Hazardous Materials Assessment Report
Oakview Apartments
Spartanburg, South Carolina
S&ME Project No. 4226-16-015

Prepared for:
City of Spartanburg
145 West Broad Street
Spartanburg, South Carolina 29301

Assessment Performed by:
Brian Mulholland
Asbestos Inspector
Inspection Date: January 25, 2016

Prepared by:
S&ME, Inc.
301 Zima Park Drive
Spartanburg, South Carolina 29301

February 18, 2016

February 18, 2016

City of Spartanburg
145 West Broad Street
Spartanburg, South Carolina 29301

Attention: Mr. David Cook

Reference: **Hazardous Materials Assessment Report**
Oakview Apartments
Spartanburg, South Carolina
S&ME Project No. 4226-16-015

Dear Mr. Cook:

S&ME, Inc. (S&ME) is pleased to provide the enclosed report detailing the hazardous materials assessment at the referenced site. The purpose of the assessment was to identify, to the extent feasible, potential asbestos, lead-based paint (LBP), lead in water, and mold in representative apartments in the Oakview Apartment complex located on Howard Street in Spartanburg, South Carolina. Our services were performed on January 25, 2016 in general accordance with S&ME Proposal No. 42-1600116, dated January 28, 2016. The following report includes the project background, sampling and analysis procedures, findings and results, and conclusions and recommendations as necessary.

S&ME appreciates this opportunity to provide our services to you. Please call if you have questions concerning this report or any of our services

Sincerely,

S&ME, Inc.

Anna Deal
Industrial Hygienist
adeal@smeinc.com

Sherman Woodson, CIH, CSP
Senior Industrial Hygienist
swoodson@smeinc.com

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Appendices

Executive Summary

A hazardous materials assessment was conducted in representative unoccupied apartment units by S&ME on January 25, 2016 at Oakview Apartments on Howard Street in Spartanburg, South Carolina. It is our understanding that this apartment complex is being considered for purchase. The purpose of the assessment was to determine if hazardous materials are present to help budget for abatement costs.

Asbestos Assessment

Asbestos was not detected in the samples of suspect materials collected.

Lead-Based Paint/Surface Wipes/Water Assessment

The following painted components had lead concentrations meeting or exceeding the SCDHEC disposal limit of 0.7 mg/cm2:

- Brown paint on wood door frames on interior of each unit.

Seven (7) of the ten (10) water samples had lead concentrations less than the laboratory detection limit. The following locations had lead concentrations approaching or exceeding the EPA lead clearance concentrations (40 µg/ft2 for floors and 250 µg/ft2 for window sills) for residential locations:

- Apartment 344 floor (70 µg/ft2),
- Apartment 343 window sill (216 µg/ft2), and
- Apartment 343 floor (59 µg/ft2).

The water samples collected in each of the five units had lead concentrations less than the laboratory detection limits.

Each of the five (5) units sampled had total mold spore concentrations that significantly exceeded the outdoor mold spore concentration on the day of our sampling. Apparent visible mold was also observed and confirmed by swab testing of the kitchen wall in Unit 343 as Chaetomium and Penicillium/Aspergillus.

This summary is for convenience only and should not be relied upon without first reading the full contents of this report, including the appended materials.

1.0 Introduction

S&ME was contracted by the City of Spartanburg to perform a hazardous materials assessment of representative unoccupied apartment units at the Oakview Apartments located on Howard Street in Spartanburg, South Carolina. The units that were accessible and included in this assessment were Units 344, 343, 403, 406, and 107. S&ME performed the assessment on January 25, 2016.

1.1 Asbestos Assessment

The asbestos assessment was conducted to identify asbestos-containing materials (ACMs) that may be disturbed as part of any future renovation or demolition activities. The identification of ACMs will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos. Identification of ACMs also complies with Title 40 Code of the Federal Regulations, part 61, and State regulations 61-86.1 enforced by the South Carolina Department of Health and Environmental Control (SCDHEC), along with Title 29 Code of Federal Regulations, part 1926 enforced by the Occupational Safety and Health Administration (OSHA).

It should be noted that not every building was assessed for asbestos. The five units assessed are thought to be representative of the other buildings. However, a full assessment of each building is required prior to renovation or demolition activities commencing.

The following sections describe the assessment procedures used, results of the suspect ACMs sampled and analyzed, confirmed ACMs identified, and conclusions and recommendations regarding the subject area as related to ACMs.

1.2 Lead-Based Paint/Lead Surface Wipes/Lead in Water Assessment

The purpose of the testing was to assess and identify lead-based paint coatings associated with the structures. The identification of these materials will aid in the compliance of occupational exposure (OSHA) and/or environmental releases of airborne lead dust in accordance with OSHA 29 CFR 1926.62 (Lead in Construction), and provide information to facilitate proper disposal of lead-based paint coated components and debris in accordance with the SCDHEC and the EPA.

The lead-based paint assessment was supplemented with the collection of wipe samples from window sills and floors as well as water samples from interior sinks. These are potential sources of lead ingestion, especially for children 5 years of age are younger.

1.3 Airborne Mold Spore and Surface Mold Testing

Based on the observation of roof leaks and apparent visible mold, S&ME collected air samples in each of the accessible units for mold spore analysis. An outdoor sample was also collected for comparison. The areas of apparent visible mold were swabbed with a sterile swab and examined by direct microscopy for mold growth.

2.0 Site And Project Description

2.1 Purpose

The assessment was performed to identify potential hazards associated with asbestos, lead, and mold and to help determine abatement costs associated with these hazards.

The scope of the asbestos assessment does not completely fulfill the requirements of the United States Environmental Protection Agency (USEPA) National Emissions Standards for Hazardous Air Pollutants (NESHAPS) asbestos regulation, 40 CFR, Part 61, Subpart M which requires an asbestos assessment of buildings scheduled for renovation and/or demolition. Each of the buildings and units will have to be assessed prior to renovation or demolition activity in those units.

2.2 Site Description

The Oakview Apartments consists of 42 buildings with 106 units. S&ME performed the hazardous materials assessment in five (5) unoccupied units that appear to be representative. The units assessed were 344, 343, 403, 406, and 107.

Each unit is in a brick building with floor tile, sheetrock walls, and plaster ceilings with textured finish.

Photos of the units are found in Appendix I.

3.0 Asbestos Assessment

3.1 Sampling and Analysis

The limited assessment was performed by observing and sampling suspect ACMs associated with the interior of the referenced area. The possibility exists that suspect materials were undetected in inaccessible areas such as wall voids. If additional suspect ACMs not identified in this report are discovered during destructive activities, bulk samples must be collected by a SCDHEC licensed inspector and analyzed for asbestos content prior to disturbance or disposal of the suspect materials.

A sampling strategy was developed to provide representative samples in accordance with the SCDHEC and the EPA. Bulk samples of suspect ACMs were collected by an SCDHEC licensed inspector. The bulk samples were then recorded on a chain of custody record and submitted to Southeast Environmental Microbiology Laboratories (SEEML) in Greenville, South Carolina for analysis by Polarized Light Microscopy (PLM). Analytical Environmental Services, Inc. (AES) of Atlanta, Georgia performed the Transmission Electron Microscopy (TEM) analysis for those non-friable organically bound materials reported negative via PLM. Both laboratories are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology.

Polarized Light Microscopy (PLM)

The suspect materials were analyzed by trained microscopists using PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I

(1-1-87 edition), Part 763, Subpart F-APPENDIX A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present.

Transmission Electron Microscopy (TEM)

Suspect non-friable organically bound materials, exhibiting negative results via PLM analysis, were analyzed by trained microscopists by TEM using EPA 600 Method in accordance with ASTM E2356. Typical examples of this material include, but are not limited to floor tile, mastic adhesives, sheet flooring (linoleum), roofing materials, glazing, caulking, duct mastic and cove base mastic.

