



Asbestos Containing Materials Assessment

631 Fulton Avenue
Spartanburg, South Carolina

Prepared for:

Northside Development Group
410 Magnolia Street
Spartanburg, South Carolina

Prepared by:

Apex Environmental Management, Inc.
7 Winchester Court
Mauldin, South Carolina 29662

Project Number: 0615-124

October 12, 2015





7 Winchester Court
Mauldin, SC 29662
864.404.3210 office
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Apex Project Number 0615-124

October 12, 2015

Ms. Tammie Hoy-Hawkins
Northside Development Group
410 Magnolia Street
Spartanburg, South Carolina 29303

Reference: Asbestos Containing Materials Assessment Services
631 Fulton Avenue
Spartanburg, South Carolina

Dear Ms. Hoy-Hawkins:

Apex Environmental Management, Inc. (Apex) is pleased to provide the results of our assessment services for the referenced property. Our services were in accordance with Apex's contract dated July 22, 2015.

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.

A handwritten signature in blue ink, appearing to read 'Rebecca W. Shultz'.

Rebecca W. Shultz, CIH, CSP
President

Appendices

ASBESTOS CONTAINING MATERIALS ASSESSMENT

**NORTHSIDE DEVELOPMENT GROUP
631 FULTON AVENUE
SPARTANBURG, SOUTH CAROLINA**

APEX PROJECT NO. 0615-124

TABLE OF CONTENTS

SECTION

- I Asbestos Evaluation Report
- II Asbestos PLM & TEM Data Tables
- III Laboratory Analytical Results
- IV Photographic Log
- V SC DHEC Asbestos Inspector License

SECTION I

Asbestos Evaluation Report

ASBESTOS EVALUATION REPORT
APEX PROJECT NUMBER: 0615-124

Date: 10/12/2015 Page Number: 1 of 3

Client: Northside Development Group
Client Address: 410 Magnolia Street
Spartanburg, SC 29303
Client Contact: Ms. Tammie Hoy-Hawkins
Client Phone Number: (864) 598-0097

Project: Asbestos Evaluation

Property Address: 631 Fulton Avenue
Spartanburg, SC

Assessor: Rebecca Shultz Date of Assessment: 9/22/2015
Company: Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662
Phone Number: (864) 404-3210

Purpose of Assessment: Demolition Age of Structure: Approximately 60 years

Building Type: Residential Number of Stories: 1

Foundation: Crawlspace Approximate Square Footage: 1,100 SF

EXTERIOR BUILDING MATERIALS

- Brick
- Pitched Shingle Roof
- Chimney Caulk
- Wood Windows
- Wood Doors
- Window Glazing

INTERIOR BUILDING MATERIALS

- Plaster Walls and Ceiling
- Carpet over wood
- Multiple types of linoleum flooring with & without glue.

SCOPE OF THE SURVEY

The objectives of the asbestos containing materials assessment included the following:

- Identification of suspect asbestos-containing material (ACM) in readily observable locations. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- Suspect ACM analysis by polarized light microscopy (PLM) utilizing EMSL Analytical, Inc. (EMSL) as an NVLAP certified laboratory, their accreditation number is 200841-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Presenting the results in a report identifying confirmed ACMs.

METHODS

In order to determine if the suspect materials observed during the visual survey contained asbestos, representative bulk samples were collected and placed in sealed packages. Twenty (20) bulk samples were collected during the survey and submitted to EMSL in Charlotte, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) coupled with dispersion staining (Method No. EPA 600/M4-82-020, Dec. 1982). EMSL participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 200841-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. In accordance with South Carolina Regulation 61-86.1, non-friable organically bound materials that are reported to be non-asbestos containing by PLM analysis must also be analyzed by Transmission Electron Microscopy (TEM). Nine (9) samples were analyzed using TEM.

RESULTS

The EPA defines an asbestos-containing material as a material containing more than one percent asbestos. Provided below is a general discussion of the asbestos containing materials identified in the residence. Specific *PLM* and *TEM* table is located in Appendix II of this report and identify positive materials and designate approximate quantities.

