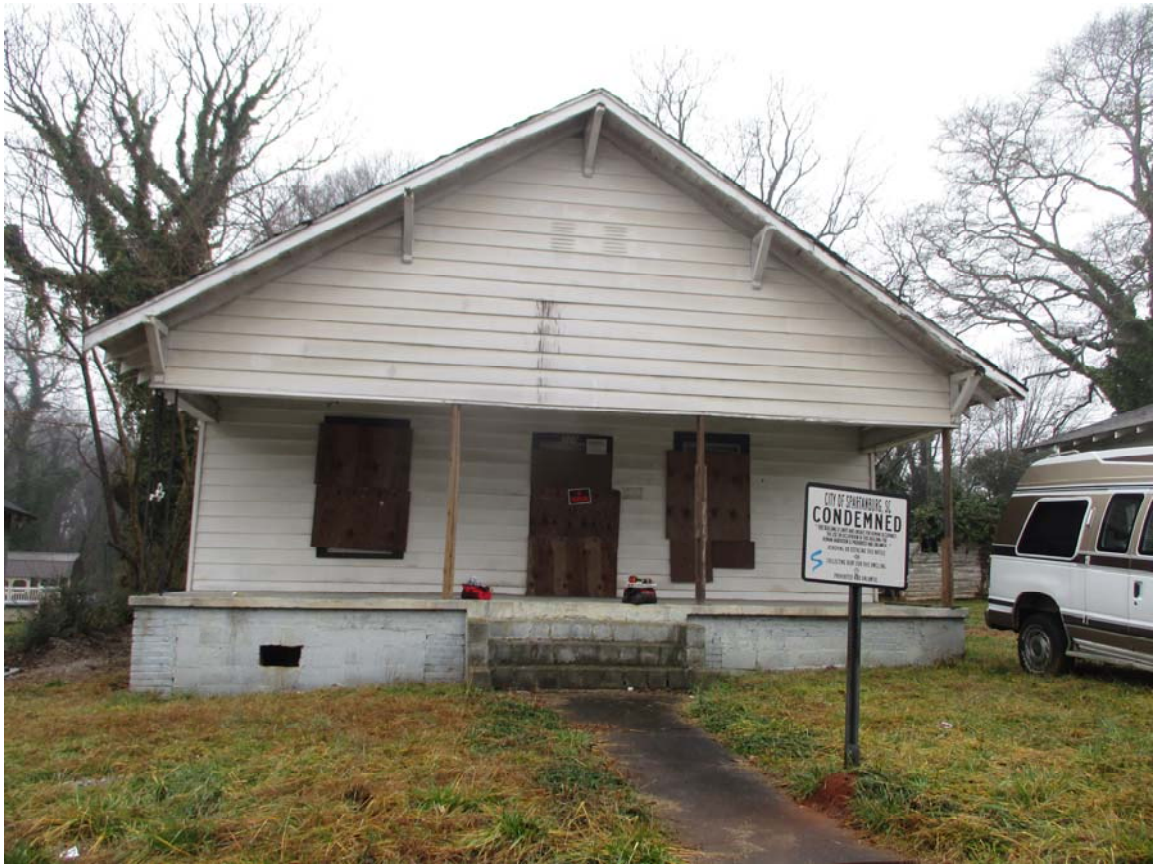

Asbestos & Lead Based Paint Assessment

City of Spartanburg
770 Hart Street
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: 0122-17

February 17, 2022

APEX ENVIRONMENTAL HEALTH & SAFETY
NAVIGATING YOUR NEEDS

7 Winchester Court
Mauldin, SC 29662
864.404.3210 office
864.404.3213 fax

802 E. Martintown Rd.
Suite 208
N. Augusta, SC 29841
803.440.2790 office

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Apex Project Number 0122-17

February 17, 2022

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

Reference: Asbestos and Lead-Based Paint Assessment Services
770 Hart Street
Spartanburg, South Carolina 29306

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.

Tom Oliver
Vice President

Appendices

ASBESTOS AND LEAD BASED PAINT ASSESSMENT

CITY OF SPARTANBURG
770 HART STREET
SPARTANBURG, SOUTH CAROLINA 29306

APEX PROJECT NO. 0122-17

TABLE OF CONTENTS

SECTION

SECTION I

Asbestos & Lead Evaluation Report

ASBESTOS EVALUATION REPORT
APEX PROJECT NUMBER: 0122-17

Date:	2/17/2022	Page Number:	1 of 4
Client:	City of Spartanburg	Client Contact:	Mr. Jeff Tillerson
Client Address:	440 South Church Street Suite B Spartanburg, SC 29306	Client Phone Number:	(864) 596-2911
Project:	Asbestos Evaluation and Lead Based Paint Assessment		
Property Address:	770 Hart Street Spartanburg, SC 29306		
Assessor:	Stephanie Hamby	Date of Assessment:	2/3/2022
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approximately 82 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Crawlspace	Approximate Square Footage	1,000 SF

EXTERIOR BUILDING MATERIALS

- Pitched wooden roof with shingles & felt on house.
- Wooden windows with glazing.
- Vinyl & metal windows with no glazing & caulk. Wooden window & door casing with hard white caulk.
- Metal siding over wooden siding. White filler on siding at the back door area.
- Tar on 3 chimneys on house – assumed positive to be ACM.
- Front shed with silver sealant on metal roof.
- Back shed with roof shingles & felt.

INTERIOR BUILDING MATERIALS

- Plaster with finish walls & ceilings throughout. Unfinished drywall exists beneath plaster.
- 9”x9” brown streaked floor tile & mastic in the front left bedroom & under carpet in the living room & hallway.
- Multiple types & layers of roll vinyl flooring & adhesives in the dining room & kitchen.
- Single layer of roll vinyl floor & adhesive in the bathroom.
- Portions of the roof, ceilings & floors are unstable & collapsed throughout the residence including in ACM removal areas.