3.2 Assessment

The sampled materials were assessed based on condition (good, fair or poor) and potential for disturbance due to the scheduled renovation/demolition. The sampled materials were also categorized based on the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) regulation categories. Friable ACM is classified as an ACM that can be crumbled to a powder by moderate hand pressure. Non-friable ACM is classified as either Category I Non-friable ACM or Category II Non-friable ACM. Category I and Category II Non-friable ACM are distinguished from each other by their fiber release potential when damaged. Generally, Category I Non-friable ACM, which by definition includes intact ACM roofing materials, gaskets, packing, resilient floor coverings and floor mastics, is less likely to become friable and release fibers in a damaged state. Category II Non-friable ACM include all other non-friable ACM excluding Category I that have a high probability of being rendered friable during removal activities or demolition. All Friable ACM, Category I Non-friable ACM that has become friable, Category I Non-friable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or Category II Non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations are considered to be a Regulated Asbestos-Containing Material (RACM).

3.3 Findings and Results

The EPA and the SCDHEC define materials as asbestos-containing when an asbestos content >1% is detected in a representative sample.

Asbestos was not identified in the samples collected.

Table I, located in Appendix II, summarizes the sample number, location, type of material tested, approximate quantity of the material sampled, condition of the material, and corresponding result for each sample. The laboratory reports are attached in Appendix IV.

4.0 Lead-Based Paint/Surface Wipes/Lead In Water Assessment

4.1 Procedure

On January 25, S&ME performed an assessment of painted building components for lead. The lead-based paint (LBP) assessment was performed using trained personnel. Representative paints/glazes on various interior and exterior surfaces of the on-site structure were tested in situ using a RMD Model LPA-1 XRF Lead Analyzer. Painted surfaces were selected based on the color of the topcoat, the underlying layers, and/or the substrate on which it was painted. The lead paint assessment was confirmed with surface wipe samples of lead dust on window sills and floors. In addition, water samples were collected from the potable drinking water supply.

S&ME tested 56 locations for paint, collected 10 wipe samples (plus 1 blank sample), and collected 5 drinking water samples.

OSHA does not recognize a threshold level of lead for definition purposes, only the airborne concentration of lead a worker is exposed. The current OSHA regulations recognize an airborne action level of 30 micrograms per cubic meter (µg/m3) during an eight-hour day and a permissible exposure limit of 50 µg/m3.

4.2 Findings

The following painted components had lead concentrations meeting or exceeding the SCDHEC disposal limit of 0.7 mg/cm2:

- Brown paint on interior wood door frames in each unit tested.

Seven (7) of the ten (10) water samples had lead concentrations less than the laboratory detection limit. The following locations had lead concentrations approaching or exceeding the EPA lead clearance concentrations (40 µg/ft2 for floors and 250 µg/ft2 for window sills) for residential locations:

- Apartment 344 floor (70 µg/ft2),
- Apartment 343 window sill (216 µg/ft2), and
- Apartment 343 floor (59 µg/ft2).

The water samples collected in each of the five units had lead concentrations less than the laboratory detection limits.

A summary of XRF readings are provided in Table 2 located in Appendix III, and should be reviewed in full. The surface wipe and water laboratory reports are found in Appendix V.

5.0 Mold Sampling

Each of the five (5) units sampled had total mold spore concentrations (ranging from 6.090 to 230,000 spores/m3) that significantly exceeded the outdoor mold spore concentration (1,130 spores/m3) on the day of our sampling. Apparent visible mold was also observed and confirmed by swab testing of the kitchen wall in Unit 343 as Chaetomium and Penicillium/Aspergillus.

The laboratory reports for the mold sampling are found in Appendix VI.

6.0 Conclusions And Recommendations

Asbestos was not identified in the units that were available for assessment.

Lead-based paint was identified on brown wood door frames in each of the units. Three (3) of the ten (10) samples had lead dust concentrations that are considered by EPA/HUD to be a potential hazard for young children. S&ME recommends that these types of surfaces with potential lead dust be cleaned prior to leasing.

Mold spore concentrations were significantly greater than the outdoor mold spore concentration in each of the five units. In addition, visible mold was observed in these units. The units that were tested are unoccupied. If there are occupied units with similar conditions, S&ME recommends that roof leaks be repaired and mold remediation be performed in those units.

7.0 Assumptions And Limitations

This report is provided for the sole use of the Client. Use of this report by any other parties will be at such party's sole risk, and S&ME disclaims liability for any such use or reliance by third parties. The results presented in this report are indicative of conditions only during the time of the sampling period and of the specific areas referenced. Under no circumstances is this report to be used as a bidding document, or as a project design or specification.

S&ME performed the services in accordance with generally accepted practices of reputable environmental consultants undertaking similar studies at the same time and in the same geographical area. S&ME has endeavored to meet this standard of care. No other warranty, expressed or implied, is intended or made with respect to this report or S&ME's services. Users of this report should consider the scope and limitations related to these services when developing opinions as to risks associated with the site.

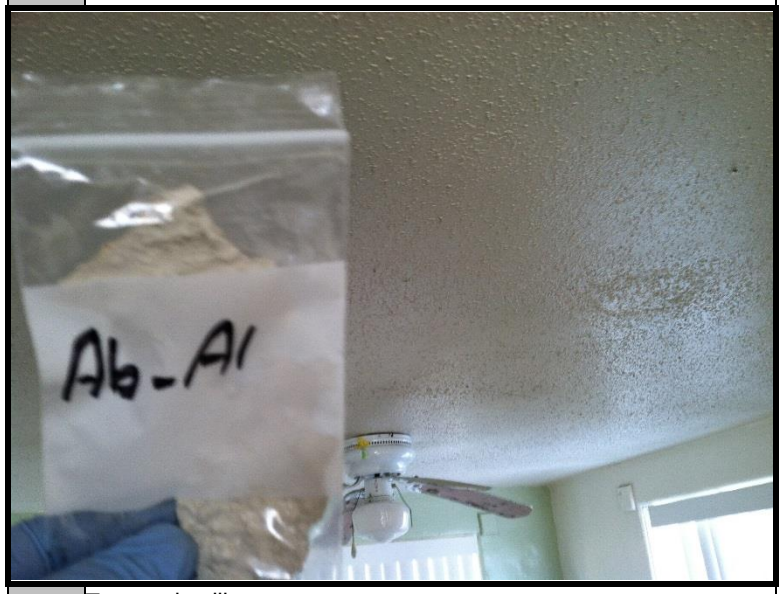
The possibility exists that suspect materials were undetected in inaccessible or concealed areas such as under carpeting or multiple flooring layers, and inside pipe chases or wall voids. If additional suspect materials are discovered during the planned destructive activities, bulk samples must be collected by an asbestos inspector and analyzed for asbestos content.

Appendices

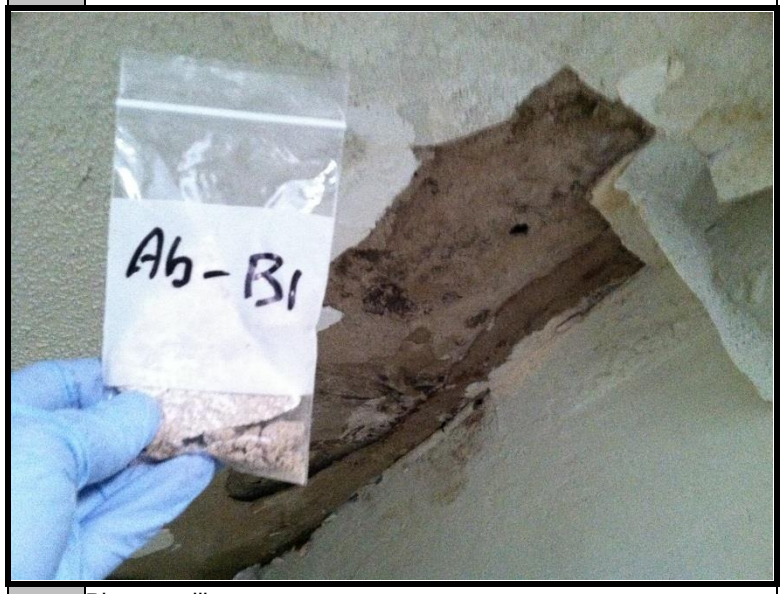
Appendix I – Photographs of Site Structure