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

- Approximately 90 SF of Linoleum (Double Layered) located in the Kitchen.
- Approximately 800 LF of window glazing located on the exterior.

RECOMMENDATIONS AND DISCUSSION

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.

Please note that this document is not a specification for asbestos removal. It does not contain means and methods for asbestos abatement. If you are planning an asbestos 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. Quantities provided in this report are estimated. Contractors must verify material amounts prior to bidding or removal.

This report summarizes our evaluation of the conditions observed at the site. The findings prepared by Apex are based upon testing performed in the building space. Additional ACM may exist (undetected) in other areas due to their inaccessibility or due to the limited nature of our testing. Our assessment procedures and recommendations are based on the guidelines presented in EPA, State of South Carolina or OSHA asbestos regulations.

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 PLM & TEM Data Tables

ASBESTOS SURVEY FIELD DATA SHEET

Project Name: NDG 631 Fulton Ave.

Sampled By: Rebecca Shultz

Project Location: Spartanburg, SC

Project Manager: Rebecca Shultz

Project Number: 0615-124

Date: 9/22/2015

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Throughout	Plaster	NAD	Friable	Good	2,700 SF
2						
3						
4						
5						
6	Kitchen	Yellow Linoleum (2 Layers)	4% Chrysotile (Top Layer)	Non-friable	Good	90 SF
7						
8						
9	Hall Bath	Gray Patterned Linoleum	NAD	Non-friable	Good	30 SF
10						
11						
12	Master Bath	Black Square Linoleum	NAD	Non-friable	Good	47 SF
13						
14						
15	Exterior	Window Glazing	2% Chrysotile	Non-friable	Good	800 LF
16						
17						
18	Exterior	Shingle & Felt (4 layers - shingle)	NAD	Non-friable	Good	1,500 SF
19						
20						
	Exterior	Chimney Caulk	Assumed Positive	Non-friable	Good	12 LF

NAD = No Asbestos Detected

LF = Linear Feet

SF = Square Feet

Bold = Positive for Asbestos

SECTION III

Laboratory Analytical Results



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

charlottelab@emsl.com

EMSL Order: 411506845

CustomerID: AXEM25

CustomerPO:

ProjectID:

Attn: **Rebecca Shultz**
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
Fax:
Received: 09/23/15 9:30 AM
Analysis Date: 9/26/2015
Collected: 9/22/2015

Project: **0815-163 631 Fulton**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1-Skim Coat 411506845-0001	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Quartz 95% Non-fibrous (other)	None Detected
1-Rough Coat 411506845-0001A	Throughout - Plaster	Gray Non-Fibrous Homogeneous	1% Cellulose	30% Quartz 69% Non-fibrous (other)	None Detected
2-Skim Coat 411506845-0002	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Quartz 25% Ca Carbonate 70% Non-fibrous (other)	None Detected
2-Rough Coat 411506845-0002A	Throughout - Plaster	Gray Non-Fibrous Homogeneous	1% Cellulose	35% Quartz 64% Non-fibrous (other)	None Detected
3-Skim Coat 411506845-0003	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Quartz 15% Ca Carbonate 80% Non-fibrous (other)	None Detected
3-Rough Coat 411506845-0003A	Throughout - Plaster	Brown Non-Fibrous Homogeneous	2% Cellulose	35% Quartz 63% Non-fibrous (other)	None Detected
4-Skim Coat 411506845-0004	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Quartz 95% Non-fibrous (other)	None Detected
4-Rough Coat 411506845-0004A	Throughout - Plaster	Gray Non-Fibrous Homogeneous	<1% Cellulose	25% Quartz 75% Non-fibrous (other)	None Detected

Analyst(s)

Aaron Hartley (16)

Erin Guzowski (15)

Lee Plumley, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:18:13



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

charlottelab@emsl.com

EMSL Order:	411506845
CustomerID:	AXEM25
CustomerPO:	
ProjectID:	

