



## **Asbestos & Lead Based Paint Assessment**

City of Spartanburg  
417 Ammons Road  
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: 0119-09

December 20, 2019





**Apex Project Number 0119-09**

December 20, 2019

7 Winchester Court  
Mauldin, SC 29662  
864.404.3210 office  
864.404.3213 fax  
[www.apex-ehs.com](http://www.apex-ehs.com)

Mr. Jeff Tillerson  
City of Spartanburg  
440 South Church Street, Suite B  
Spartanburg, SC 29306

Reference: Asbestos and Lead-Based Paint Assessment Services  
419 Ammons Road  
Spartanburg, South Carolina 29306

**SERVICES**

- Indoor Air Quality
- Mold Remediation
- Asbestos & Lead
- Industrial Hygiene
- Worker Health & Safety
- Mold Consulting
- Moisture Management Plans
- Safety Assessment
- Environmental Site Assessments
- Hazard Communication

Dear Mr. Tillerson:

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.**

Handwritten signature of Ted Shultz in blue ink.

Ted Shultz  
Project Manager

Handwritten signature of Rebecca W. Shultz in blue ink.

Rebecca W. Shultz, CIH, CSP  
President

Appendices

**ASBESTOS AND LEAD BASED PAINT ASSESSMENT**

**CITY OF SPARTANBURG  
419 AMMONS ROAD  
SPARTANBURG, SOUTH CAROLINA 29306**

**APEX PROJECT NO. 0119-09**

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**SECTION I**

**Asbestos & Lead Evaluation Report**

**ASBESTOS EVALUATION REPORT**  
**APEX PROJECT NUMBER: 0119-09**

Date: 12/20/2019 Page Number: 1 of 4

Client: City of Spartanburg  
Client Address: 440 South Church Street  
Suite B  
Spartanburg, SC 29306

Client Contact: Mr. Jeff Tillerson  
Client Phone Number: (864) 596-2911

Project: Asbestos Evaluation and  
Lead Based Paint  
Assessment  
Property Address: 417 Ammons Road  
Spartanburg, SC 29306

Assessor: Ted Shultz  
Company: Apex Environmental  
Management  
7 Winchester Court  
Mauldin, SC 29662

Date of Assessment: 11/9/2019  
Phone Number: (864) 404-3210

Purpose of Assessment:

Demolition

Age of Structure:

50+ years

Building Type:

Commercial

Number of Stories:

1 story with walk-out  
basement

Foundation:

Slab

Approximate Square Footage:

3,700 SF

**EXTERIOR BUILDING MATERIALS**

- Pitched metal roof
- Metal doors
- CMU block
- Wood doors
- Metal windows

**INTERIOR BUILDING MATERIALS**

- Plaster with finish over unfinished drywall throughout
- Vinyl flooring, tile and drywall ceiling exists under collapsed roof system

## **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 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.
- 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. Sixteen (16) 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. 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). Five (5) 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 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. No asbestos was detected in the samples collected and analyzed. Should additional suspect ACM should be discovered during demolition activities, Apex recommends that work activities stop until the suspect building materials may be sampled and analyzed. A specific *PLM and TEM Data Table* is located in Appendix II of this report and identifies suspect materials and designates approximate quantities.

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

- Approximately 2,500 square feet of green stone pattern roll vinyl flooring and associated brown mastic.
- Approximately 2,500 square feet of tan 9" x 9" floor tile and associated black mastic.

### 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<sup>2</sup>. The laboratory analytical results are included in the LBP Analysis Report in Appendix II of this report. The approximate locations of the paint samples collected and analytical results are presented in the *LBP Data Table* included in Appendix II of this report.

One surface in the building tested positive for lead in excess of the regulatory definition:

### Interior:

- White metal window frame.

## **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.

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. Provided below is a general discussion of the asbestos containing materials identified in the residence. A specific *PLM and TEM Data Table* is located in Appendix II of this report and identifies positive materials and designates approximate quantities.

