll vinyl Flooring with mastic	Gray/Yellow Non-Fibrous Heterogeneous		2% Ca Carbonate 98% Non-fibrous (Other)	None Detected
19-Vinyl 412304567-0017	Floor Back Kitchen - Roll vinyl with glue	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
19-Glue/Leveler 412304567-0017A	Floor Back Kitchen - Roll vinyl with glue	Gray/White/Yellow Non-Fibrous Heterogeneous	2% Cellulose	10% Ca Carbonate 88% Non-fibrous (Other)	None Detected
20-Vinyl 412304567-0018	Floor Back Kitchen - Roll vinyl with glue	Gray/White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected

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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
20-Glue/Leveler 412304567-0018A	Floor Back Kitchen - Roll vinyl with glue	Tan/White Non-Fibrous Heterogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
22 412304567-0019	Interior Room Door Wans - Caulk	Gray/White/Green Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
23 412304567-0020	Interior Room Door Wans - Caulk	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
25-Skim Coat 412304567-0021	Behind drywall over walls - Plaster	White Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
25-Plaster 412304567-0021A	Behind drywall over walls - Plaster	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
26 412304567-0022	Behind drywall over walls - Plaster	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
27 412304567-0023	Behind drywall over walls - Plaster	Tan Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
28 412304567-0024	Under drywall and plaster - 1st layer of drywall	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
29 412304567-0025	Under drywall and plaster - 1st layer of drywall	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
30-Joint Compound 412304567-0026	Under drywall and plaster - 1st layer of drywall	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
30-Drywall 412304567-0026A	Under drywall and plaster - 1st layer of drywall	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
31-Skim Coat 412304567-0027	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
31-Plaster 412304567-0027A	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		40% Quartz 60% Non-fibrous (Other)	None Detected
32-Skim Coat 412304567-0028	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
32-Plaster 412304567-0028A	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
33-Skim Coat 412304567-0029	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
33-Plaster 412304567-0029A	Exterior Foundation - Plaster and Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
34-Tape 412304567-0030	Throughout wall over plaster - DW, JC and Tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
34-Joint Compound 412304567-0030A	Throughout wall over plaster - DW, JC and Tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected

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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
34-Drywall <i>412304567-0030B</i>	Throughout wall over plaster - DW, JC and Tape	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
35-Tape <i>412304567-0031</i>	Throughout wall over plaster - DW, JC and Tape	Beige Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
35-Joint Compound <i>412304567-0031A</i>	Throughout wall over plaster - DW, JC and Tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
35-Drywall <i>412304567-0031B</i>	Throughout wall over plaster - DW, JC and Tape	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
36 <i>412304567-0032</i>	Behind DW over walls - Plaster	Tan Non-Fibrous Homogeneous		35% Quartz 65% Non-fibrous (Other)	None Detected
37 <i>412304567-0033</i>	Behind DW over walls - Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
38-Joint Compound <i>412304567-0034</i>	Under top layer of DW - Lower D.W.	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
38-Drywall <i>412304567-0034A</i>	Under top layer of DW - Lower D.W.	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
39-Joint Compound <i>412304567-0035</i>	Under top layer of DW - Lower D.W.	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
39-Drywall <i>412304567-0035A</i>	Under top layer of DW - Lower D.W.	White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected

Analyst(s)

Jalen Moore (14)
Jessica Glover (18)
Kelsie Dwyer (30)

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: 05/02/2023 14:59:53



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EMSL Order: 412304567

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: 05/09/2023
Collected Date:

Project: 0123-01 COS 844 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
6-Shingle 412304567-0036	Roof - Shingles and Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Felt 412304567-0037	Roof - Shingles and Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
18-Vinyl Flooring 412304567-0038	Entry Wall Floor - Gray/White Roll Vinyl Flooring with Mastic	White Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
18-Mastic/Leveler 412304567-0039	Entry Wall Floor - Gray/White Roll Vinyl Flooring with Mastic	Brown/Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
21-Vinyl 412304567-0040	Floor Back Kitchen - Roll Vinyl with Glue	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
21-Glue/Leveler 412304567-0041	Floor Back Kitchen - Roll Vinyl with Glue	Gray/White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
24 412304567-0042	Interior Room Doorways - Caulk	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Sarah Breneman (7)

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. 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: 05/09/2023 11:07:28

412304567



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

Project Information			
Project Name/No:	0123-01 COS 844 Carson Avenue		Purchase Order
EMSL LIMS Project ID: (If applicable, EMSL will provide)	US State where samples collected:	State of Connecticut (CT) must select project location: <input type="checkbox"/> Commercial (Taxable) <input type="checkbox"/> Residential (Non-Taxable)	
Sampled By Name:	Sampled By Signature:	Date Sampled:	No. of Samples in Shipment
Stephanie Hamby	<i>[Signature]</i>	4-25-23	89
Turn-Around-Time (TAT) <input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 32 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input checked="" type="checkbox"/> 1 Week <input type="checkbox"/> 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.			

PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) <input type="checkbox"/> POINT COUNT <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> POINT COUNT w/ GRAVIMETRIC <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1,000 (<0.1%) <input type="checkbox"/> NIOSH 9002 (<1%) <input type="checkbox"/> NYS 198.1 (Friable - NY) <input type="checkbox"/> NYS 198.6 NOB (Non-Friable - NY) <input type="checkbox"/> NYS 198.8 (Vermiculite SM-V)		TEM - Bulk <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (Non-Friable - NY) <input type="checkbox"/> TEM EPA 600/R-93/116 w Milling Prep (0.1%) Other Tests (please specify)	
<input checked="" type="checkbox"/> Positive Stop - Clearly Identified Homogeneous Areas (HA)			

Sample Number	HA Number	Sample Location	Material Description
1	PLM	Exterior under vinyl siding	Transit & 2 layers of felt
2			
3			
4	PLM	Roof	Shingles & felt
5			
6	TEM		
7	PLM	Throughout walk over	DW, JC & tape
8		plaster	
9			
10		ceiling	Flat skim coat

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

Method of Shipment: Fed Ex	Sample Condition Upon Receipt
Relinquished by: Stephanie Hamby	Received by: <i>[Signature]</i>
Date/Time: 4-25-23 4:00P	Date/Time: 4-26-23 1000
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	PLM	Ceiling	Flat Skim Coat
12		└	└
13		Ceiling	Textured Skim coat
14		└	└
15		└	└
16	PLM	Entry wall Floor	Roll Gray/white Roll
17	└	└	vinyl Flooring w/mastic
18	TEM	└	└
19	PLM	Floor Back Kitchen	Roll vinyl w/glue
20	└	└	└
21	TEM	└	└
22	PLM	Interior Room Doorways	Caulk
23	└	└	└
24	TEM	└	└
25	PLM	Behind drywall over walls	Plaster
26	└	└	└
27	└	└	└
28	PLM	under drywall & plaster	1st layer of
29	└	└	drywall /
30	└	└	└
31	PLM	Ext Foundation	Plaster & Skimcoat
32	└	└	└
33	└	└	└
34	PLM	Throughout wall over plaster	DW, J.C & Tape
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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SECTION IV
Photographic Log



Photo 1 – 844 Carson Avenue located in Spartanburg, South Carolina 29306



Photo 2 – Exterior vinyl windows with metal wrap and no caulk



Photo 3 – Drywall and joint compound throughout walls.



Photo 4 – Ceiling with flat skim coat over plywood located in back right room, front right and left rooms.

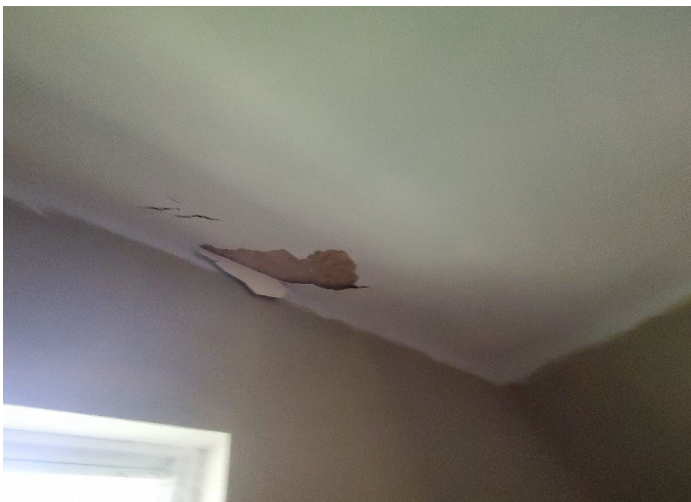


Photo 5 – Ceiling with textured coat over plywood located in back left room.



Photo 6 – White/gray roll vinyl flooring located in hallway entry.



Photo 5 – Roll vinyl with glue located within kitchen area.



Photo 6 – White caulk found sporadically throughout interior door ways

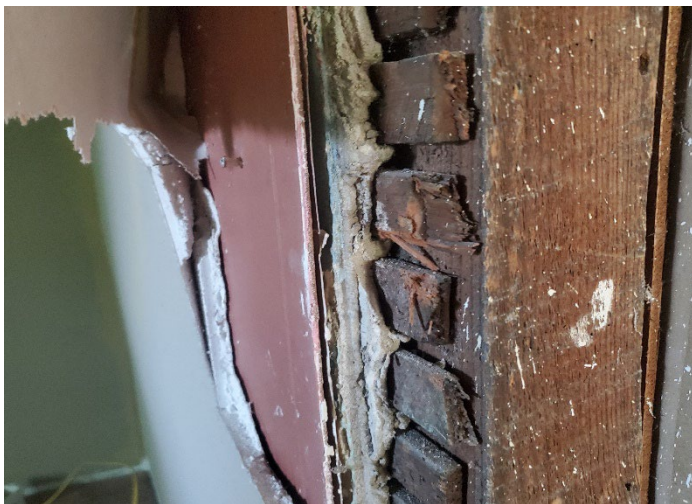


Photo 7 – Plaster and felt located under drywall throughout walls.



Photo 8 – Double layers of drywall located sporadically throughout the walls.



Photo 9 – Plaster and skim coat located on exterior foundation.



Photo 10 – Transite and two layers of felt located under vinyl siding. Gray transite is ACM.

City of Spartanburg
844 Carson Avenue
Apex Project No. 0123-01
May 5, 2023



Photo 11 – Layer of shingles with one layer of felt located on the roof.

SECTION V

SC DHEC Asbestos Inspector License

SCDHEC ISSUED

Asbestos ID Card

Stephanie Hamby



**AIR SAMPLER
CONSULT BI**

**AS-000632
BI-01894**

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