Attn: Rebecca Shultz Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone: (864) 640-5274 Fax: Received: 09/23/15 9:30 AM Analysis Date: 9/26/2015 Collected: 9/22/2015
Project: 0815-163 631 Fulton	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4-Drywall 411506845-0004B	Throughout - Plaster	Gray Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (other)	None Detected
5-Skim Coat 411506845-0005	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Quartz 95% Non-fibrous (other)	None Detected
5-Rough Coat 411506845-0005A	Throughout - Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	None Detected
5-Drywall 411506845-0005B	Throughout - Plaster	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
6-Beige Floor Tile 411506845-0006	Kitchen - Yellow Linoleum (2 Layer)	Beige Non-Fibrous Homogeneous		5% Ca Carbonate 91% Non-fibrous (other)	4% Chrysotile
6-Gray Floor Tile 411506845-0006A	Kitchen - Yellow Linoleum (2 Layer)	Gray/White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (other)	None Detected
7-Beige Floor Tile 411506845-0007	Kitchen - Yellow Linoleum (2 Layer)				Stop Positive (Not Analyzed)
7-Gray Floor Tile 411506845-0007A	Kitchen - Yellow Linoleum (2 Layer)	Gray/White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (16)
 Erin Guzowski (15)



 Lee Plumley, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

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Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
Fax:
Received: 09/23/15 9:30 AM
Analysis Date: 9/26/2015
Collected: 9/22/2015

Project: **0815-163 631 Fulton**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
9 411506845-0008	Hall Bath - Gray Patterned Linoleum	Gray Non-Fibrous Homogeneous	5% Cellulose	30% Ca Carbonate 65% Non-fibrous (other)	None Detected
10-Flooring 411506845-0009	Hall Bath - Gray Patterned Linoleum	Gray/White Non-Fibrous Homogeneous	4% Cellulose	30% Ca Carbonate 66% Non-fibrous (other)	None Detected
10-Mastic 411506845-0009A	Hall Bath - Gray Patterned Linoleum	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (other)	None Detected
12 411506845-0010	Master Bath - Black Sq. Linoleum	Gray/Black Fibrous Homogeneous	1% Glass 4% Synthetic 15% Cellulose	80% Non-fibrous (other)	None Detected
13 411506845-0011	Master Bath - Black Sq. Linoleum	Gray/Black Fibrous Homogeneous	5% Cellulose 1% Glass	94% Non-fibrous (other)	None Detected
15 411506845-0012	Exterior - Window Glazing	Gray/White Non-Fibrous Homogeneous		50% Ca Carbonate 48% Non-fibrous (other)	2% Chrysotile
16 411506845-0013	Exterior - Window Glazing				Stop Positive (Not Analyzed)
18-Red Shingle 411506845-0014	Exterior - Roofing	Red/Black Fibrous Homogeneous	30% Cellulose 2% Synthetic	68% Non-fibrous (other)	None Detected

Analyst(s)

Aaron Hartley (16)

Erin Guzowski (15)

Lee Plumley, Laboratory Manager
or other approved signatory

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7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
 Fax:
 Received: 09/23/15 9:30 AM
 Analysis Date: 9/26/2015
 Collected: 9/22/2015

Project: **0815-163 631 Fulton**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
18-Brown Shingle 411506845-0014A	Exterior - Roofing	Brown/Black Fibrous Homogeneous	10% Glass	5% Quartz 10% Ca Carbonate 75% Non-fibrous (other)	None Detected
18-Gray Shingle 411506845-0014B	Exterior - Roofing	Gray/Black Fibrous Homogeneous	30% Cellulose 1% Synthetic	5% Quartz 64% Non-fibrous (other)	None Detected
18-Black Shingle 411506845-0014C	Exterior - Roofing	Black Fibrous Homogeneous	10% Glass <1% Cellulose	5% Quartz 10% Ca Carbonate 75% Non-fibrous (other)	None Detected
18-Felt 411506845-0014D	Exterior - Roofing	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected
19-Red Shingle 411506845-0015	Exterior - Roofing	Red/Black Fibrous Homogeneous	25% Cellulose	5% Quartz 70% Non-fibrous (other)	None Detected
19-Brown Shingle 411506845-0015A	Exterior - Roofing	Brown/Black Fibrous Homogeneous	8% Glass	5% Quartz 15% Ca Carbonate 72% Non-fibrous (other)	None Detected
19-Gray Shingle 411506845-0015B	Exterior - Roofing	Gray/Black Fibrous Homogeneous	20% Cellulose	5% Quartz 75% Non-fibrous (other)	None Detected