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. Thirty-eight (38) 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-three (63) 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). Twenty-four (24) 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. It should be noted that materials were identified to contain less than 1% asbestos and OSHA Construction Industry Asbestos Standards (29 CFR 1926.1101) will apply if those materials are disturbed during renovation or demolition activities. 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.

Portions of the roof, ceilings and floors are unstable and collapsing throughout the residence. The building was fully assessed; however, if additional ACM is discovered during demolition activities, Apex recommends that work activities stop until the suspect building materials may be sampled and analyzed.

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

- Approximately 405 SF of 9”x9” brown streaked floor tiles in the front left bedroom and under carpet in the living room and hallway.
- Approximately 140 SF of tan rock fissure pattern roll vinyl floor over 4 layers of additional vinyl floors in the dining room.
- Approximately 9 wooden windows on the house with glazing.
- Approximately 18 LF of tar on three chimneys on the house – assumed positive.
- Approximately 350 SF of silver sealant on the metal roof on the front shed.

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 µg/m^3) during an eight-hour workday and a permissible exposure level of fifty micrograms per cubic meter (50 µg/m^3) for employees.

Currently, HUD and the EPA define LBP as paint containing in excess of, or equal to, 1.0 mg/cm^2. *XRF LBP Data Sheets* providing XRF results for testing combinations can be found in the Appendices at the conclusion of this report.

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

Exterior

- White wooden front porch header board and trim.
- Black wooden window and doors casing.
- White wooden doors and associated jambs.
- White wooden roof overhang and framing.

Interior

- Green, red and white plaster walls.
- Red wooden door casings.
- Red wooden baseboards.
- White wooden door jambs.

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

Lead-Based Paint

Changes to state 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 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^2 or above to satisfy the OSHA requirements. If a baseline exposure lower than the OSHA Action Level of 30 micrograms per cubic meter ($\mu g/m^3$) is established, personal air monitoring may be terminated. The full OSHA lead standard should be referenced for compliance.

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

SECTION II

Asbestos & LBP Data Tables

ASBESTOS SURVEY FIELD DATA SHEET
PLM & TEM ANALYSIS

Project Name: COS 770 Hart Street ACM/LBP

Sampled By: Stephanie Hamby

Project Location: 770 Hart Street, Spartanburg, South Carolina 29306

Project Manager: Tom Oliver

Project Number: 0122-17

Date: 2/3/2022

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	**Front left bedroom; living room under carpet; hallway under carpet**	**9"x9" brown streaked floor tile & mastic**	**PLM - 4% chrysotile (floor tile);** NAD (mastic)	**Non-Friable**	**Good**	**405 SF**
2						
3			TEM - NAD (mastic)			
4	**Dining room**	**Tan rock fissure pattern roll vinyl floor over 4 layers of vinyl floors & adhesives**	**PLM - 4% chrysotile (vinyl flooring);** NAD (adhesives)	**Non-Friable**	**Good**	**140 SF**
5						
6			TEM - NAD (adhesives)			
7	Kitchen	Tan & gray pattern roll vinyl floor over 5 layers of vinyl floors & adhesives	PLM -NAD	Friable	Damaged	100 SF
8						
9			TEM - NAD			
10	Throughout	Plaster with finish	PLM - NAD	Friable	Damaged	2,500 SF
11						
12						
13						
14						
15	Bathroom	Tan with gray stripes roll vinyl floor with backing & adhesive	PLM -NAD	Non-Friable	Good	35 SF
16						
17			TEM - NAD			
18	**Wooden windows**	**Glazing**	**2% chrysotile**	**Non-Friable**	**Good**	**9 EA**
19						
20						
21	Wooden window & door casings	Hard white caulk	PLM -NAD	Non-Friable	Good	11 EA
22						
23			TEM - NAD			

ASBESTOS SURVEY FIELD DATA SHEET
PLM & TEM ANALYSIS

Project Name: COS 770 Hart Street ACM/LBP

Sampled By: Stephanie Hamby

Project Location: 770 Hart Street, Spartanburg, South Carolina 29306

Project Manager: Tom Oliver

Project Number: 0122-17

Date: 2/3/2022

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
24	Back door area	White filler material in wooden siding	PLM -NAD	Non-Friable	Good	25 LF
25						
26			TEM - NAD			
27	House roof	Roof shingles (2 layers) & felt (1 layer)	PLM -NAD	Non-Friable	Good	1,500 SF
28						
29			TEM - NAD			
30	**Front shed roof**	**Silver sealant on metal roof**	**3% chrysotile**	**Non-Friable**	**Good**	**350 SF**
31						
32						
33	Back shed roof	Roof shingles (1 layer) & felt (1 layer)	PLM -NAD	Non-Friable	Good	105 SF
34						
35			TEM - NAD			
36	Scattered through inside house	Unfinished drywall beneath plaster	PLM - NAD	Friable	Damaged	1,500 SF
37						
38						
Assumed	**3 chimney's**	**3 chimneys with tar**	**Assumed**	**Non-Friable**	**Good**	**18 LF**