1	General Building view

2	General interior view



3	Textured ceiling Sample A – no asbestos

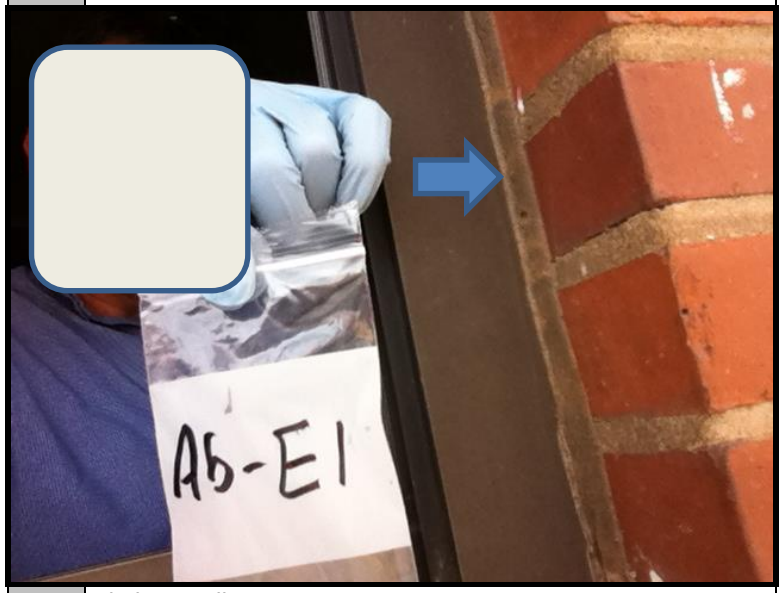


4	Plaster ceiling Sample B – no asbestos

S&ME	**Oakview Apartments** **Spartanburg, South Carolina**	S&ME Project # 4226-16-015
		Taken by: B. Mulholland / Date Taken: 1/25/16

5	Drywall and joint compound Sample C – no asbestos

6	Floor tile and black mastic Sample D – no asbestos



7	Window caulk Sample E – no asbestos

8	General view of floor tile

S&ME	**Oakview Apartments** **Spartanburg, South Carolina**	S&ME Project # 4226-16-015	
		Taken by: B. Mulholland	Date Taken: 1/25/16

9	Mold located on unit 343 – drywall wall Sample S1

10	General view of unit 343 damaged 2nd floor ceiling

11	General view of 1st floor kitchen area

	No Photo
12	

S&ME	**Oakview Apartments** **Spartanburg, South Carolina**	S&ME Project # 4226-16-015	
		Taken by: B. Mulholland	Date Taken: 1/25/16

Appendix II – Table 1 – Asbestos Results Summary

TABLE 1: ASBESTOS RESULTS SUMMARY

Oakview Apartments
Howard Street
Spartanburg, South Carolina
S&ME Project No. 4226-16-015

SAMPLE NUMBER	SAMPLE DESCRIPTION AND LOCATION	ASBESTOS CONTENT	CLASSIFICATION	FRIABLE/ NON-FRIABLE	CURRENT CONDITION	POTENTIAL FOR DISTURBANCE	ESTIMATED QUANTITY
AB-A1	Textured Ceiling	ND	Surfacing	Friable	Damaged	Moderate	780 SF/Unit
AB-A2		ND					
AB-A3		ND					
AB-A4		ND					
AB-A5		ND					
AB-B1	Plaster Ceilings	ND	Surfacing	Friable	Damaged	Moderate	1,320 SF/Unit
AB-B2		ND					
AB-B3		ND					
AB-B4		ND					
AB-B5		ND					

TABLE 1: ASBESTOS RESULTS SUMMARY (CONTINUED)

AB-C1	Sheetrock and Joint Compound - Walls	ND	Miscellaneous/ Surfacing	Friable	Damaged	Moderate	1,100 SF/Unit
AB-C2		ND					
AB-C3		ND					
AB-C4		ND					
AB-C5		ND					
AB-D1	Floor Tile and Mastic	ND	Miscellaneous	Non-Friable	Good	Low	780 SF/Unit
AB-D2		ND					
AB-D3		ND					
AB-D4		ND					
AB-D5		ND					
AB-E1	Window Caulk	ND	Miscellaneous	Non-Friable	Good	Low	20 LF

Notes:

ND = None detected.
NA = Not analyzed – positive stop method.
PLM = Polarized Light Microscopy, TEM = Transmission Electron Microscopy.
SF = Square feet, LF = Linear feet.
TSI = Thermal system insulation.

Quantities listed are for inspection purposes only. Actual quantities should be verified for other purposes and by demolition/abatement contractor.

Appendix III – Table 2 – Summary of Paint Results

Table 2
Summary of Paint Results

Oakview Apartments
Spartanburg, South Carolina
S&ME Project No. 4226-16-015

LBP Number	Location	Substrate	Structure	Feature	Color	Result	Lead (mg/cm^2)
Interior							
	Calibrate						1.1
1	Apt. 107 Living room	Wood	Door	Front	Brown		<0.1
2		**Wood**	**Door**	**Frame**	**Brown**		**1.1**
3		Plaster	Wall		White		0.2
4		Metal	Window		Brown		<0.1
5		Wood	Window	Sill	White		<0.1
6		Wood	Baseboard		White		0.3
7	Apt. 107 Kitchen	Wood	HVAC	Door	White		<0.1
8		Wood	Door	Rear	White		<0.1
9	Apt. 107 Hall	**Wood**	**Door**	**Frame**	**Brown**		**1.6**
10		Concrete	Stairs	Tread	Brown		<0.1
11		Wood	Handrail		Brown		0.1
12		Plaster	Ceiling		White		0.2
13	Apt. 107 Rear bedroom	Plaster	Wall	dnd floor	White		<0.1
14		Wood	Door		White		<0.1
15		Wood	Door	Frame	White		<0.1
16	Apt. 107 Front bedroom	Plaster	Wall		White		<0.1
17		Wood	Window	Sill	White		<0.1
18		Vinyl	Window	Blind	White		<0.1
19		Plaster	Ceiling	dnd floor	White		0.3
20	Apt. 344 Living room	Wood	Door	Front	Brown		<0.1
21		**Wood**	**Door**	**Frame**	**White**		**0.7**
22		Plaster	Wall		White		<0.1
23		Wood	WIndow	Sill	White		<0.1
24	Apt. 344 Dining room	Plaster	Wall		Green		0.1
25		Metal	Window	Frame	Brown		<0.1
26	Apt. 344 Kitchen	Wood	Door	Rear	White		0.1
27	Apt. 344 Kitchen rear	**Wood**	**Door**	**Frame**	**Brown**		**2.8**
28	Apt. 344 Hall	Plaster	Ceiling		White		0.3
29	Apt. 344 Bathroom	Plaster	Wall		White		<0.1
30		Wood	Door	Bathroom	White		0.2
31	Apt. 343 Living room	Wood	Door	Front	Brown		<0.1
32		**Wood**	**Door**	**Frame**	**White**		**1.2**
33	Apt. 343 Kitchen	Wood	Baseboard		Brown		<0.1
34		Wood	Door	Frame	White		<0.1
35	Apt. 343 Hall	Concrete	Stairs	Tread	Brown		<0.1
36	Apt. 343 Front bedroom	Plaster	Wall		White		0.2
37	Apt. 403 Living room	Plaster	Ceiling		White		0.4
38	Apt. 403 Kitchen	Plaster	Wall		White		<0.1
39	Apt. 403 Living room	Wood	Door	Closet	White		<0.1
40		Wood	Door	Frame	White		<0.1
41	Apt. 403 Front bedroom	Metal	Window	Frame	Brown		<0.1
42		Wood	Window	Sill	White		<0.1
43		Plaster	Wall		White		0.3