### Lead-Based Paint

Currently SCDHEC defines LBP as paint containing greater than 1.0 milligrams per square centimeter (mg/cm<sup>2</sup>) 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.

Changes to SC DHEC and federal regulations have changed the disposal options for LBP waste and LBP residue. LBP waste is defined as material such as wood, brick, metal, etc. that is coated with LBP. LBP residue is defined as residue that is generated from the removal (scraped, chipped, sandblasted, chemical means, etc.) of LBP from a structure. The regulations allow LBP waste from residential and commercial structures to be disposed of in Class 2 (construction and demolition debris) and Class 3 (municipal solid waste or industrial) landfills in South Carolina. The management of LBP residue is based on the source and lead concentration characterized by Toxic Characteristic Leaching Procedures (TCLP) to determine if the waste is classified as hazardous or non-hazardous. LBP residues that have TCLP sample results less than 5 milligrams per liter (mg/L) lead may be disposed of in a Class 3 landfill and is considered to be non-hazardous. LBP residues that have TCLP sample results equal to or greater than 5 mg/L lead should be disposed of in a Subtitle C landfill and is considered to be hazardous. However, the landfills should be contacted to determine their specific disposal requirements.

Occupational Safety and Health Administration (OSHA) 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 mg/cm<sup>2</sup> or above to satisfy the OSHA requirements. If a baseline exposure lower than the OSHA Action Level of 30 micrograms per cubic meter (µg/m<sup>3</sup>) 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.**

This report summarizes our evaluation of the conditions observed at the site. The findings prepared by Apex are based upon testing performed in the building spaces. Additional ACM may exist (undetected) in other areas due to their inaccessibility or due to the limited nature of our testing. Should additional suspect ACM be discovered during demolition activities, Apex recommends that work activities stop until the suspect building material may be sampled and analyzed.



**SECTION II**

**Asbestos & Lead Based Paint Data Tables**

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

Project Name: COS 417 Ammons Road ACM/LBP

Sampled By: Ted Shultz

Project Location: 417 Ammons Road, Spartanburg, South Carolina 29306

Project Manager: Rebecca Shultz

Project Number: 0119-09

Date: 11/9/2019

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Interior	Collapsed roof system shingles, felt & tar	PLM & TEM - NAD	Non-Friable	Good	1,800 SF
2						
3						
4	Interior walls	Plaster and unfinished dry wall	PLM - NAD	Friable	Damaged	4,000 SF
5						
6						
7						
8	Interior	Collapsed ceiling drywall	PLM - NAD	Friable	Damaged	2,500 SF
9						
10						
11						
12						
13						
14	Flooring	Stone pattern green flooring with brown mastic & Tan 9" x 9" tile with black mastic	Green Flooring PLM - 20% Chrysotile	Friable	Damaged	2,500 SF
15			Brown Mastic TEM - 1.9% Chrysotile			
			Tan 9" x9" Tile PLM - 8% Chrysotile			
			Black Mastic TEM - 1.3% Chrysotile			
16						

NAD = No Asbestos Detected

LF = Linear Feet

EA = Each

**Bold = Positive For Asbestos**

SF = Square Feet

**FIELD DATA SHEET  
LBP ANALYSIS**

Project Name: COS 417 Ammons Road ACM/LBP

Sampled By: Ted Shultz

Project Location: 417 Ammons Road, Spartanburg, SC 29306

Project Manager: Ted Shultz

Project Number: 0119-09

Date: 11/9/2019

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/m <sup>3</sup> )
1		Standardization			186.00
2		Calibration			1.28
3		Insufficient Test			INS.
4		Calibration			1.12
5		Calibration			1.19
6	Exterior	Front door frame	White	Wood	0.44
7	Exterior	Front window covering	White	Wood	0.00
8	Exterior	North wall	White	CMU Block	0.46
9	Interior	Wall	Green	Plaster	0.00
10	Interior	Door frame	White	Wood	0.25
<b>11</b>	<b>Interior</b>	<b>Window frame</b>	<b>White</b>	<b>Metal</b>	<b>1.17</b>
12		Calibration			1.13
13		Calibration			1.38
14		Calibration			1.23