NAD = No Asbestos Detected
Bold = Positive For Asbestos

LF = Linear Feet
SF = Square Feet

EA = Each
Chry = Chrysotile

FIELD DATA SHEET
XRF LBP ANALYSIS

Project Name: COS 770 Hart Street ACM/LBP

Sampled By: Stephanie Hamby

Project Location: 770 Hart Street, Spartanburg, South Carolina 29306

Project Manager: Tom Oliver

Project Number: 0122-17

Date: 2/3/2022

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/m^3)
1	Standardization				184.00/Pass
2	Calibration				1.15
3	Calibration				1.16
4	Calibration				1.12
5	Exterior	Front porch ceiling	Green	Wood	2.60
6	**Exterior**	**Front porch header board**	**White**	**Wood**	**>4.72**
7	**Exterior**	**Front porch header trim**	**White**	**Wood**	**>5.00**
8	Exterior	Front porch floor	Gray	Concrete	0.02
9	**Exterior**	**Door casing**	**Black**	**Wood**	**>5.00**
10	**Exterior**	**Window casing**	**Black**	**Wood**	**>5.00**
11	Exterior	Front porch column	Black	Metal	0.06
12	Exterior	Siding	White	Metal over wood	0.00
13	**Exterior**	**Roof overhang & framing**	**White**	**Wood**	**1.54**
14	**Exterior**	**Door**	**White**	**Wood**	**1.92**
15	**Exterior**	**Door jamb**	**White**	**Wood**	**0.98**
16	Interior	Door casing	White	Wood	0.64
17	Interior	Wall	White	Plaster	0.00
18	Interior	Baseboard	White	Wood	0.79
19	Interior	Fireplace mantle	White	Wood	0.57
20	Interior	Fireplace casing	White	Wood	0.59
21	Interior	Window sill	White	Wood	0.81
22	Interior	Door casing	Blue	Wood	0.63
23	Interior	Door	Blue	Wood	0.34
24	Interior	Baseboard	Blue	Wood	0.62
25	Interior	Floor	White	Wood	0.20

FIELD DATA SHEET
XRF LBP ANALYSIS

Project Name: COS 770 Hart Street ACM/LBP

Sampled By: Stephanie Hamby

Project Location: 770 Hart Street, Spartanburg, South Carolina 29306

Project Manager: Tom Oliver

Project Number: 0122-17

Date: 2/3/2022

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/m^3)
26	**Interior**	**Wall**	**Green**	**Plaster**	**>1.18**
27	Interior	Window casing	Green	Wood	0.22
28	Interior	Window	Green	Wood	0.13
29	Interior	Baseboard	Green	Wood	NA
30	Interior	Baseboard	Green	Wood	0.50
31	**Interior**	**Door casing**	**Red**	**Wood**	**0.91**
32	**Interior**	**Wall**	**Red**	**Plaster**	**>1.80**
33	**Interior**	**Baseboard**	**Red**	**Wood**	**0.96**
34	Interior	Window apron	Red	Wood	0.69
35	**Interior**	**Wall**	**White**	**Plaster**	**>1.00**
36	**Interior**	**Door jamb**	**White**	**Wood**	**1.36**
37	Calibration				1.07
38	Calibration				1.03
39	Calibration				1.22

Bold = LBP FFM = Factory Finished Metal FFV = Factory Finished Vinyl

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:	412201266
Customer ID:	AXEM25
Customer PO:	
Project ID:	City of Spartanburg

Attention:	Tom Oliver	**Phone:**	(864) 640-5274
	Apex Environmental Management	**Fax:**	
	7 Winchester Court	**Received Date:**	02/07/2022 9:55 AM
	Mauldin, SC 29662	**Analysis Date:**	02/09/2022 - 02/11/2022
		Collected Date:	02/03/2022

Project: 0122-17 COS 770 Hart St ACM/LBP (City of Spartanburg)

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1-Floor Tile *412201266-0001*	House - 9"x9" Brown Streaked FT & Mastic	Brown Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
1-Mastic *412201266-0001A*	House - 9"x9" Brown Streaked FT & Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2-Floor Tile *412201266-0002*	House - 9"x9" Brown Streaked FT & Mastic				Positive Stop (Not Analyzed)
2-Mastic *412201266-0002A*	House - 9"x9" Brown Streaked FT & Mastic	Brown Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
4-Beige Vinyl Flooring *412201266-0003*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	White/Beige Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
4-Tan Vinyl Flooring *412201266-0003A*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
4-Mastic *412201266-0003B*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Black/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4-Green Dot Vinyl Flooring *412201266-0003C*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan/Black/Green Non-Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
4-Orange Dot Vinyl Flooring *412201266-0003D*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan/Black/Orange Fibrous Homogeneous	40% Cellulose 2% Glass	58% Non-fibrous (Other)	None Detected
5-Beige Vinyl Flooring *412201266-0004*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts				Positive Stop (Not Analyzed)
5-Tan Vinyl Flooring *412201266-0004A*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
5-Mastic *412201266-0004B*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
5-Green Dot Vinyl Flooring *412201266-0004C*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Black/Green Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected

Initial report from: 02/11/2022 10:29:45

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: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
5-Orange Dot Vinyl Flooring *412201266-0004D*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
7-White Vinyl Flooring *412201266-0005*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Gray/White Fibrous Homogeneous	20% Glass	10% Ca Carbonate 70% Non-fibrous (Other)	None Detected
7-Mastic *412201266-0005A*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Red Vinyl Flooring 1 *412201266-0005B*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Gray/Red/Black Fibrous Homogeneous	30% Cellulose 3% Synthetic	67% Non-fibrous (Other)	None Detected
7-Mastic *412201266-0005C*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Red Vinyl Flooring 2 *412201266-0005D*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	White/Red/Black Fibrous Homogeneous	30% Cellulose 2% Synthetic	68% Non-fibrous (Other)	None Detected
7-Mastic *412201266-0005E*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Brown/Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Red Vinyl Flooring 3 *412201266-0005F*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Brown/Red/Black Fibrous Homogeneous	30% Cellulose 3% Synthetic	67% Non-fibrous (Other)	None Detected
7-Mastic *412201266-0005G*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7-Brown Vinyl Flooring *412201266-0005H*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Brown/Black/Green Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
8-White Vinyl Flooring *412201266-0006*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	White Non-Fibrous Homogeneous	15% Cellulose	10% Ca Carbonate 75% Non-fibrous (Other)	None Detected
8-Mastic *412201266-0006A*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8-Red Vinyl Flooring 1 *412201266-0006B*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red Non-Fibrous Homogeneous	30% Cellulose 1% Synthetic	69% Non-fibrous (Other)	None Detected
8-Mastic *412201266-0006C*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

