Asbestos & Lead Based Paint Assessment

City of Spartanburg
310 Hydrick 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: 0120-17

October 21, 2020

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Apex Project Number 0120-17

October 21, 2020

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

Reference: Asbestos and Lead-Based Paint Assessment Services
310 Hydrick 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.

Stephanie Hamby
Project Manager

Tom Oliver
Vice President

Appendices

ASBESTOS AND LEAD BASED PAINT ASSESSMENT

CITY OF SPARTANBURG
310 HYDRICK STREET
SPARTANBURG, SOUTH CAROLINA 29306

APEX PROJECT NO. 0120-17

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SECTION

SECTION I

Asbestos & Lead Evaluation Report

ASBESTOS EVALUATION REPORT
APEX PROJECT NUMBER: 0120-17

Date:	10/21/2020	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:	310 Hydrick Street Spartanburg, SC 29306		
Assessor:	Stephanie Hamby	Date of Assessment:	9/30/2020
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approximately 100 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Brick Crawlspace	Approximate Square Footage	1,570 SF

EXTERIOR BUILDING MATERIALS

- Pitched wooden roof with shingles & no felt.
- Wooden siding.
- Wooden windows with glazing.
- Wooden windows and doors with & without caulk around casings.
- Metal storm windows with no caulk.
- Evidence of damage to the roof from fallen tree was observed.
- A pallet of roof shingles & felt paper is next to the front porch.
- Three chimneys with tar are assumed to be ACM.

INTERIOR BUILDING MATERIALS

- Popcorn ceiling texture throughout.
- Drywall with joint compound & tape ceilings throughout.
- Wooden floors.
- Plaster with finish under wood wall paneling.
- Multiple types & layers of vinyl flooring with & without mastics/adhesives located in kitchen and hallway.
- Water damage exists throughout and ceiling damage in the back portion of the residence.
- Large amount of household items, trash & debris exists.

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 (30) 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. Forty-five (45) 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). Six (6) 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. 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.

Portions of the residence have collapsed ceilings or floors that are collapsing. These areas were fully assessed, however, if 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.

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

- Approximately 265 SF of brown square pattern flooring and associated mastic beneath the 12"x12" adhesive white pattern flooring in the kitchen, pantry and hallway.

- Approximately 36 LF of tar located on three chimneys – assumed positive.

Lead Based Paint

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms per cubic meter (30 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, EPA defines 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. Paint-chip sampling was not required for XRF inconclusive values.

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

Exterior:
- Gray wooden siding.
- Dark gray wooden doors.
- Plum wooden door casings.
- Plum wooden porch headers.
- White wooden porch ceilings.
- Plum wooden windows and window casings.
- Plum wooden corner trim.

Interior:
No surfaces in the building tested positive for lead in excess of the regulatory definition of LBP.

RECOMMENDATIONS AND DISCUSSION

Asbestos Containing Materials

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

APEX recommends the following:

1. Abate the asbestos containing materials in the structure prior to renovation or demolition.

2. Follow applicable asbestos regulations during renovation or demolition of the structure. You

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

Lead-Based Paint

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

Occupational Safety and Health Administration Lead Regulations apply to actions initiated on lead containing materials. This regulation applies to lead concentrations greater than the analytical limit of detection. This regulation sets exposure levels on airborne lead and does not reference the percent lead in paint. Therefore, initial personal air monitoring should be conducted on workers performing work on surfaces which have a lead concentration of 0.1 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 310 Hydrick St NIP ACM-LBP
Sampled By: Stephanie Hamby

Project Location: 310 Hydrick St, Spartanburg, South Carolina 29306
Project Manager: Stephanie Hamby

Project Number: 0120-17
Date: 9/30/2020

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Roof	Roof shingles (1 layer) with no felt	PLM - NAD	Non-Friable	Significantly Damaged	1,800 SF
2						
3			TEM - NAD			
4	Stack of shingles in front yard	Shingles with roll of felt	PLM - NAD	Non-Friable	Good	1,900 SF
5						
6			TEM - NAD			
7	Wood windows	Glazing	PLM - NAD	Non-Friable	Good	18 EA
8						
9			TEM - NAD			
10	Wood windows and doors	Casing caulk	PLM - NAD	Non-Friable	Good	21 EA
11						
12			TEM - NAD			
13	Ceiling Throughout	Popcorn ceiling texture	PLM - NAD	Friable	Significantly Damaged	1,270 SF
14						
15						
16						
17						
18	Ceiling Throughout	Drywall with joint compound & tape	PLM - NAD	Friable	Significantly Damaged	1,565 SF
19						
20						
21						
22						
23	Under wood wall paneling throughout	Plaster with finish	PLM - NAD	Friable	Significantly Damaged	3,913 SF
24						
25						
26						
27						