Analyst(s) _____

Aaron Hartley (16)
Erin Guzowski (15)

Lee Plumley, Laboratory Manager
or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:18:13



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Project: 0815-163 631 Fulton	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
19-Black Shingle 411506845-0015C	Exterior - Roofing	Black Fibrous Homogeneous	5% Glass	5% Quartz 10% Ca Carbonate 80% Non-fibrous (other)	None Detected
19-Felt 411506845-0015D	Exterior - Roofing	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (16)
 Erin Guzowski (15)



 Lee Plumley, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:18:13

**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273
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<http://www.EMSL.com> charlottelab@emsl.com

EMSL Order: 411506845
 CustomerID: AXEM25
 CustomerPO:
 ProjectID:

Attn: **Rebecca Shultz**
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
 Fax:
 Received: 09/28/15 9:15 AM
 Analysis Date: 10/1/2015
 Collected: 9/22/2015

Project: **0815-163 631 Fulton**

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
8-Gray Floor Tile 411506845-0016	Kitchen - Yellow Linoleum (2 Layer)	Gray Non-Fibrous Homogeneous	99.0	0.96 Fibrous (other)	No Asbestos Detected
11-Flooring 411506845-0017	Hall Bath - Gray Patterned Linoleum	White Non-Fibrous Homogeneous	99.0	0.96 Fibrous (other)	No Asbestos Detected
11-Mastic 411506845-0018	Hall Bath - Gray Patterned Linoleum	Tan Non-Fibrous Homogeneous	100	<0.56 Fibrous (other)	No Asbestos Detected
14 411506845-0019	Master Bath - Black Sq. Linoleum	White/Black Fibrous Homogeneous	100	<0.16 Fibrous (other)	No Asbestos Detected
20-Red Shingle 411506845-0020	Exterior - Roofing	Red/Black Fibrous Homogeneous	100	<0.49 Fibrous (other)	No Asbestos Detected
20-Brown Shingle 411506845-0021	Exterior - Roofing	Brown/Black Fibrous Homogeneous	100	None	No Asbestos Detected
20-Gray Shingle 411506845-0022	Exterior - Roofing	Gray/Black Fibrous Homogeneous	99.5	0.51 Fibrous (other)	No Asbestos Detected
20-Black Shingle 411506845-0023	Exterior - Roofing	Black Fibrous Homogeneous	99.2	0.81 Fibrous (other)	No Asbestos Detected
20-Felt 411506845-0024	Exterior - Roofing	Black Fibrous Homogeneous	100	<0.1 Fibrous (other)	No Asbestos Detected

Analyst(s)

Charles Harris (9)

Lee Plumley, Laboratory Manager
 or other approved signatory

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

Initial report from 10/01/2015 14:39:04



Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

Charlotte, NC 28273
PHONE: (704) 525-2205
FAX: (704) 525 2382

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

411506845

Company : Apex Environmental Management		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 7 Winchester Court		<i>Third Party Billing requires written authorization from third party</i>	
City: Mauldin	State/Province: SC	Zip/Postal Code: 29662	Country: United States
Report To (Name): Rebecca Shultz		Telephone #: 864-404-3210	
Email Address: rshultz@apex-ehs.com		Fax #:	Purchase Order:
Project Name/Number: 0815-163 631 Fulton		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: SC		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* – Please Check