Initial report from: 02/11/2022 10:29:45

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
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EMSL Order: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
8-Red Vinyl Flooring 2 *412201266-0006D*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red Non-Fibrous Homogeneous	30% Cellulose 1% Synthetic	69% Non-fibrous (Other)	None Detected
8-Mastic *412201266-0006E*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
8-Red Vinyl Flooring 3 *412201266-0006F*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red Non-Fibrous Homogeneous	30% Cellulose 1% Synthetic	69% Non-fibrous (Other)	None Detected
8-Brown Vinyl Flooring *412201266-0006G*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Brown/Green Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
8-Mastic *412201266-0006H*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
10-Finish Coat *412201266-0007*	House - Plaster w/ Finish	White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
10-Plaster *412201266-0007A*	House - Plaster w/ Finish	Tan Fibrous Homogeneous	2% Cellulose	30% Quartz 68% Non-fibrous (Other)	None Detected
11-Finish Coat *412201266-0008*	House - Plaster w/ Finish	White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
11-Plaster *412201266-0008A*	House - Plaster w/ Finish	Tan Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
12-Finish Coat *412201266-0009*	House - Plaster w/ Finish	White Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (Other)	None Detected
12-Plaster *412201266-0009A*	House - Plaster w/ Finish	Tan Fibrous Homogeneous		15% Quartz 85% Non-fibrous (Other)	None Detected
13-Finish Coat *412201266-0010*	House - Plaster w/ Finish	White Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
13-Plaster *412201266-0010A*	House - Plaster w/ Finish	Gray Non-Fibrous Homogeneous	<1% Cellulose	20% Quartz 80% Non-fibrous (Other)	None Detected
14-Finish Coat *412201266-0011*	House - Plaster w/ Finish	White Non-Fibrous Homogeneous		20% Quartz 80% Non-fibrous (Other)	None Detected
14-Plaster *412201266-0011A*	House - Plaster w/ Finish	Gray Non-Fibrous Homogeneous	<1% Cellulose	25% Quartz 75% Non-fibrous (Other)	None Detected
15-Vinyl Flooring *412201266-0012*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	Tan Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
15-Mastic *412201266-0012A*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	Tan/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 02/11/2022 10:29:45

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: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
16-Vinyl Flooring *412201266-0013*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	White Non-Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
16-Mastic *412201266-0013A*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
18 *412201266-0014*	House - Window Glazing	Gray/White Non-Fibrous Homogeneous		25% Ca Carbonate 73% Non-fibrous (Other)	2% Chrysotile
19 *412201266-0015*	House - Window Glazing				Positive Stop (Not Analyzed)
21 *412201266-0016*	House - Window & Door Casing Caulk	Tan Non-Fibrous Homogeneous	6% Fibrous (Other)	94% Non-fibrous (Other)	None Detected
22 *412201266-0017*	House - Window & Door Casing Caulk	White Non-Fibrous Homogeneous	5% Fibrous (Other)	15% Ca Carbonate 80% Non-fibrous (Other)	None Detected
24 *412201266-0018*	House - White Filler in Wooden Siding	Tan Non-Fibrous Homogeneous	6% Fibrous (Other)	94% Non-fibrous (Other)	None Detected
25 *412201266-0019*	House - White Filler in Wooden Siding	White Non-Fibrous Homogeneous	2% Fibrous (Other)	15% Ca Carbonate 83% Non-fibrous (Other)	None Detected
27-Green Shingle *412201266-0020*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black/Green Fibrous Homogeneous	15% Cellulose 2% Synthetic	5% Quartz 78% Non-fibrous (Other)	None Detected
27-Gray Shingle *412201266-0020A*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Gray/Black Fibrous Homogeneous	25% Cellulose	10% Quartz 65% Non-fibrous (Other)	None Detected
27-Felt *412201266-0020B*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black Fibrous Homogeneous	70% Cellulose	5% Ca Carbonate 25% Non-fibrous (Other)	None Detected
28-Green Shingle *412201266-0021*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black/Green Non-Fibrous Homogeneous	30% Cellulose	10% Quartz 60% Non-fibrous (Other)	None Detected
28-Gray Shingle *412201266-0021A*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	15% Cellulose	10% Quartz 75% Non-fibrous (Other)	None Detected
28-Felt *412201266-0021B*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
30 *412201266-0022*	Front Shed - Silver Sealant on Metal Roof	Silver Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
31 *412201266-0023*	Front Shed - Silver Sealant on Metal Roof				Positive Stop (Not Analyzed)
33-Shingle *412201266-0024*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Fibrous Homogeneous	5% Glass	5% Quartz 15% Ca Carbonate 75% Non-fibrous (Other)	None Detected
33-Felt *412201266-0024A*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected

Initial report from: 02/11/2022 10:29:45

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EMSL Order: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
34-Shingle *412201266-0025*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
34-Felt *412201266-0025A*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
36 *412201266-0026*	House - Unfinished Drywall beneath Plaster	Tan Fibrous Homogeneous	5% Cellulose 2% Glass	93% Non-fibrous (Other)	None Detected
37 *412201266-0027*	House - Unfinished Drywall beneath Plaster	Tan Fibrous Homogeneous	5% Cellulose 2% Glass	93% Non-fibrous (Other)	None Detected
38 *412201266-0028*	House - Unfinished Drywall beneath Plaster	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected

Analyst(s)
Jessica Cooper (35)
Sarah Breneman (28)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

Initial report from: 02/11/2022 10:29:45

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
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http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

Attention: Tom Oliver
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
Fax:
Received Date: 02/07/2022 9:55 AM
Analysis Date: 02/16/2022
Collected Date: 02/03/2022

Project: 0122-17 COS 770 Hart St ACM/LBP (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-Mastic *412201266-0029*	House - 9"x9" Brown Streaked FT & Mastic	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Tan Vinyl Flooring *412201266-0030*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Heterogeneous	100.0 Other	None	No Asbestos Detected
6-Mastic *412201266-0031*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Green Dot Vinyl Flooring *412201266-0032*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan/Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Orange Dot Vinyl Flooring *412201266-0033*	House - Tan Rock Fissure Pattern Roll VF over 3 Layers of VF w/ Mastics & Felts	Tan/Orange Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-White Vinyl Flooring *412201266-0034*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Mastic *412201266-0035*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Red Vinyl Flooring 1 *412201266-0036*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Mastic *412201266-0037*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Red Vinyl Flooring 2 *412201266-0038*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red/Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Mastic *412201266-0039*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 02/16/2022 14:00:54

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: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

Attention: Tom Oliver
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
Fax:
Received Date: 02/07/2022 9:55 AM
Analysis Date: 02/16/2022
Collected Date: 02/03/2022

Project: 0122-17 COS 770 Hart St ACM/LBP (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
9-Red Vinyl Flooring 3 *412201266-0040*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Red/Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Mastic *412201266-0041*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Brown Vinyl Flooring *412201266-0042*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Brown/Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Mastic *412201266-0043*	House - Tan & Gray Pattern Roll VF over 4 Layers of VF w/ Mastics & Felts	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
17-Vinyl Flooring *412201266-0044*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
17-Mastic *412201266-0045*	House - Tan w/ Gray Stripes Pattern Roll VF w/ Backing & Adhesive	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
23 *412201266-0046*	House - Window & Door Casing Caulk	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
26 *412201266-0047*	House - White Filler in Wooden Siding	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
29-Green Shingle *412201266-0048*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black/Green Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
29-Gray Shingle *412201266-0049*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
29-Felt *412201266-0050*	House - Roof Shingles (2 Layers) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
35-Shingle *412201266-0051*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 02/16/2022 14:00:54

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: 412201266
Customer ID: AXEM25
Customer PO:
Project ID: City of Spartanburg

Attention: Tom Oliver
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
Fax:
Received Date: 02/07/2022 9:55 AM
Analysis Date: 02/16/2022
Collected Date: 02/03/2022

Project: 0122-17 COS 770 Hart St ACM/LBP (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
35- Felt *412201266-0052*	Back Shed - Roof Shingles (1 Layer) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Derrick Young (24)

Lee Plumley, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 02/16/2022 14:00:54

OrderID: 412201266

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only: 412201266

EMSL Analytical, Inc.
10801 Southern Loop Blvd
Pineville, NC 28134
PHONE: (704) 525-2205
EMAIL: charlottelab@EMSL.com

Customer Information		Billing Information	
Customer ID:		Billing ID:	
Company Name:	Apex Environmental Management, Inc.	Company Name:	Apex Environmental Management
Contact Name:	Tom Oliver	Billing Contact:	Rebecca Shultz
Street Address:	7 Winchester Court	Street Address:	7 Winchester Court
City, State, Zip:	Mauldin SC 29662	City, State, Zip:	Mauldin SC
Country:	US	Country:	US
Phone:	864-404-3210	Phone:	864-404-3210
Email(s) for Report:	toliver@apex-ehs.com	Email(s) for Invoice:	

Project Information

Project Name/No:	0122-17 COS 770 Hart St ACM/LBP	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:	D. Hamby
Date Sampled:	2/3/2022	No. of Samples in Shipment:	38

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	House	9"x9" brown streaked F.T.	PLM
2		+ mastic	1
3			TEM
4		Tan rock fissure pattern roll	PLM
5		VF over 3 layers of VF w/	1
6		mastics + felts	TEM
7		Tan + gray pattern roll VF	PLM
8		over 4 layers of VF w/ mastics	1
9		+ felts	TEM

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

Method of Shipment:	Fed Ex - Overnight	Sample Condition Upon Receipt:	
Relinquished by:	Date/Time: 2/3/22 2:00PM	Received by:	Date/Time: 2/7/22
Relinquished by:	Date/Time:	Received by: EMSL Fx 7963 2841 5401	Date/Time: 955AM

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.)

OrderID: 412201266

EMSL ANALYTICAL, INC.
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Asbestos Bulk Building Materials - Chain of Custody

EMSL Order Number / Lab Use Only

1266

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
10	House	Plaster w/ Finish	PLM
11			
12			
13			
14			
15		Tan w/ gray stripes pattern	PLM
16		roll UF w/ backing &	
17		adhesive	TEM
18		Window Glazing	PLM
19			
20			TEM
21		Window & Door Casing	PLM
22		Caulk	
23			TEM
24		White filler in wooden	PLM
25		siding	
26			TEM
27	House	Roof shingles (2 layers) &	PLM
28		+ felt (1 layer)	
29			TEM
30	Front Shed	Silver Sealant on	PLM
31		metal roof	
32			TEM

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.)

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.