ASBESTOS SURVEY FIELD DATA SHEET
PLM & TEM ANALYSIS

Project Name: COS 310 Hydrick St NIP ACM-LBP
Sampled By: Stephanie Hamby

Project Location: 310 Hydrick St, Spartanburg, South Carolina 29306
Project Manager: Stephanie Hamby

Project Number: 0120-17
Date: 9/30/2020

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
28	**Kitchen, pantry and hallway**	**12"x12" adhesive white pattern flooring (top layer) over brown square pattern flooring (bottom layer)**	**PLM - 10% Chry (brown flooring),** <1% Chry (brown flooring mastic), NAD (white flooring)	**Non-Friable**	**Damaged**	**265 SF**
29						
30			**TEM - 1.2% Chry (brown flooring mastic)**			
31	**Chimney's**	**Tar on 3 Chimneys**	**Assumed**	**Non-Friable**	**Damaged**	**36 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 310 Hydrick Street NIP ACM-LBP

Sampled By: Tom Oliver

Project Location: 310 Hydrick Street, Spartanburg, SC 29306

Project Manager: Tom Oliver

Project Number: 0120-17

Date: 9/30/2020

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/m^3)
44	**Exterior**	**Siding**	**Gray**	**Wood**	**3.15**
45	Exterior	Door	Gray	Metal	0.00
46	**Exterior**	**Door**	**Dark Gray**	**Wood**	**2.98**
47	**Exterior**	**Door Casing**	**Plum**	**Wood**	**3.64**
48	**Porch**	**Header**	**Plum**	**Wood**	**2.45**
49	**Porch**	**Ceiling**	**White**	**Wood**	**3.20**
50	Porch	Floor	Gray	Concrete	0.00
51	Porch	Column	Plum	Wood	0.03
52	**Exterior**	**Widow Casing**	**Plum**	**Wood**	**1.69**
53	**Exterior**	**Corner Trim**	**Plum**	**Wood**	**1.24**
54	**Exterior**	**Window**	**Plum**	**Wood**	**3.60**
55	Interior	Ceiling	White	Drywall	0.00
56	Interior	Door	Brown	Wood	0.00
57	Interior	Door Casing	Brown	Wood	0.16
58	Interior	Door Header	Brown	Wood	0.21
59	Interior	Fireplace	White	Brick	0.00
60	Interior	Mantle	Plum	Wood	0.21
61	Interior	Wall	Brown Panel	Wood	0.56
62	Interior	Window	Brown	Wood	0.19
63	Interior	Window Casing	Brown	Wood	0.05
64	Interior	Window Sill	Brown	Wood	0.25
65	Interior	Floor	Brown Wood	Wood	0.00
66	Interior	Closet Shelf	White	Wood	0.00
67	Interior	Cabinet	Gray	Wood	0.00
68	Calibration				1.12
69	Calibration				1.07
70	Calibration				1.09

Bold = LBP

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:	412008430
Customer ID:	AXEM25
Customer PO:	
Project ID:	

Attention:	Stephanie Hamby	**Phone:**	(864) 640-5274
	Apex Environmental Management	**Fax:**	
	7 Winchester Court	**Received Date:**	10/02/2020 9:55 AM
	Mauldin, SC 29662	**Analysis Date:**	10/08/2020
		Collected Date:	09/30/2020
Project:	310 Hydrick St.		