**Bold = LBP**    FF = Factory Finish

**SECTION III**

**Laboratory Analytical Results**



# 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: 411911092

Customer ID: AXEM25

Customer PO:

Project ID:

**Attention:** Ted Shultz  
Apex Environmental Management  
7 Winchester Court  
Mauldin, SC 29662

**Phone:** (803) 348-4921

**Fax:**

**Received Date:** 11/12/2019 10:15 AM

**Analysis Date:** 11/12/2019

**Collected Date:** 11/09/2019

**Project:** 0119-09 COS 419 Ammons Rd.

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Shingle 411911092-0001	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Fibrous Homogeneous	25% Cellulose	10% Quartz 10% Ca Carbonate 55% Non-fibrous (Other)	None Detected
1-Felt 411911092-0001A	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Non-Fibrous Homogeneous	50% Cellulose	10% Ca Carbonate 40% Non-fibrous (Other)	None Detected
1-Tar 411911092-0001B	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-Shingle 411911092-0002	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Non-Fibrous Homogeneous	15% Cellulose	10% Quartz 10% Ca Carbonate 65% Non-fibrous (Other)	None Detected
2-Felt 411911092-0002A	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2-Tar 411911092-0002B	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
4-Skim Coat 411911092-0003	Interior Walls - Plaster over Unfinished Drywall	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
4-Rough Coat 411911092-0003A	Interior Walls - Plaster over Unfinished Drywall	Gray/Tan Non-Fibrous Homogeneous		25% Mica 75% Non-fibrous (Other)	None Detected
4-Drywall 411911092-0003B	Interior Walls - Plaster over Unfinished Drywall	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
5-Skim Coat 411911092-0004	Interior Walls - Plaster over Unfinished Drywall	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
5-Rough Coat 411911092-0004A	Interior Walls - Plaster over Unfinished Drywall	Gray/Tan Non-Fibrous Homogeneous		25% Mica 75% Non-fibrous (Other)	None Detected
5-Drywall 411911092-0004B	Interior Walls - Plaster over Unfinished Drywall	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
6-Skim Coat 411911092-0005	Interior Walls - Plaster over Unfinished Drywall	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
6-Rough Coat 411911092-0005A	Interior Walls - Plaster over Unfinished Drywall	Gray/Tan Non-Fibrous Homogeneous		25% Mica 75% Non-fibrous (Other)	None Detected
6-Drywall 411911092-0005B	Interior Walls - Plaster over Unfinished Drywall	Brown/Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
7-Skim Coat 411911092-0006	Interior Walls - Plaster over Unfinished Drywall	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected

Initial report from: 11/12/2019 15:22:03



# 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:** 411911092  
**Customer ID:** AXEM25  
**Customer PO:**  
**Project ID:**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7-Rough Coat 411911092-0006A	Interior Walls - Plaster over Unfinished Drywall	Gray Non-Fibrous Homogeneous		20% Mica 80% Non-fibrous (Other)	None Detected
7-Drywall 411911092-0006B	Interior Walls - Plaster over Unfinished Drywall	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
8-Skim Coat 411911092-0007	Interior Walls - Plaster over Unfinished Drywall	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
8-Rough Coat 411911092-0007A	Interior Walls - Plaster over Unfinished Drywall	Gray Non-Fibrous Homogeneous		15% Mica 85% Non-fibrous (Other)	None Detected
8-Drywall 411911092-0007B	Interior Walls - Plaster over Unfinished Drywall	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
9 411911092-0008	Interior - Collapsed Drywall Ceiling	Brown/Gray Fibrous Homogeneous	10% Cellulose 1% Glass	89% Non-fibrous (Other)	None Detected
10 411911092-0009	Interior - Collapsed Drywall Ceiling	Brown/Gray Fibrous Homogeneous	10% Cellulose 1% Glass	89% Non-fibrous (Other)	None Detected
11 411911092-0010	Interior - Collapsed Drywall Ceiling	Brown/Gray Fibrous Homogeneous	10% Cellulose 1% Glass	89% Non-fibrous (Other)	None Detected
12 411911092-0011	Interior - Collapsed Drywall Ceiling	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
13 411911092-0012	Interior - Collapsed Drywall Ceiling	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
14-Flooring 411911092-0013	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Brown/Tan Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
14-Mastic 411911092-0013A	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Brown/Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	<1% Chrysotile
<i>Possible contamination</i>					
14-Floor Tile 411911092-0013B	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Gray Non-Fibrous Homogeneous		40% Ca Carbonate 52% Non-fibrous (Other)	8% Chrysotile
14-Mastic 411911092-0013C	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	<1% Chrysotile
<i>Possible contamination</i>					
15-Flooring 411911092-0014	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic				Positive Stop (Not Analyzed)
15-Mastic 411911092-0014A	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Brown/Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