OrderID: 412201266

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Asbestos Bulk Building Materials - Chain of Custody

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

Sample Number	HA Number	Sample Location	Material Description
33	Back Shed	Roof Shingles (1 layer)	PLM
34	"	& felt (1 layer)	"
35	"	"	TEM
36	House	Unfinished drywall	PLM
37	"	beneath Plaster	"
38	"	"	"

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

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SECTION IV

Photographic Log

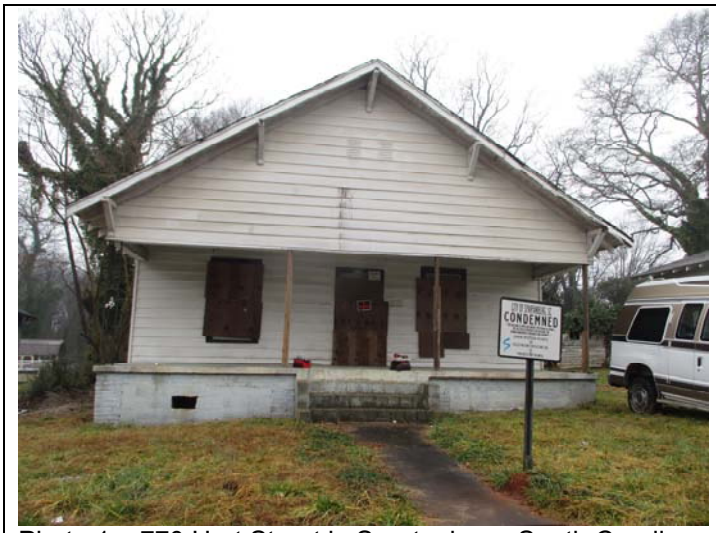

Photo 1 – 770 Hart Street in Spartanburg, South Carolina 29306

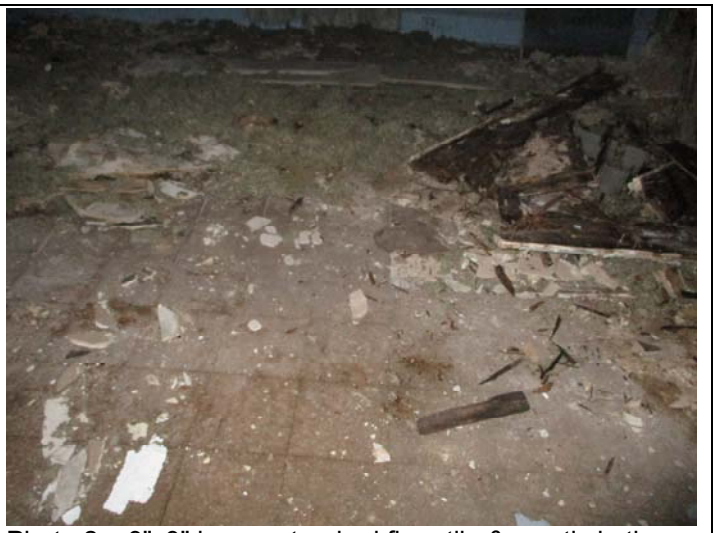
Photo 2 – 9"x9" brown streaked floor tile & mastic in the front left bedroom


Photo 3 – 9"x9" brown streaked floor tile & mastic under carpet in the living room & hallway


Photo 4 – Tan rock fissure pattern roll vinyl floor over 4 layers of vinyl floors & adhesives in the dining room

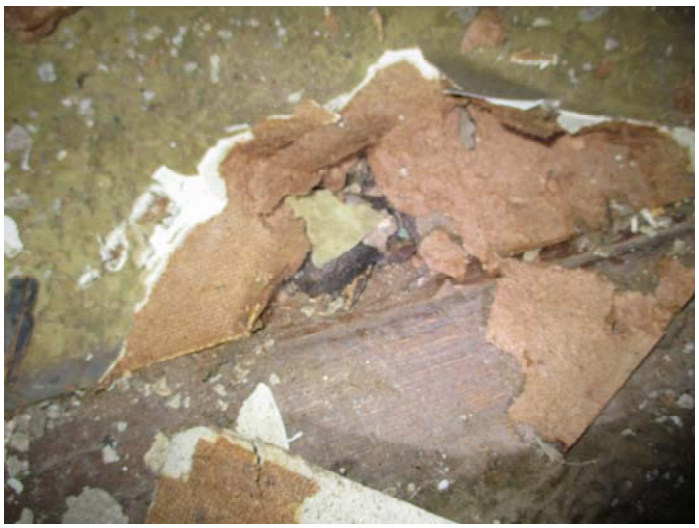
Photo 5 – Tan rock fissure pattern roll vinyl floor over 4 layers of vinyl floors & adhesives in the dining room


Photo 6 – Tan & gray pattern roll vinyl floor over 5 layers of vinyl floors & adhesives in the kitchen

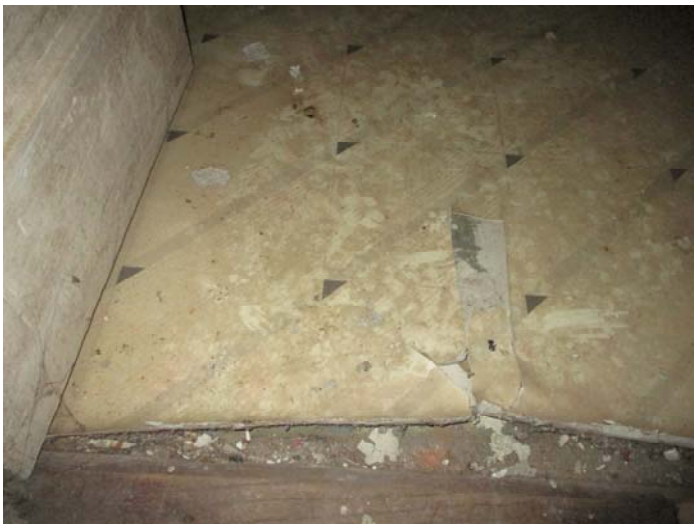

Photo 7 – Tan with gray stripes roll vinyl floor with backing & adhesive in the bathroom