Table 2
Summary of Paint Results

Oakview Apartments
Spartanburg, South Carolina
S&ME Project No. 4226-16-015

LBP Number	Location	Substrate	Structure	Feature	Color	Result	Lead (mg/cm^2)
44	Apt. 406 Dining room	Plaster	Wall		Green		0.5
45		Wood	Window	Sill	White		<0.1
46	Apt. 406 Kitchen	Wood	Kitchen	Cabinet	Stain		<0.1
47	Apt. 406 Living room	Wood	Door	Front	Brown		<0.1
48		**Wood**	**Door**	**Frame**	**Brown**		**1.1**
49	Apt. 406 Rear bedroom	Plaster	Wall		White		<0.1
50		Wood	Door	Closet	White		<0.1
51		Wood	Door	Frame	White		0.3
Exterior							
52	Exterior	Metal	Storm door		Brown		<0.1
53		Metal	Exterior window		Brown		<0.1
54		Concrete	Window	Sill	Tan		<0.1
55		Concrete	Foundation		White		<0.1
56		Wood	Door	Trim	Tan		<0.1

Appendix IV – Asbestos Laboratory Report

SEEML Reference Number:
160126001-A

Southeast Environmental Microbiology Laboratories
506-A Laurens Road
Greenville, South Carolina 29607
Phone: (864) 233-3770
Fax: (864) 233-6589

The information and data for **S&ME** has been checked for thoroughness and accuracy. The following report is contained within this document:

☒ Bulk asbestos fiber analysis: EPA 600/M4-82-020 Interim Method for the Determination of Asbestos in Bulk Insulation

☒ Bulk asbestos fiber analysis: EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials

Lab Manager Review: *Andrea Berrios* Date:01/26/16

Thank you for choosing Southeast Microbiology Laboratories (SEEML). We strive to provide superior quality testing, analytical data and customer service. SEEML is accredited through the National Institute of Standards and Technology (NIST) National Voluntary Accreditation Program (NVLAP) for bulk asbestos analysis (NVLAP # 201031-0).

Guidelines for Interpretation:
A material is considered regulated asbestos containing material (ACM) where the asbestos content is determined to be one percent or greater. Several organizations, including the American Conference of Government Industrial Hygienists (ACGIH); the American Industrial Hygiene Association (AIHA); the Indoor Air Quality Association (IAQA); the United States Environmental Protection Agency (USEPA); the Centers for Disease Control (CDC) as well as the California Department of Health Services (CADHS) have published guidelines for assessment and interpretation of analytical data indicating a tested material is ACM.

Interpretation of the data and information within this document is left to the company, consultant, and/or persons who conducted the fieldwork.

Southeast Environmental Microbiology Laboratories - Asbestos Division
506 A- Laurens Rd, Greenville, SC 29607
Phone: 864-233-3770, Fax: 864-233-3779 , www.seeml.com

PLM Asbestos Bulk Sample Summary

Client:	Sherman Woodson S&ME 281 Fairforest Way Greenville, SC 29607	Date Sampled:	
		Date Received:	01/26/16
		Date Analyzed:	01/26/16
		Date Reported:	01/26/16
		Project Name:	
Analyzed by:	Andrea Berrios	Project Number:	4226-16-015
Methodology:	EPA/600/R-93/116 Without Gravimetry	SEEML Ref#:	160126001-A
Regular/Split Layers Analyzed:	19/13		

Lab No.: / Client No.:	% Asbestos Type	% Fibrous Non-Asbestos Material Type	% Non-Fibrous Material	Description/Location
001A / AB-A1	**None Detected**	None Detected	100%	Textured Ceiling
002A / AB-B1	**None Detected**	None Detected	100%	Skim and Base Coat **Skim Coat**
002B / AB-B1	**None Detected**	2% Cellulose	98%	Skim and Base Coat **Base Coat**
003A / AB-C1	**None Detected**	15% Cellulose	85%	Drywall and Joint Compound **Drywall**
003B / AB-C-1	**None Detected**	2% Cellulose	98%	Drywall and Joint Compound **Joint Compound**
004A / AB-D1	**None Detected**	None Detected	100%	Floor Tile / Mastic **Floor Tile**
004B / AB-D1	**None Detected**	8% Cellulose	92%	Floor Tile / Mastic **Mastic**
005A / AB-A2	**None Detected**	2% Cellulose	98%	Textured Ceiling
006A / AB-B2	**None Detected**	None Detected	100%	Skim and Base Coat **Skim Coat**

Approved by: *Andrea Berrios*

Approved Signatory: Andrea Berrios

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected the minimum detection and reporting limit is less than 1% unless point counting is preformed. Floor tile samples may contain large amounts of interference material and it is recommmended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification

SEEML NVLAP Lab ID:201031-0

Southeast Environmental Microbiology Laboratories - Asbestos Division
506 A- Laurens Rd, Greenville, SC 29607
Phone: 864-233-3770, Fax: 864-233-3779 , www.seeml.com

PLM Asbestos Bulk Sample Summary

Client:	Sherman Woodson S&ME 281 Fairforest Way Greenville, SC 29607	Date Sampled:	
		Date Received:	01/26/16
		Date Analyzed:	01/26/16
		Date Reported:	01/26/16
		Project Name:	
Analyzed by:	Andrea Berrios	Project Number:	4226-16-015
Methodology:	EPA/600/R-93/116 Without Gravimetry	SEEML Ref#:	160126001-A
Regular/Split Layers Analyzed:	19/13		

Lab No.: / Client No.:	% Asbestos Type	% Fibrous Non-Asbestos Material Type	% Non-Fibrous Material	Description / Location
006B / AB-B2	**None Detected**	2% Cellulose	98%	Skim and Base Coat **Base Coat**
007A / AB-C-2	**None Detected**	18% Cellulose	82%	Drywall and Joint Compound **Drywall**
007B / AB-C-2	**None Detected**	None Detected	100%	Drywall and Joint Compound **Joint Compound**
008A / AB-D-2	**None Detected**	2% Cellulose	98%	Floor Tile / Mastic **Floor Tile**
008B / AB-D2	**None Detected**	5% Cellulose	95%	Floor Tile / Mastic **Mastic**
009A / AB-A3	**None Detected**	2% Cellulose	98%	Textured Ceiling
010A / AB-B3	**None Detected**	None Detected	100%	Skim and Base Coat **Skim Coat**
010B / AB-B3	**None Detected**	3% Cellulose	97%	Skim and Base Coat **Base Coat**
011A / AB-C-3	**None Detected**	18% Cellulose	82%	Drywall and Joint Compound **Drywall**

Approved by: *Andrea Berrios*

Approved Signatory: Andrea Berrios

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected the minimum detection and reporting limit is less than 1% unless point counting is preformed. Floor tile samples may contain large amounts of interference material and it is recommmended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification

SEEML NVLAP Lab ID:201031-0

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506 A- Laurens Rd, Greenville, SC 29607
Phone: 864-233-3770, Fax: 864-233-3779 , www.seeml.com

PLM Asbestos Bulk Sample Summary

Client:	Sherman Woodson S&ME 281 Fairforest Way Greenville, SC 29607	Date Sampled:	
		Date Received:	01/26/16
		Date Analyzed:	01/26/16
		Date Reported:	01/26/16
		Project Name:	
Analyzed by:	Andrea Berrios	Project Number:	4226-16-015
Methodology:	EPA/600/R-93/116 Without Gravimetry	SEEML Ref#:	160126001-A
Regular/Split Layers Analyzed:	19/13		

Lab No.: / Client No.:	% Asbestos Type	% Fibrous Non-Asbestos Material Type	% Non-Fibrous Material	Description / Location
011B / AB-C3	**None Detected**	None Detected	100%	Drywall and Joint Compound **Joint Compound**
012A / AB-D3	**None Detected**	2% Cellulose	98%	Floor Tile / Mastic **Floor Tile**
012B / AB-D3	**None Detected**	8% Cellulose	92%	Floor Tile / Mastic **Mastic**
013A / AB-A4	**None Detected**	None Detected	100%	Textured Ceiling
014A / AB-B4	**None Detected**	2% Cellulose	98%	Skim and Base Coat **Skim Coat**
014B / AB-B4	**None Detected**	3% Cellulose	97%	Skim and Base Coat **Base Coat**
015A / AB-C4	**None Detected**	15% Cellulose	85%	Drywall and Joint Compound **Drywall**
015B / AB-C4	**None Detected**	None Detected	100%	Drywall and Joint Compound **Joint Compound**
016A / AB-D4	**None Detected**	None Detected	100%	Floor Tile / Mastic **Floor Tile**