Initial report from: 11/12/2019 15:22:03



# 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:** 411911092  
**Customer ID:** AXEM25  
**Customer PO:**  
**Project ID:**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15-Floor Tile <i>411911092-0014B</i>	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic				Positive Stop (Not Analyzed)
15-Mastic <i>411911092-0014C</i>	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_  
 Katherine Sluder (19)  
 Lacy Searcy (13)

  
 \_\_\_\_\_  
 Lee Plumley, Laboratory Manager  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. 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 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. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. 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. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. 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: 11/12/2019 15:22:03



# 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: 411911092

Customer ID: AXEM25

Customer PO:

Project ID:

**Attention:** Ted Shultz  
Apex Environmental Management  
7 Winchester Court  
Mauldin, SC 29662

**Phone:** (803) 348-4921

**Fax:**

**Received Date:** 11/12/2019 10:15 AM

**Analysis Date:** 11/13/2019

**Collected Date:** 11/09/2019

**Project:** 0119-09 COS 419 Ammons Rd.

## 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-Shingle 411911092-0015	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
3-Felt 411911092-0016	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
3-Tar 411911092-0017	Interior Collapsed Roof System - Shingles, Felt & Tar	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
16-Mastic 411911092-0018	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Tan Non-Fibrous Homogeneous	98.1 Other	None	1.9% Chrysotile
16-Mastic 411911092-0019	Int. Flooring - Stone Pat. Roll Vinyl w/ Mastic & 9x9 Tan Floor Tile w/ Mastic	Black Non-Fibrous Homogeneous	98.7 Other	None	1.3% Chrysotile

**Analyst(s)**

Aaron Hartley (3)  
Derrick Young (2)

Lee Plumley, Laboratory Manager  
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Report amended: 12/18/2019 15:57:51 Replaces initial report from: 11/13/2019 16:14:22 Reason Code: Data Entry-Change to Location





# Asbestos Bulk Building Material Chain of Custody

Pineville, NC 28134

PHONE: (704) 525-2205

FAX: (704) 525-2382

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

**EMSL Order Number (Lab Use Only):**

411911092

<b>Company :</b> Apex Environmental Management		<b>EMSL-Bill to:</b> <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
<b>Street:</b> 7 Winchester Court		<i>Third Party Billing requires written authorization from third party</i>	
<b>City:</b> Mauldin	<b>State/Province:</b> SC	<b>Zip/Postal Code:</b> 29662	<b>Country:</b> US
<b>Report To (Name):</b> Ted Shultz		<b>Telephone #:</b> 864-404-3210	
<b>Email Address:</b> tshultz@apex-ehs.com		<b>Fax #:</b>	<b>Purchase Order:</b>
<b>Project Name/Number:</b> 0119-09 COS 419 Ammons Rd.		<b>Please Provide Results:</b> <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Mail	
<b>U.S. State Samples Taken:</b> SC		<b>CT Samples:</b> <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