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 *412008430-0001*	Roof - Shingle	Gray/Black Non-Fibrous Homogeneous	5% Glass	10% Quartz 10% Ca Carbonate 75% Non-fibrous (Other)	None Detected
2 *412008430-0002*	Roof - Shingle	Gray/Black Non-Fibrous Homogeneous	5% Glass	10% Quartz 10% Ca Carbonate 75% Non-fibrous (Other)	None Detected
4-Shingle *412008430-0003*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Non-Fibrous Homogeneous	5% Glass	8% Quartz 10% Ca Carbonate 77% Non-fibrous (Other)	None Detected
4-Felt *412008430-0003A*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
5-Shingle *412008430-0004*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Non-Fibrous Homogeneous	2% Glass	8% Quartz 10% Ca Carbonate 80% Non-fibrous (Other)	None Detected
5-Felt *412008430-0004A*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Non-Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
7 *412008430-0005*	Windows (Wood) - Glazing	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
8 *412008430-0006*	Windows (Wood) - Glazing	Tan Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
10 *412008430-0007*	Wood Windows & Doors - Casing Caulk	Gray Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
11 *412008430-0008*	Wood Windows & Doors - Casing Caulk	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
13 *412008430-0009*	Ceilings Throughout - Ceiling Texture	White Non-Fibrous Homogeneous		30% Ca Carbonate 5% Mica 65% Non-fibrous (Other)	None Detected
14 *412008430-0010*	Ceilings Throughout - Ceiling Texture	White Non-Fibrous Homogeneous		30% Ca Carbonate 5% Mica 65% Non-fibrous (Other)	None Detected
15 *412008430-0011*	Ceilings Throughout - Ceiling Texture	White Non-Fibrous Homogeneous		30% Ca Carbonate 5% Mica 65% Non-fibrous (Other)	None Detected
16 *412008430-0012*	Ceilings Throughout - Ceiling Texture	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
17 *412008430-0013*	Ceilings Throughout - Ceiling Texture	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
18-Drywall *412008430-0014*	Ceilings Throughout - Drywall, J.C. & Tape	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

Initial report from: 10/08/2020 13:03:59

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412008430
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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
18-Joint Compound *412008430-0014A*	Ceilings Throughout - Drywall, J.C. & Tape	Beige Non-Fibrous Homogeneous		5% Quartz 30% Ca Carbonate 65% Non-fibrous (Other)	None Detected
18-Tape *412008430-0014B*	Ceilings Throughout - Drywall, J.C. & Tape	Tan Non-Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
19-Drywall *412008430-0015*	Ceilings Throughout - Drywall, J.C. & Tape	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
19-Joint Compound *412008430-0015A*	Ceilings Throughout - Drywall, J.C. & Tape	White Non-Fibrous Homogeneous		5% Quartz 30% Ca Carbonate 65% Non-fibrous (Other)	None Detected
19-Tape *412008430-0015B*	Ceilings Throughout - Drywall, J.C. & Tape	Tan Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
20-Drywall *412008430-0016*	Ceilings Throughout - Drywall, J.C. & Tape	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
20-Joint Compound *412008430-0016A*	Ceilings Throughout - Drywall, J.C. & Tape	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
20-Tape *412008430-0016B*	Ceilings Throughout - Drywall, J.C. & Tape	Tan Non-Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
21-Drywall *412008430-0017*	Ceilings Throughout - Drywall, J.C. & Tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
21-Joint Compound *412008430-0017A*	Ceilings Throughout - Drywall, J.C. & Tape	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
21-Tape *412008430-0017B*	Ceilings Throughout - Drywall, J.C. & Tape	Tan Non-Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
22-Drywall *412008430-0018*	Ceilings Throughout - Drywall, J.C. & Tape	Gray Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
22-Joint Compound *412008430-0018A*	Ceilings Throughout - Drywall, J.C. & Tape	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
22-Tape *412008430-0018B*	Ceilings Throughout - Drywall, J.C. & Tape	Tan Non-Fibrous Homogeneous	99% Cellulose	1% Non-fibrous (Other)	None Detected
23-Skim Coat *412008430-0019*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	White Non-Fibrous Homogeneous		20% Quartz 5% Ca Carbonate 75% Non-fibrous (Other)	None Detected
23-Rough Coat *412008430-0019A*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Tan Non-Fibrous Homogeneous	1% Hair	30% Quartz 5% Ca Carbonate 64% Non-fibrous (Other)	None Detected
24-Skim Coat *412008430-0020*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	White Non-Fibrous Homogeneous		20% Quartz 5% Ca Carbonate 75% Non-fibrous (Other)	None Detected
24-Rough Coat *412008430-0020A*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Tan Non-Fibrous Homogeneous	1% Hair	40% Quartz 5% Ca Carbonate 54% Non-fibrous (Other)	None Detected
25-Skim Coat *412008430-0021*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	White Non-Fibrous Homogeneous		30% Quartz 5% Ca Carbonate 65% Non-fibrous (Other)	None Detected