Approved by: *Andrea Berrios*

Approved Signatory: Andrea Berrios

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected the minimum detection and reporting limit is less than 1% unless point counting is preformed. Floor tile samples may contain large amounts of interference material and it is recommmended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification

SEEML NVLAP Lab ID:201031-0

Southeast Environmental Microbiology Laboratories - Asbestos Division
506 A- Laurens Rd, Greenville, SC 29607
Phone: 864-233-3770, Fax: 864-233-3779 , www.seeml.com

PLM Asbestos Bulk Sample Summary

Client:	Sherman Woodson S&ME 281 Fairforest Way Greenville, SC 29607	Date Sampled:	
		Date Received:	01/26/16
		Date Analyzed:	01/26/16
		Date Reported:	01/26/16
		Project Name:	
Analyzed by:	Andrea Berrios	Project Number:	4226-16-015
Methodology:	EPA/600/R-93/116 Without Gravimetry	SEEML Ref#:	160126001-A
Regular/Split Layers Analyzed:	19/13		

Lab No.: / Client No.:	% Asbestos Type	% Fibrous Non-Asbestos Material Type	% Non-Fibrous Material	Description/Location
016B / AB-D4	**None Detected**	5% Cellulose	95%	Floor Tile / Mastic **Mastic**
017A / AB-A5	**None Detected**	2% Cellulose	98%	Texture Ceiling
018A / AB-B5	**None Detected**	None Detceted	100%	Skim and Base Coat **Skim Coat**
018B / AB-B5	**None Detected**	2% Cellulose	98%	Skim and Base Coat **Base Coat**
019A / AB-D5	**TEM**	**SAMPLE**	**SUBCONTRACTED**	Floor Tile / Mastic **Floor Tile**
019B / AB-D5	**TEM**	**SAMPLE**	**SUBCONTRACTED**	Floor Tile / Mastic **Mastic**
020A / AB-E1	**None Detected**	3% Cellulose	97%	Window Caulking- **TEM SAMPLE SUBCONTRACTED**

Approved by: *Andrea Berrios*

Approved Signatory: Andrea Berrios

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected the minimum detection and reporting limit is less than 1% unless point counting is preformed. Floor tile samples may contain large amounts of interference material and it is recommmended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification

SEEML NVLAP Lab ID:201031-0

SEEML Asbestos Chain-of-Custody Form

506-A Laurens Rd, Greenville, SC 29607
Phone :(864)-233-3770, *Fax* :(864)-233-6589, www.seeml.com
NVLAP Lab ID: 201031-0

160173

 S20304

SEEML Ref #: **160126001-A-TEM**		Lab ID:	
Company:	SEEML	Date Sampled:	1/25/2016
Project Manager:	Andrea Berrios	Project Name:	
Address:	506 A Laurens Rd	Project Location:	
City, State, Zip:	Greenville, SC 29607	Project No:	4226-16-015
Phone:	864-233-3770	Analysis Requested/TAT (Circle One):	
Email Address:	andrea@seeml.com	PLM TAT	*Same Day Next Day 2 Day 3 Day 4 Day 5 Day
		TEM TAT	**Next Day 2 Day 3 Day 4 Day 5 Day

Sample ID	Description/ Location	Analysis Type	Comments
AB-D5 (A)	Floor Tile	TEM	
AB-D5 (B)	Mastic	TEM	
AB-E1	Window Caulking	TEM	
			Need results by Tuesday
			Feb. 2nd, 2016.

Relinquished By:	Time/Date	Received By:	Time/Date
Andrea Berrios	16:43 1/26/16		1/27/16 10:45
Relinquished By:	Time/Date	Received By:	Time/Date

Positive Stop Requested : ☐

Analysis Types:	**TEM		PLM	
	Air Cassette	Bulk	Point Count	Bulk

*Same Day TAT is only offered on Bulk PLM analysis.

**TEM analysis is subcontracted; the requested TAT starts after PLM results have been submitted by SEEML, unless otherwise requested.

Form 2.0 Rev. 3 10/07/14

Date: 1/27/2016 AES Project ID: S20304

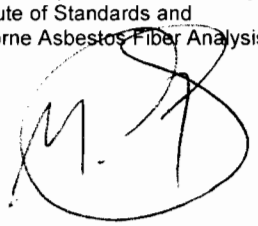
ANALYTICAL ENVIRONMENTAL SERVICES, INC.
Transmission Electron Microscopy
Semi-Quantitative Analysis Summary Report

Company Name: SEEML
Project Name:
Attention:

TEM ID	Client Sample ID	Location	SemiQuant Results (in Weight %)*				
			Ch	Am	Cr	Oth	Total
24904	AB-D5 (A)	FLOOR TILE	NAD	NAD	NAD	NAD	NAD
24905	AB-D5 (B)	MASTIC	NAD	NAD	NAD	NAD	NAD
24906	AB-E1	WINDOW CAULKING	NAD	NAD	NAD	NAD	NAD

These test results apply only to those samples actually tested, as submitted by the client.These samples have been analyzed using a Phillips 400T transmission electron microscope equipped with a Tracor Northern energy dispersive X-ray spectrometer. The semi-quantitative method used for this analysis sometimes is referred to as drop mount or Modified Chatfield and is developed by AES TEM laboratory. This method is similar to EPA 60/R93/116 Section 2.5.5.1 "AEM Specimen Preparation for Semi-Quantitative Evaluation of Bulk Samples". A copy of the method used will be provided upon request. It is certified by the signature below that Analytical Environmental Services, Inc. is accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program, Lab No. 102082-0 for Airborne Asbestos Fiber Analysis only.

Mort Soltani, TEM Analyst:



Appendix V – Lead Wipe and Water Reports

Rogers & Callcott ENVIRONMENTAL

Laboratory Services

Laboratory Report

Client	S and ME Inc. - Greenville Brian Mulholland 281 Fairforest Way Greenville, SC 29607	**Project:** **Work Order:** **Received:**	Drinking Water 6011018 01/25/2016 16:50

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on January 25, 2016. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Melissa Riddle, your Project Manager, at melissa.riddle@rogersandcallcott.com or (864)-232-1556 if you have any questions about this report.

Report Approved By:

Melissa Riddle
Project Manager

Rogers & Callcott ENVIRONMENTAL

South Carolina Greenville Laboratory Identification 23105
South Carolina Columbia Laboratory Identification 40572
North Carolina Laboratory Certification Number 27
North Carolina Drinking Water Lab Number 45710
NELAP Utah Certificate Number SC000042014-1
Georgia Drinking Water Lab ID 880

Certificate of Analysis

Client S and ME Inc. - Greenville
Brian Mulholland
281 Fairforest Way
Greenville, SC 29607

Project: Drinking Water
Work Order: 6011018
Received: 01/25/2016 16:50

Sample Number	Sample Description	Matrix	Sampled	Type
6011018-01	Apt 344 Pb1	Drinking Water	01/25/16 11:12	Grab
6011018-02	Apt 343 Pb2	Drinking Water	01/25/16 11:54	Grab
6011018-03	Apt 403 Pb3	Drinking Water	01/25/16 12:27	Grab
6011018-04	Apt 406 Pb4	Drinking Water	01/25/16 12:47	Grab
6011018-05	Apt 107 Pb5	Drinking Water	01/25/16 13:19	Grab

S and ME Inc. - Greenville		Project:	Drinking Water
281 Fairforest Way		Work Order:	6011018
Greenville, SC 29607		Reported:	01/29/16 12:31