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

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

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input checked="" type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	Other
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

Check For Positive Stop – Clearly Identify Homogenous Group Date Sampled: 9/22/15

Samplers Name: _____ Samplers Signature: _____

Sample #	HA #	Sample Location	Material Description
1		Throughout	Plaster
2			
3		+	
4			
5			
6		Kitchen	Yellow Linoleum (2layer)
7			
8			

Client Sample # (s):	20	Total # of Samples:	20
Relinquished (Client):	[Signature]	Date: 9/22/15	Time:
Received (Lab):	[Signature]	Date: 9/23/15	Time: 9:30am EMSL FX
Comments/Special Instructions:		7950 7172 8130	

SECTION IV
Photographic Log



Photo 1 -- Front Elevation



Photo 2 – Porch – all wood.



Photo 3 – Wood Flooring



Photo 4 – Hall Bath



Photo 5 – Master Bath



Photo 6 – Kitchen

SECTION V

SC DHEC Asbestos Inspector License

North Carolina
Asbestos Accreditation



Rebecca W Shultz
7 Winchester Ct
Mauldin, SC 29662

108487

EXPIRATION

06-30-2016

DOB	SEX	HT	WT
09-19-1974	F	5'4"	175
CLASS	#	EXP	
DESIGNER	40465	06-16	
INSPECTOR	12394	06-16	
SUPER AIR MONITOR	90151	08-15	

SCDHEC ISSUED
Asbestos ID Card

Rebecca Shultz



CONSULTPD
CONSULTBI

Expires
PD-00060 06/10/16
BI-00492 06/09/16



Asbestos Containing Materials Assessment

787 N. Vernon Street
Spartanburg, South Carolina

Prepared for:

Northside Development Group
410 Magnolia Street
Spartanburg, South Carolina

Prepared by:

Apex Environmental Management, Inc.
7 Winchester Court
Mauldin, South Carolina 29662

Project Number: 0615-124

October 12, 2015





Apex Project Number 0615-124

October 12, 2015

7 Winchester Court
Mauldin, SC 29662
864.404.3210 office
864.404.3213 fax
www.apex-ehs.com

Ms. Tammie Hoy-Hawkins
Northside Development Group
410 Magnolia Street
Spartanburg, South Carolina 29303

Reference: Asbestos Containing Materials Assessment Services
787 N. Vernon Street
Spartanburg, South Carolina

SERVICES

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

Dear Ms. Hoy-Hawkins:

Apex Environmental Management, Inc. (Apex) is pleased to provide the results of our assessment services for the referenced property. Our services were in accordance with Apex's contract dated July 22, 2015.

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.

A handwritten signature in blue ink, appearing to read 'R. Shultz'.

Rebecca W. Shultz, CIH, CSP
President

Appendices

ASBESTOS CONTAINING MATERIALS ASSESSMENT

**NORTHSIDE DEVELOPMENT GROUP
787 N. VERNON STREET
SPARTANBURG, SOUTH CAROLINA**

APEX PROJECT NO. 0615-124

TABLE OF CONTENTS

SECTION

- I Asbestos Evaluation Report
- II Asbestos PLM & TEM Data Tables
- III Laboratory Analytical Results
- IV Photographic Log
- V SC DHEC Asbestos Inspector License

SECTION I

Asbestos Evaluation Report

ASBESTOS EVALUATION REPORT
APEX PROJECT NUMBER: 0615-124

Date:	10/12/2015	Page Number:	1 of 3
Client:	Northside Development Group	Client Contact:	Ms. Tammie Hoy-Hawkins
Client Address:	410 Magnolia Street Spartanburg, SC 29303	Client Phone Number:	(864) 598-0097
Project:	Asbestos Evaluation		
Property Address:	787 N. Vernon Street Spartanburg, SC		
Assessor:	Rebecca Shultz	Date of Assessment:	9/22/2015
Company:	Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone Number:	(864) 404-3210
Purpose of Assessment:	Demolition	Age of Structure:	Approximately 60 years
Building Type:	Residential	Number of Stories:	1
Foundation:	Crawlspace	Approximate Square Footage:	1,150 SF