**Turnaround Time (TAT) Options\* – Please Check**

3 Hour  
  6 Hour  
  24 Hour  
  48 Hour  
  72 Hour  
  96 Hour  
  1 Week  
  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<p style="text-align: center;"><b>PLM - Bulk (reporting limit)</b></p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (&lt;1%)</p> <p><input type="checkbox"/> PLM EPA NOB (&lt;1%)</p> <p>Point Count <input type="checkbox"/> 400 (&lt;0.25%) <input type="checkbox"/> 1000 (&lt;0.1%)</p> <p>Point Count w/Gravimetric <input type="checkbox"/> 400 (&lt;0.25%) <input type="checkbox"/> 1000 (&lt;0.1%)</p> <p><input type="checkbox"/> NIOSH 9002 (&lt;1%)</p> <p><input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)</p> <p><input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> OSHA ID-191 Modified</p> <p><input type="checkbox"/> Standard Addition Method</p>	<p style="text-align: center;"><b>TEM – Bulk</b></p> <p><input checked="" type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1</p> <p><input type="checkbox"/> NY ELAP Method 198.4 (TEM)</p> <p><input type="checkbox"/> Chatfield Protocol (semi-quantitative)</p> <p><input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2</p> <p><input type="checkbox"/> TEM Qualitative via Filtration Prep Technique</p> <p><input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique</p> <p style="text-align: center;"><b>Other</b></p> <p><input type="checkbox"/></p>
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**Check For Positive Stop – Clearly Identify Homogenous Group**      **Date Sampled:** 11-9-19

**Samplers Name:** Ted Shultz      **Samplers Signature:** *[Signature]*

Sample #	HA #	Sample Location	Material Description
1		Interior - collapsed roof system	
2		shingles, felt & tar	
3			
4		Interior walls - plaster	
5		over unfinished drywall	
6			
7			
8			

**Client Sample # (s):** 1 - 10      **Total # of Samples:**

**Relinquished (Client):** *[Signature]*      **Date:** 11-11-19      **Time:** 4:00pm

**Received (Lab):** *[Signature]*      **Date:** 11/21/19      **Time:** 10:15AM Fx

**Comments/Special Instructions:**  
Bill To: Apex Environmental Management, 7 Winchester Court, Mauldin, SC, 29662, US  
 Attention: Rebecca Shultz Phone: 864-404-3210 Email: rshultz@apex-ehs.com Purchase Order:

7957 8797 9720



**SECTION IV**  
**Photograph Log**





Photo 1 – 417 Ammons Road in Spartanburg, South Carolina



Photo 2 – New metal and wood roof system.



Photo 3 – Collapsed roof and ceiling systems.



Photo 4 – Collapsed roof and ceiling systems.



Photo 5 – Green stone pattern flooring.



Photo 6 – Tan 9" x 9" floor tile.



Photo 7 – Plaster over dry wall.

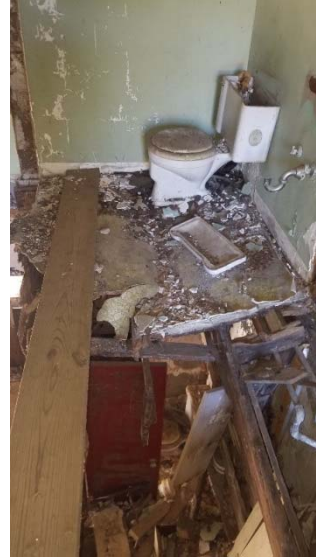


Photo 8 – 1st floor bathroom flooring.



Photo 9 – 1<sup>st</sup> floor plaster over drywall.



Photo 10 – Basement collapsed ceiling.

**SECTION V**

**SC DHEC Asbestos Inspector License**

**SCDHEC ISSUED**  
Asbestos ID Card

**Tedman K Shultz**



**CONSULTBI BI-00971**  
**AIRSAMPLER AS-00355**

Expiration Date:  
**01/16/20**  
**03/06/20**

**North Carolina  
Asbestos Accreditation**



Tedman K Shultz  
7 Winchester Court  
Mauldin, SC 29662

123985

EXPIRATION			
03-31-2020			
DOB	SEX	HT	WT
03-10-1972	M	5'10"	240
CLASS		#	EXP
AIR MONITOR		80864	03-20
INSPECTOR		12900	01-20