Sample Data

Sample Number 6011018-01
Sample Description Apt 344 Pb1 collected on 01/25/16 11:12

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.002	mg/L	1.00	01/27/16 21:15	EPA 200.8		DER	B6A1038

Sample Number 6011018-02
Sample Description Apt 343 Pb2 collected on 01/25/16 11:54

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.002	mg/L	1.00	01/27/16 21:48	EPA 200.8		DER	B6A1038

Sample Number 6011018-03
Sample Description Apt 403 Pb3 collected on 01/25/16 12:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.002	mg/L	1.00	01/27/16 21:52	EPA 200.8		DER	B6A1038

Sample Number 6011018-04
Sample Description Apt 406 Pb4 collected on 01/25/16 12:47

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.002	mg/L	1.00	01/27/16 21:56	EPA 200.8		DER	B6A1038

Sample Number 6011018-05
Sample Description Apt 107 Pb5 collected on 01/25/16 13:19

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.002	mg/L	1.00	01/27/16 22:00	EPA 200.8		DER	B6A1038

Rogers & Callcott ENVIRONMENTAL

S and ME Inc. - Greenville		Project:	Drinking Water
281 Fairforest Way		Work Order:	6011018
Greenville, SC 29607		Reported:	01/29/16 12:31

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 200.8 Metal Digestion				
EPA 200.8	B6A1038	6011018-01	01/27/2016 08:29	DER
EPA 200.8	B6A1038	6011018-02	01/27/2016 08:29	DER
EPA 200.8	B6A1038	6011018-03	01/27/2016 08:29	DER
EPA 200.8	B6A1038	6011018-04	01/27/2016 08:29	DER
EPA 200.8	B6A1038	6011018-05	01/27/2016 08:29	DER

Rogers & Callcott ENVIRONMENTAL

S and ME Inc. - Greenville		Project:	Drinking Water
281 Fairforest Way		Work Order:	6011018
Greenville, SC 29607		Reported:	01/29/16 12:31

Data Qualifiers and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not reported

Rogers & Callcott ENVIRONMENTAL

CHAIN OF CUSTODY RECORD

WORK ORDER 1601018

Mailing Address: PO Box 5655, Greenville, SC 29606, Phone (864) 232-1556

Shipping Address: 426 Fairforest Way, Greenville, SC 29607, Fax (864) 232-6140

215B Stoneridge Drive, Columbia, SC 29210, Phone (803) 509-8999

Client Name S&ME

Address 218 Fairforest Way
Greenville SC 29607

Report To: Brian Mullholland

Email Address bmullholland@smeinc.com

Telephone # (864) 297-9964

PO # 4226-16-015 Project # 4226-16-015

R & C WORK ORDER	YR___ DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) → Pb
-01	1/25/16	1112	Apt. 344 - Pb1	1	1
-02	1/25/16	1154	Apt. 343 - Pb2	1	1
-03	1/25/16	1227	Apt. 403 - Pb3	1	1
-04	1/25/16	1247	Apt. 406 - Pb4	1	1
-05	1/25/16	1319	Apt. 107 - Pb5	1	1

N								Filtered (Yes/No)
N								Cooled (Yes/No)
P								Container Type (Plastic/Glass)
1L								Container Volume (mL)
G								Sample Type (Grab/Composite)
dw								Sample Source (WW, GW, DW, SW, S, Other)
B								

Preservation Code(s)

A – None E – HCl I – Zn Acetate
B – HNO_3 F – $Na_2S_2O_3$ J – H_3PO_4
C – H_2SO_4 G – Boric Acid K - MCAA
D – NaOH H – Ascorbic Acid L - _____

COMMENTS

~~RUSH~~ HRU 1.26.16

SAMPLER – RELINQUISHED BY: 1. Bmullholland	DATE/TIME: 1/25/16 ~~16:30~~	RECEIVED BY: 2.	DATE/TIME: 1-25-16 1650
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 4.	DATE/TIME:
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 6.	DATE/TIME:
RELINQUISHED BY: 7.	DATE/TIME:	RECEIVED BY: 8.	DATE/TIME:

Composite Start Date: _____

Composite Start Time: _____

Time or Flow (Circle one) Initials: _____

Temperature of blank or representative sample
At time of collection _____ °C
At time of lab receipt 14.8 °C

Possible Hazards associated with samples: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown ☐ Other _____

Form Revised July, 2014 Page 1 of 1

FOR LAB USE ONLY

Rogers & Callcott ENVIRONMENTAL

Sample Receipt Verification

Client: S+ME Date Received: 1.25.16 Work Order: 6011018

Carrier Name: (Client) FedEx UPS US Mail Courier Field Services Other: _____

Tracking Number: _____

Receipt Criteria	Yes	No	NA	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC; Temp measured with IR thermometer - SN: 97050067			X	Ice Cold Packs Dry Ice None
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab.	X			Bottles pre pres
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection?			X	

If in-house preservation used – record Lot #			
HCL		H_3PO_4	
H_2SO_4		NaOH	
HNO_3	P505655	Other	

Comments:

Were non-conformance issues noted at sample receipt? Yes or (No)

Non-Conformance issue other than noted above:

Revised July 2014

Completed by: KRU

Rogers & Callcott ENVIRONMENTAL

Laboratory Services

Laboratory Report

Client	S and ME Inc. - Greenville Brian Mulholland 281 Fairforest Way Greenville, SC 29607	**Work Order:** **Received:**	6011019 01/25/2016 16:50

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on January 25, 2016. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Melissa Riddle, your Project Manager, at melissa.riddle@rogersandcallcott.com or (864)-232-1556 if you have any questions about this report.

Report Approved By:

Melissa Riddle
Project Manager

Rogers & Callcott ENVIRONMENTAL

South Carolina Greenville Laboratory Identification 23105
South Carolina Columbia Laboratory Identification 40572
North Carolina Laboratory Certification Number 27
North Carolina Drinking Water Lab Number 45710
NELAP Utah Certificate Number SC000042014-1
Georgia Drinking Water Lab ID 880

Certificate of Analysis

Client S and ME Inc. - Greenville
Brian Mulholland
281 Fairforest Way
Greenville, SC 29607

Work Order: 6011019
Received: 01/25/2016 16:50

Sample Number	Sample Description	Matrix	Sampled	Type
6011019-01	Apt 344 Window Sill 344-W1	Wipe	01/25/16 11:12	Grab
6011019-02	Apt 344 Floor 344-W2	Wipe	01/25/16 11:54	Grab
6011019-03	Apt 343 Window Sill 343-W3	Wipe	01/25/16 12:27	Grab
6011019-04	Apt 343 Floor 343-W4	Wipe	01/25/16 12:47	Grab
6011019-05	Apt 403 Window Sill 403-W5	Wipe	01/25/16 12:27	Grab
6011019-06	Apt 403 Floor 403-W6	Wipe	01/25/16 12:27	Grab
6011019-07	Apt 406 Window Sill 406-W7	Wipe	01/25/16 12:47	Grab
6011019-08	Apt 406 Floor 406-W8	Wipe	01/25/16 12:47	Grab
6011019-09	Apt 107 Window Sill 107-W9	Wipe	01/25/16 13:19	Grab
6011019-10	Apt 107 Floor 107-W10	Wipe	01/25/16 13:19	Grab
6011019-11	Blank W11	Wipe	01/25/16 13:40	Grab

S and ME Inc. - Greenville
281 Fairforest Way
Greenville, SC 29607

Work Order: 6011019
Reported: 02/04/16 11:39

Sample Data

Sample Number 6011019-01
Sample Description Apt 344 Window Sill 344-W1 collected on 01/25/16 11:12

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:17	EPA 6010C		MEC	B6A1061

Sample Number 6011019-02
Sample Description Apt 344 Floor 344-W2 collected on 01/25/16 11:54

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	**0.070**	0.050	mg/Wipe	1.00	01/29/16 13:23	EPA 6010C		MEC	B6A1061