EXTERIOR BUILDING MATERIALS

- Pitched Shingle Roof (4 layers)
- Transite Siding
- Window Glazing
- Wood Windows
- Wood Doors
- Two Chimneys with Caulking

INTERIOR BUILDING MATERIALS

- Plaster Walls
- Plaster Ceilings
- Wood Floors
- Multiple Linoleum Floor Types

SCOPE OF THE SURVEY

The objectives of the asbestos containing materials assessment included the following:

- Identification of suspect asbestos-containing material (ACM) in readily observable locations. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- Suspect ACM analysis by polarized light microscopy (PLM) utilizing EMSL Analytical, Inc. (EMSL) as an NVLAP certified laboratory, their accreditation number is 200841-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Presenting the results in a report identifying confirmed ACMs.

METHODS

In order to determine if the suspect materials observed during the visual survey contained asbestos, representative bulk samples were collected and placed in sealed packages. Twenty six (26) bulk samples were collected during the survey and submitted to EMSL in Charlotte, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) coupled with dispersion staining (Method No. EPA 600/M4-82-020, Dec. 1982). EMSL participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 200841-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. In accordance with South Carolina Regulation 61-86.1, non-friable organically bound materials that are reported to be non-asbestos containing by PLM analysis must also be analyzed by Transmission Electron Microscopy (TEM). Seven (7) samples were analyzed using TEM.

RESULTS

The EPA defines an asbestos-containing material as a material containing more than one percent asbestos. Provided below is a general discussion of the asbestos containing materials identified in the residence. Specific *PLM* and *TEM* table is located in Appendix II of this report and identify positive materials and designate approximate quantities.

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

- Approximately 2,000 SF of transite siding on the building exterior.
- Approximately 500 LF of window glazing on the building exterior.
- Approximately 116 SF of tan linoleum located in the kitchen.
- Approximately 76 SF of tan floor tile/mastic located on the rear porch.

RECOMMENDATIONS AND DISCUSSION

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.

*Northside Development Group
787 N Vernon Street
Apex Project No. 0615-124
October 12, 2015*

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.

Please note that this document is not a specification for asbestos removal. It does not contain means and methods for asbestos abatement. If you are planning an asbestos 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. Quantities provided in this report are estimated. Contractors must verify material amounts prior to bidding or removal.

This report summarizes our evaluation of the conditions observed at the site. The findings prepared by Apex are based upon testing performed in the building space. Additional ACM may exist (undetected) in other areas due to their inaccessibility or due to the limited nature of our testing. Our assessment procedures and recommendations are based on the guidelines presented in EPA, State of South Carolina or OSHA asbestos regulations.

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 PLM & TEM Data Tables

ASBESTOS SURVEY FIELD DATA SHEET

Project Name: NDG 787 N. Vernon St.

Sampled By: Rebecca Shultz

Project Location: Spartanburg, SC

Project Manager: Rebecca Shultz

Project Number: 0615-124

Date: 9/22/2015

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1	Exterior	Transite Siding	8% Chrysotile	Non-friable	Good	2,000 SF
2						
3						
4	Exterior	Window Glazing	2% Chrysotile	Non-friable	Good	500 SF
5						
6						
7	Rear Porch	Ceiling Tile over Window	NAD	Friable	Good	12 SF
8						
9						
10	Bath	12" x 12" Marbled Floor Tile	NAD	Non-friable	Good	38 SF
11						
12						
13	Kitchen	Multiple Layer Flooring	5% Chrysotile (Tan Layer)	Non-friable	Good	176 SF
14						
15						
16	Rear Porch	12" x 12" Tan Floor Tile	3% Chrysotile (Tile) 2% Chrysotile (Mastic)	Non-friable	Good	76 LF
17						
18						
19	Throughout	Plaster	NAD	Friable	Good	2,800 SF
20						
21						
22						
23						
24	Exterior	Shingle & Felt (4 layers - shingle)	NAD	Non-friable	Good	1,500 SF
25						
26						
	Exterior	Chimney Caulk	Assumed Positive	Non-friable	Good	12 LF