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EMSL Order: 412008430
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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
25-Rough Coat *412008430-0021A*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Tan Non-Fibrous Homogeneous	2% Hair	40% Quartz 5% Ca Carbonate 53% Non-fibrous (Other)	None Detected
26-Skim Coat *412008430-0022*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Tan Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
26-Rough Coat *412008430-0022A*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Gray Non-Fibrous Homogeneous	1% Hair	35% Quartz 5% Ca Carbonate 59% Non-fibrous (Other)	None Detected
27-Skim Coat *412008430-0023*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Tan Non-Fibrous Homogeneous		10% Quartz 90% Non-fibrous (Other)	None Detected
27-Rough Coat *412008430-0023A*	Under Wood Paneling (Walls) Throughout - Plaster w/ Finish	Gray Non-Fibrous Homogeneous		35% Quartz 5% Ca Carbonate 60% Non-fibrous (Other)	None Detected
28-White Flooring *412008430-0024*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	White/Beige Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
28-Brown Flooring *412008430-0024A*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	Brown Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
28-Mastic *412008430-0024B* *Possible contamination*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	<1% Chrysotile
29-White Flooring *412008430-0025*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
29-Brown Flooring *412008430-0025A*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor				Positive Stop (Not Analyzed)
29-Mastic *412008430-0025B*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected

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Analyst(s)

Lacy Searcy (19)
Sarah Breneman (26)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

Initial report from: 10/08/2020 13:03:59

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Attention: Stephanie Hamby
Apex Environmental Management
7 Winchester Court
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Project: 310 Hydrick St.

Phone: (864) 640-5274
Fax:
Received Date: 10/02/2020 9:55 AM
Analysis Date: 10/13/2020 - 10/20/2020
Collected Date: 09/30/2020

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 *412008430-0026*	Roof - Shingle	Gray Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Shingle *412008430-0027*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
6-Felt *412008430-0028*	Stack of Shingles in Front Yard - Shingle w/ Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9 *412008430-0029*	Windows (Wood) - Glazing	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
12 *412008430-0030*	Wood Windows & Doors - Casing Caulk	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
30-Mastic *412008430-0031*	Kitchen & Hallway Pantry Floors - 12x12 Adhesive White Pattern Flooring over Brown Square Pattern Floor	Tan Non-Fibrous Homogeneous	98.8 Other	None	1.2% Chrysotile

Analyst(s)

Derrick Young (6)

Lee Plumley, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 10/14/2020 06:58:57

OrderID: 412008430

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(lab use only)*: 412008430

EMSL Analytical, Inc.
10801 Southern Loop Blvd

Pineville, NC 28134
Phone (704) 525-2205
Fax (704) 525-2382

Company Name : Apex Environmental Management		**EMSL Customer ID:**	
Street: 7 Winchester Court		**City:** Mauldin	**State or Province:** SC
Zip/Postal Code: 29662	**Country:** US	**Telephone #:** 864-640-5274	**Fax #:**
Report To (Name): Stephanie Hamby		**Please Provide Results via:** ☐ Fax ☐ Email	
email Address: shamby@apex-ehs.com		**Purchase Order Number:**	
Client Project ID: 310 Hydrick St		**EMSL Project ID** *(internal use only)*:	
State or Province Collected: SC		**CT only** ☐ **Commercial/Taxable** ☐ **Residential/Tax Exempt**	

EMSL-Bill to: ☑ Same ☐ Different - *If bill to is different note instructions in comment. Third party billing requires written authorization from third party*

Turnaround Time (TAT) Options Please Check

☐ 3 Hour	☐ 6 Hour	☐ 24 Hour	☐ 32 Hour*	☐ 48 Hour	☐ 72 Hour	☐ 96 Hour	■ 1 Week	☐ 2 Week

**32 Hour TAT available for select tests only, samples must be submitted by 11:30am.*
Please call ahead for large projects and/or turnaround times 6 hours or less.

PLM - Bulk (reporting limit)	TEM – Bulk
■ PLM EPA 600/R-93/116 (<1%)	■ TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
☐ PLM EPA NOB (<1%)	☐ NY ELAP Method 198.4 non-friable - NY
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
☐ NIOSH 9002 (<1%)	☐ TEM Qualitative via Filtration Prep Technique
☐ NY ELAP Method 198.1- friable - NY	☐ TEM Qualitative via Drop Mount Prep Technique
☐ NY ELAP Method 198.6 NOB- non-friable - NY	**Other tests (please specify)**
☐ NY ELAP Method 198.8- Vermiculite Surfacing Material	
☐ OSHA ID-191 Modified	☐
☐ EMSL Standard Addition Method	