Sample Number 6011019-03
Sample Description Apt 343 Window Sill 343-W3 collected on 01/25/16 12:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	**0.072**	0.050	mg/Wipe	1.00	01/29/16 13:29	EPA 6010C		MEC	B6A1061

Sample Number 6011019-04
Sample Description Apt 343 Floor 343-W4 collected on 01/25/16 12:47

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	**0.059**	0.050	mg/Wipe	1.00	01/29/16 13:32	EPA 6010C		MEC	B6A1061

Sample Number 6011019-05
Sample Description Apt 403 Window Sill 403-W5 collected on 01/25/16 12:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:34	EPA 6010C		MEC	B6A1061

S and ME Inc. - Greenville
281 Fairforest Way
Greenville, SC 29607

Work Order: 6011019
Reported: 02/04/16 11:39

Sample Number 6011019-06
Sample Description Apt 403 Floor 403-W6 collected on 01/25/16 12:27

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:37	EPA 6010C		MEC	B6A1061

Sample Number 6011019-07
Sample Description Apt 406 Window Sill 406-W7 collected on 01/25/16 12:47

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:39	EPA 6010C		MEC	B6A1061

Sample Number 6011019-08
Sample Description Apt 406 Floor 406-W8 collected on 01/25/16 12:47

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:42	EPA 6010C		MEC	B6A1061

Sample Number 6011019-09
Sample Description Apt 107 Window Sill 107-W9 collected on 01/25/16 13:19

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:44	EPA 6010C		MEC	B6A1061

Sample Number 6011019-10
Sample Description Apt 107 Floor 107-W10 collected on 01/25/16 13:19

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:47	EPA 6010C		MEC	B6A1061

Sample Number 6011019-11
Sample Description Blank W11 collected on 01/25/16 13:40

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch
Total Metals									
Lead	ND	0.050	mg/Wipe	1.00	01/29/16 13:57	EPA 6010C		MEC	B6A1061

S and ME Inc. - Greenville
281 Fairforest Way
Greenville, SC 29607

Work Order: 6011019
Reported: 02/04/16 11:39

Sample Preparation Data

Parameter	Batch	Sample ID	Prepared	Analyst
EPA 200.7 M Digestion				
EPA 200.7 Mod	B6A1061	6011019-01	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-02	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-03	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-04	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-05	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-06	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-07	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-08	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-09	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-10	01/27/2016 13:29	MEC
EPA 200.7 Mod	B6A1061	6011019-11	01/27/2016 13:29	MEC

S and ME Inc. - Greenville
281 Fairforest Way
Greenville, SC 29607

Work Order: 6011019
Reported: 02/04/16 11:39

Data Qualifiers and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not reported

Rogers & Callcott ENVIRONMENTAL

CHAIN OF CUSTODY RECORD

WORK ORDER 16011019

Mailing Address: PO Box 5655, Greenville, SC 29606, Phone (864) 232-1556
Shipping Address: 426 Fairforest Way, Greenville, SC 29607, Fax (864) 232-6140
215B Stoneridge Drive, Columbia, SC 29210, Phone (803) 509-8999

Client Name: SAME

Address: 281 Fairforest Way, Greenville SC 29607

Report To: B. Mullholland

Email Address: bmullholland

Telephone #: (864) 297 9944

PO #: _____ Project # 4226-16-015

R&C WORK ORDER	YR 16 DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) →	N	N	P		G	Wipe	A	B	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	COMMENTS
-01	344-W1	1/25	11:32	Apt 344 Window Sill	1		1													ASTM - SW 846-7000B Flame
-02	344-W2	1/25	11:54	Apt 344 - Floor	1		1													
-03	343-W3	1/25	12:27	Apt 343 - Window Sill	1		1													RUSH ASAP
-04	343-W4	1/25	12:47	Apt 343 - Floor	1		1													KRW 1.26.16
-05	403-W5	1/25	12:27	Apt 403 - Window Sill	1		1													
-06	403-W6	1/25	12:27	Apt 403 - Floor	1		1													
-07	406-W7	1/25	12:47	Apt 406 - Window Sill	1		1													
-08	406-W8	1/25	12:47	Apt 406 - Floor	1		1													
-09	107-W9	1/25	13:19	Apt 107 - Window Sill	1		1													
-10	107-W10	1/25	13:19	Apt 107 - Floor	1		1													
-11																				

Preservation Code(s): A – None; B – HNO_3; C – H_2SO_4; D – NaOH; E – HCl; F – $Na_2S_2O_3$; G – Boric Acid; H – Ascorbic Acid; I – Zn Acetate; J – H_3PO_4; K - MCAA; L - _____

SAMPLER – RELINQUISHED BY: 1 WH	DATE/TIME: 1/25 13:40	RECEIVED BY: 2. Blank	DATE/TIME:
RELINQUISHED BY: 3. B Mullholland	DATE/TIME: 1/25/16 16:50 16:30	RECEIVED BY: 4.	DATE/TIME: 1.25.16 1650
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 6.	DATE/TIME:
RELINQUISHED BY: 7.	DATE/TIME:	RECEIVED BY: 8.	DATE/TIME:

Composite Start Date: _____

Composite Start Time: _____

Time or Flow (Circle one) Initials: _____

Temperature of blank or representative sample
At time of collection _____ °C
At time of lab receipt 20.8 °C

Possible Hazards associated with samples: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown ☐ Other _____

Form Revised July, 2014 Page _____ of _____

FOR LAB USE ONLY

Rogers & Callcott ENVIRONMENTAL

Sample Receipt Verification

Client: S+ME Date Received: 1.25.16 Work Order: L6011019

Carrier Name: (Client) FedEx UPS US Mail Courier Field Services Other: _____

Tracking Number: _____

Receipt Criteria	Yes	No	NA	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples cooled? Temp at receipt recorded on COC; Temp measured with IR thermometer - SN: 97050067			X	Ice Cold Packs Dry Ice None
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab.			X	
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection?			X	

If in-house preservation used – record Lot #			
HCL		H_3PO_4	
H_2SO_4		NaOH	
HNO_3		Other	

Comments:

Were non-conformance issues noted at sample receipt? Yes or (No)

Non-Conformance issue other than noted above:

Revised July 2014

Completed by: KRW

Appendix VI – Mold Laboratory Report

Spore Trap Report

	Date Sampled: 01/25/16
Attn: Brian Mulholland	Date Received: 01/26/16
S & ME, Inc.	Date Analyzed: 01/26/16
281 Fairforest Way	Date Reported: 01/26/16
Greenville, SC 29607	Date Revised:
	Project Number: 4226-16-015
	Project Address:
	SEEML Reference # : 160126001

TEST METHOD: DIRECT MICROSCOPY EXAMINATION AT 400X (100% OF TRACE ANALYZED) SEEML SOP 7

Client Sample ID	344-A1			343-A2			403-A3		
Location	2nd Floor Hall-344			343 First Floor Kitchen			403 First Floor Kitchen		
Lab Sample ID	160126001-001			160126001-002			160126001-004		
Detection Limit (spores/m^3)	13			13			13		
Hyphal Fragments	6	78		3	39		8	104	
Pollen	1	13					3	39	
Spore Trap Used	Allergenco			Allergenco			Allergenco		
	raw ct.	spores/m^3	%	raw ct.	spores/m^3	%	raw ct.	spores/m^3	%
Alternaria									
Ascospores	25	325	<1						
Basidiospores									
Bipolaris/Drechslera							1	13	<1
Chaetomium	2	26	<1	15	195	<1	16	208	<1
Cladosporium	72	936	1	24	312	<1	16	208	<1
Curvularia									
Epicoccum							1	13	<1
Cercospora									
Fusarium									
Memnoniella									
Nigrospora									
Penicillium/Aspergillus	5208	67700	98	17577	229000	100	2356	30600	98
Polythrincium									
Rusts									
Smuts/Periconia/Myxomy	3	39	<1	3	39	<1	11	143	<1
Spegazzinia									
Stachybotrys	2	26	<1	1	13	<1			
Stemphylium									
Tetraploa									
Torula									
Ulocladium									
Colorless/Other Brown 2									
Oidium									
Zygomycetes									
Pithomyces									
Background debris (1-5)3	3			3			3		
Sample Volume(liters)	75			75			75		
TOTAL SPORES/M^3	5312	**69100**		17620	**230000**		2401	**31200**	

Comments: Condition of the sample(s) upon receipt: Acceptable.