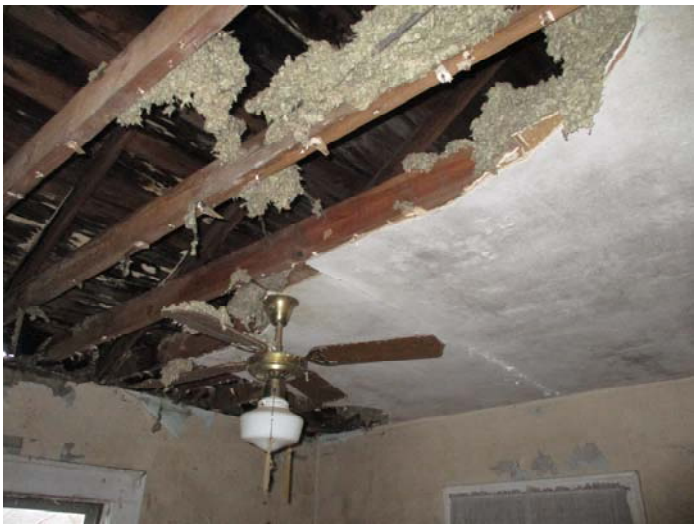

Photo 8 – Typical view of plaster with finish walls & ceilings throughout the residence

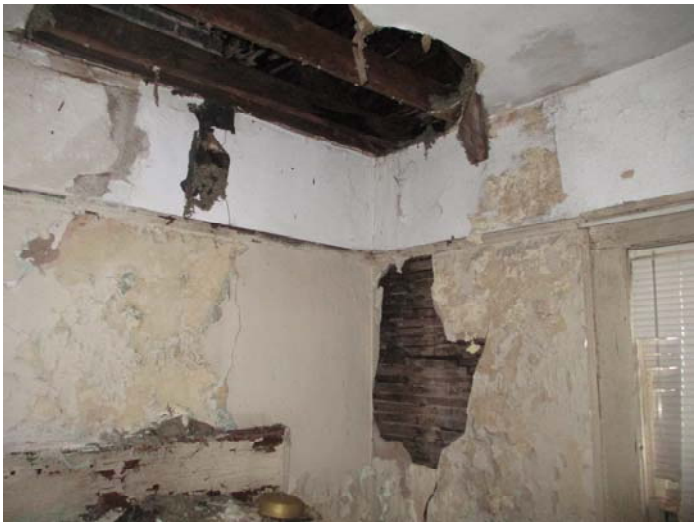

Photo 9 – Typical view of plaster with finish walls & ceilings throughout the residence

Photo 10 – Typical view of plaster with finish walls & ceilings throughout the residence