■ **Positive Stop – Clearly Identify Homogenous Areas (HA)** **Date Sampled:** 9/30/20

Sampler's Name: Tom Oliver & Stephanie Hamby **Sampler's Signature:**

Sample #	HA #	Sample Location	Material Description
1		Roof	Shingle
2		"	
3		"	
4		Stack of shingles in	Shingle w/ felt
5		front yard "	"
6		"	"

Client Sample # (s): 1 - 30 **Total # of Samples:** 30

Relinquished by (Client): S. Hamby **Date:** 10-1-20 **Time:** 2:45pm

Received by (Lab): [illegible] **Date:** 10/2/20 **Time:** 955AM FK

Comments/Special Instructions:

7959 4220 1160

Page 1 of 3

Controlled Document – COC-01 Asbestos Bulk – R4 – 09/10/2019

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(lab use only)*:

8430

EMSL Analytical, Inc.
10801 Southern Loop Blvd

Pineville, NC 28134
Phone (704) 525-2205
Fax (704) 525-2382

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

Sample #	HA #	Sample Location	Material Description
7		Windows (wood)	Glazing
8		"	"
9		"	"
10		wood windows & doors	casing caulk
11		"	"
12		"	"
13		Ceilings Throughout	Ceiling Texture
14		"	"
15		"	"
16		"	"
17		"	"
18		Ceilings Throughout	Drywall, J.C. & tape
19		"	"
20		"	"
21		"	"
22		"	"
23		Under wood paneling (walls)	Plaster w/ finish
24		throughout	"
25		"	"
26		"	"
27		"	"

***Comments/Special Instructions:**

Page 2 of 3 pages

EMSL ANALYTICAL, INC.
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Asbestos Bulk Building Material Chain of Custody

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

Sample #	HA #	Sample Location	Material Description
28		kitchen & hallway pantry	12x12 adhesive white
29		floors	pattern flooring over
30			brown square pattern floor

*Comments/Special Instructions:

SECTION IV

Photographic Log

Photo 1 – 310 Hydrick Street in Spartanburg, South Carolina 29306

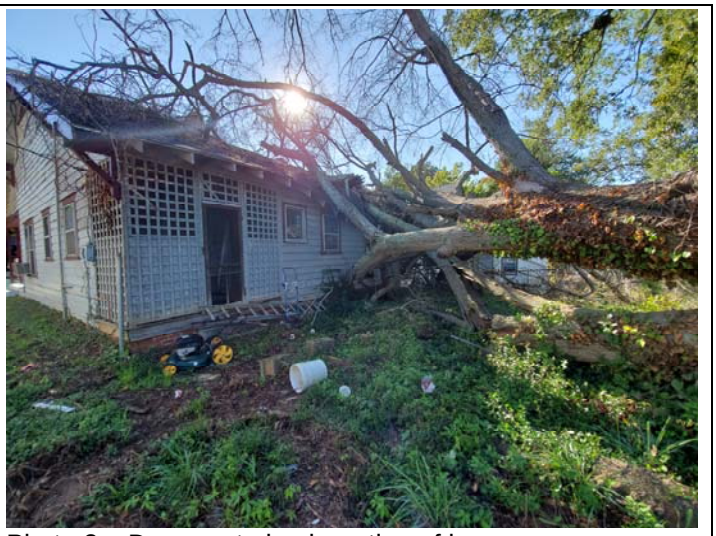

Photo 2 – Damage to back portion of house.

Photo 3 – Shingles with no felt.

Photo 4 – Pallet of shingles with roll of felt paper located in front yard.

Photo 5 – Casing caulk on doors and windows.

Photo 6 – Assumed ACM on chimney.

Photo 7 – Ceiling texture, drywall, joint compound & tape throughout ceilings.

Photo 8 – Plaster with finish under wood paneling on walls throughout.

Photo 9 – Wood floors throughout.

Photo 10 – 12”x12” brown square pattern flooring and associated mastic in kitchen, pantry and hallway is ACM.

Photo 11 – Household debris throughout house.

Photo 12 – Damage to ceiling throughout the house.

SECTION V

SC DHEC Asbestos Inspector License

SCDHEC ISSUED

Asbestos ID Card

STEPHANIE HAMBY

		Expiration Date:
AIRSAMPLER	AS-000632	08/13/21
CONSULTBI	BI-01894	01/15/21