1=Total % may not equal 100 due to rounding.

2 = Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

3 = Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

The reporting limit is 1 Spore/sample.

Disclaimer: This report relates only to the samples tested

Respectfully submitted, SEEML

Rafael Berrios

Rafael Berrios, Approved Laboratory Signatory

506 Laurens Road
Greenville, SC 29607
Phone: (864) 233- 3770
Fax: (864) 233-6589
AIHA-LAP, LLC EMLAP # 173667

Spore Trap Report

	Date Sampled: 01/25/16
Attn: Brian Mulholland	Date Received: 01/26/16
S & ME, Inc.	Date Analyzed: 01/26/16
281 Fairforest Way	Date Reported: 01/26/16
Greenville, SC 29607	Date Revised:
	Project Number: 4226-16-015
	Project Address:
	SEEML Reference # : 160126001

TEST METHOD: DIRECT MICROSCOPY EXAMINATION AT 400X (100% OF TRACE ANALYZED) SEEML SOP 7

Client Sample ID	406-A4			107-A5			A6		
Location	406 First Floor Living Room			107 First Floor Kitchen			Outside		
Lab Sample ID	160126001-005			160126001-006			160126001-007		
Detection Limit (spores/m^3)	13			13			13		
Hyphal Fragments	2	26		8	104		6	78	
Pollen									
Spore Trap Used	Allergenco			Allergenco			Allergenco		
	raw ct.	spores/m^3	%	raw ct.	spores/m^3	%	raw ct.	spores/m^3	%
Alternaria									
Ascospores				4	52	<1	6	78	7
Basidiospores							3	39	3
Bipolaris/Drechslera									
Chaetomium				1	13	<1			
Cladosporium	11	143	2	87	1130	4	41	533	47
Curvularia									
Epicoccum									
Cercospora									
Fusarium									
Memnoniella									
Nigrospora									
Penicillium/Aspergillus	458	5950	98	2077	27000	96	30	390	35
Polythrincium									
Rusts									
Smuts/Periconia/Myxomy				4	52	<1	7	91	8
Spegazzinia									
Stachybotrys									
Stemphylium									
Tetraploa									
Torula									
Ulocladium									
Colorless/Other Brown 2									
Oidium									
Zygomycetes									
Pithomyces									
Background debris (1-5)3	3			3			3		
Sample Volume(liters)	75			75			75		
TOTAL SPORES/M^3	469	**6090**		2173	**28200**		87	**1130**	

Comments: Condition of the sample(s) upon receipt: Acceptable.

1=Total % may not equal 100 due to rounding.

2 = Colorless,other Brown are spores without a distinctive morphology on spore traps and non-viable surface samples.

3 = Background debris is the amount of particulate matter present on the slide and is graded from 1-5 with 1 = very light, 2= Light, 3 = Medium, 4 = Heavy, 5 = Very Heavy. The higher the rating the more likelihood spores may be underestimated. A rating of 5 should be interpreted as minimal counts and may actually be higher than reported.

The reporting limit is 1 Spore/sample.

Disclaimer: This report relates only to the samples tested

Respectfully submitted, SEEML

Rafael Berrios

Rafael Berrios, Approved Laboratory Signatory

506 Laurens Road
Greenville, SC 29607
Phone: (864) 233- 3770
Fax: (864) 233-6589
AIHA-LAP, LLC EMLAP # 173667

Direct Microscopic Examination Report

	Date Sampled: 01/25/16
Attn: Brian Mulholland	Date Received: 01/26/16
S & ME, Inc.	Date Analyzed: 01/26/16
281 Fairforest Way	Date Reported: 01/26/16
Greenville, SC 29607	Project Number: 4226-16-015
	SEEML Reference #: 160126001

TEST METHOD: Direct Microscopy Examination at 400X

Client Sample ID	343-S1			
Location	343 First Floor Kitchen			
SEEML Sample ID	160126001-003			
Sample Type	Swab			
	Quantification *			
Hyphal Fragments	**VL**			
Pollen				
General Impressions **	**FG**			
Fungal Spore:				
Alternaria				
Acremonium				
Ascospores				
Basidiospores				
Botrytis				
Chaetomium	**M**			
Cladosporium				
Cercospora				
Curvularia				
Drechslera/Bipolaris				
Epicoccum				
Geotrichum				
Nigrospora				
Pen./ Asp	**L**			
Peronospora/Oidium				
Pithomyces				
Rusts				
Smuts				
Myxomycetes				
Stachybotrys				
Stemphylium				
Tetraploa				
Torula				
Ulocladium				
Fusarium				

Comments: Condition of the sample(s) upon receipt: Acceptable.

*** Quantification of fungal growth are graded VL through VH with VL = Very Light Fungal Growth, L = Light Fungal Growth, M = Moderate Fungal Growth, H = Heavy Fungal Growth & VH = Very Heavy Fungal Growth**

**** General Impressions: NFG = No Fungal Growth, FG = Fungal Growth, MFG = Minimal Fungal Growth Or Growth in vicinity, ND = No Fungal Spores Detected**

Disclaimer: This report relates only to the samples tested

Respectfully submitted, SEEML

Rafael Berrios, **Approved Laboratory Signatory**

506 Laurens Road
Greenville, SC 29607
Phone: (864) 233- 3770
Fax: (864) 233- 6589

Southeast Environmental Microbiology Laboratories
Chain of Custody

506-A Laurens Rd, Greenville, SC 29607
Phone : 864-233-3770, Fax: 864-233-3779, www.seeml.com, AIHA-LAP, LLC. (EMLAP) #173667

For Lab Use Only			
Condition of samples is acceptable	☑ YES ☐ NO	SEEML Ref #: 160126007	Lab ID: 001-007

Company Information	Client Information		Environmental Conditions	
Brian Mulholland	Date Sampled:	1/25/16	Precipitation in last 16hrs:	None
S&ME	Project ~~Name~~ #:	4226-16-015	Relative Humidity I/O:	/
281 Fairforest Way	Project Address:		Temperature I/O:	/
Greenville, SC 29615	City, State, Zip:		Wind Conditions	
(864) 297-9944				
bmulholland@smeinc.com				

Sample Type Abbreviations:
A- Allergenco **S**-Swab **AP**-Andersen Plate
AOC- Air O Cell **T**-Tape **W**- Water
M5- Micro 5 **B**- Bulk **D**- Dust

Analysis Type:
1. SporeTrap, Air Sample Analysis-Same Day
2. Direct Exam Surface Sample Analysis -Same Day
3. Culturable Air / Surface Samples -7-10 days

Sample ID	Sample Location	Sample Type	Analysis Type	*Area	**Volume (L)	Notes RH-	T °F	Temp: ~~55°F~~
344 - A1	2nd floor hall - 344	AOC				52	55° F	
343 - A2	343 first floor kitchen	AOC						
343 - S1	343 first floor kitchen	Swab						
403 - A3	403 first floor kitchen	AOC				37	58° F	
406 - A4	406 first floor living room	AOC				31	51° F	
107 - A5	107 first floor kitchen	AOC				39	56° F	
A6	outside	AOC				34	46° F	

Reliquished By:	Date/Time	Recieved By:	Date/Time
	1/25/16 1700		1-26-16 9:00AM

*Area is only required for culturable surface samples.
** Volume = Pump setting (L/min) x minutes

Appendix VII – Copy of Inspector's License/Accreditation

S&ME

SCDHEC ISSUED
Asbestos ID Card

Brian J Mulholland

		Expiration Date
AIRSAMPLER	AS-00074	11/03/16
SUPERAHERA	SA-00821	11/03/16
CONSULTBI	BI-00691	11/02/16