Photo 11 – Unfinished drywall beneath plaster scattered throughout the residence

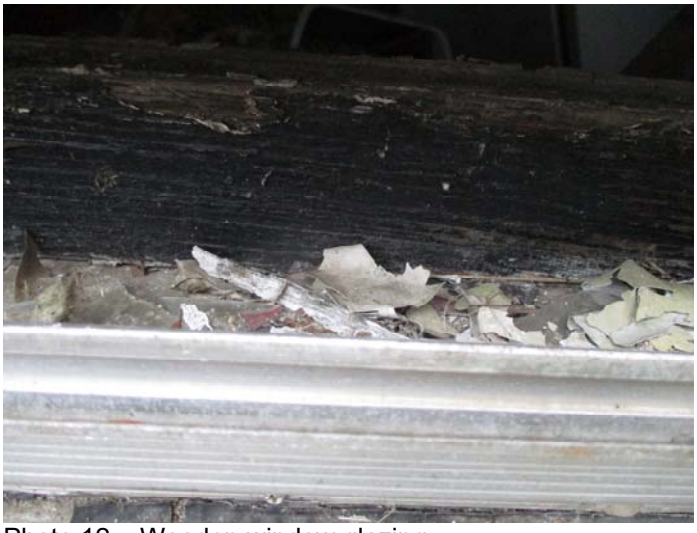

Photo 12 – Wooden window glazing

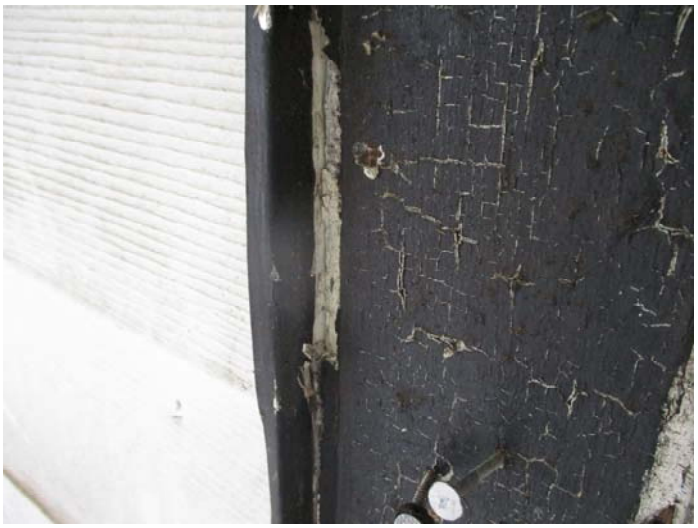

Photo 13 – Hard white caulk on wooden window & door casings

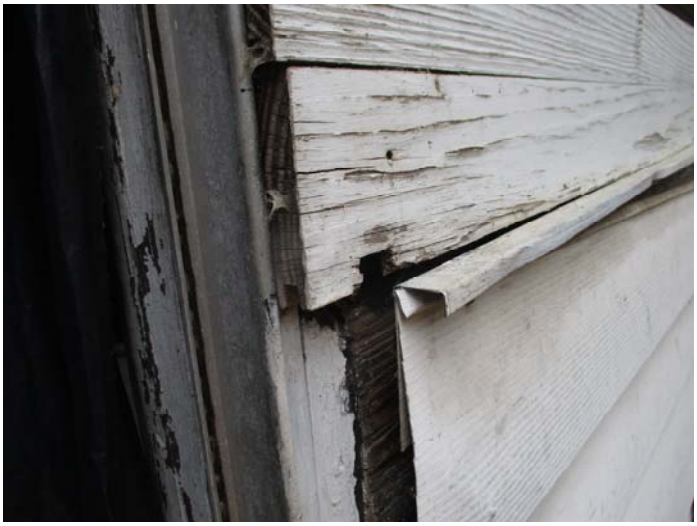

Photo 14 – White filler material in wooden siding in the back door area

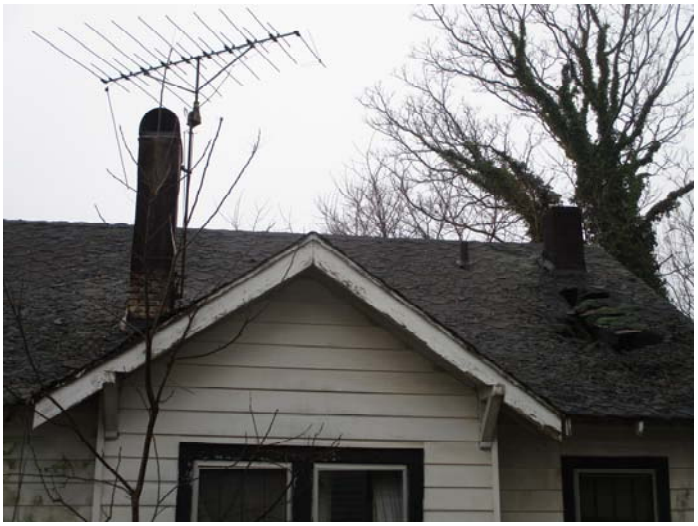

Photo 15 – Typical view of house roof with 2 chimneys with tar that are presumed positive for asbestos

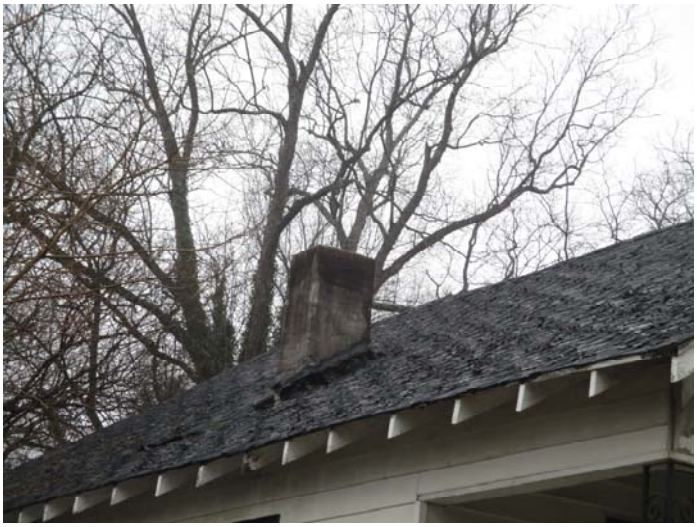

Photo 16 – Typical view of house roof with 1 chimney with tar that are presumed positive for asbestos

Photo 17 – Front shed with wooden construction & silver sealant on the metal roof

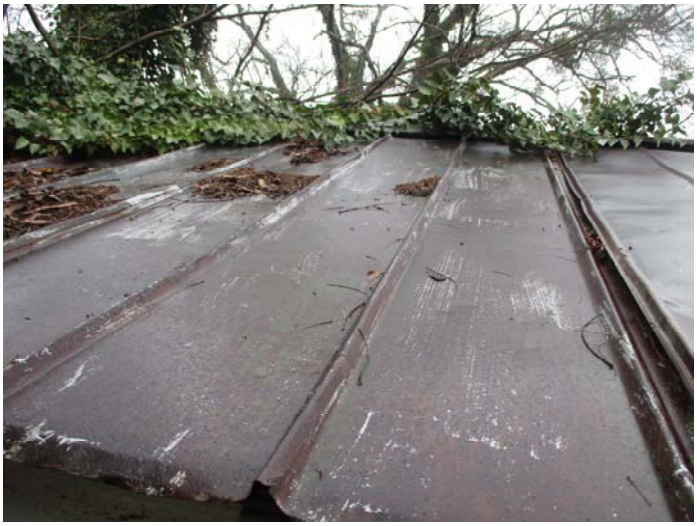

Photo 18 – Front shed with silver sealant on the metal roof

Photo 19 – Back shed with wooden construction & shingle and felt on the roof

Photo 20 – Back shed with shingle and felt on the roof

SECTION V

SC DHEC Asbestos Inspector License

SCDHEC ISSUED

Asbestos ID Card

STEPHANIE HAMBY

		Expiration Date:
AIRSAMPLER	AS-000632	08/05/22
CONSULTBI	BI-01894	12/07/22