NAD = No Asbestos Detected

LF = Linear Feet

SF = Square Feet

Bold = Positive for Asbestos

SECTION III

Laboratory Analytical Results



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

charlottelab@emsl.com

EMSL Order:	411506844
CustomerID:	AXEM25
CustomerPO:	
ProjectID:	

Attn: Rebecca Shultz Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone: (864) 640-5274 Fax: Received: 09/23/15 9:30 AM Analysis Date: 9/26/2015 Collected: 9/22/2015
Project: 0815-163 787 N. Vernon	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1 411506844-0001	Exterior - Transite Siding	Gray/White Fibrous Homogeneous		10% Ca Carbonate 82% Non-fibrous (other)	8% Chrysotile
2 411506844-0002	Exterior - Transite Siding				Stop Positive (Not Analyzed)
3 411506844-0003	Exterior - Transite Siding				Stop Positive (Not Analyzed)
4 411506844-0004	Exterior - Window Glazing	Gray/White Non-Fibrous Homogeneous		50% Ca Carbonate 48% Non-fibrous (other)	2% Chrysotile
5 411506844-0005	Exterior - Window Glazing				Stop Positive (Not Analyzed)
7 411506844-0006	Rear Porch - 2x4 Ceiling Tile	Gray Fibrous Homogeneous	30% Min. Wool 60% Cellulose	5% Perlite 5% Non-fibrous (other)	None Detected
8 411506844-0007	Rear Porch - 2x4 Ceiling Tile	Gray/White Fibrous Homogeneous	30% Min. Wool 50% Cellulose	5% Perlite 15% Non-fibrous (other)	None Detected
9 411506844-0008	Rear Porch - 2x4 Ceiling Tile	Gray/White Fibrous Heterogeneous	50% Cellulose 30% Min. Wool	10% Perlite 10% Non-fibrous (other)	None Detected
10 411506844-0009	Bath - Marble Pattern Tile	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (17)
 Eric Loomis (11)



 Lee Plumley, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:17:29



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

charlottelab@emsl.com

EMSL Order:	411506844
CustomerID:	AXEM25
CustomerPO:	
ProjectID:	

Attn: **Rebecca Shultz**
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
 Fax:
 Received: 09/23/15 9:30 AM
 Analysis Date: 9/26/2015
 Collected: 9/22/2015

Project: **0815-163 787 N. Vernon**

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11 411506844-0010	Bath - Marble Pattern Tile	Tan/Black Fibrous Heterogeneous		30% Ca Carbonate 70% Non-fibrous (other)	None Detected
13-Beige Flooring 411506844-0011	Kitchen - Multi-Layer Vinyl Floor	Beige Fibrous Homogeneous	2% Glass 15% Cellulose	5% Ca Carbonate 78% Non-fibrous (other)	None Detected
13-Tan Flooring 411506844-0011A	Kitchen - Multi-Layer Vinyl Floor	Gray/Tan Fibrous Homogeneous	10% Cellulose	85% Non-fibrous (other)	5% Chrysotile
13-Red Flooring 411506844-0011B	Kitchen - Multi-Layer Vinyl Floor	Red/Black Fibrous Homogeneous	40% Cellulose 3% Synthetic	57% Non-fibrous (other)	None Detected
14-Beige Flooring 411506844-0012	Kitchen - Multi-Layer Vinyl Floor	Gray/Beige Fibrous Heterogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
14-Tan Flooring 411506844-0012A	Kitchen - Multi-Layer Vinyl Floor				Stop Positive (Not Analyzed)
14-Red Flooring 411506844-0012B	Kitchen - Multi-Layer Vinyl Floor	Red/Black Fibrous Heterogeneous	45% Cellulose 3% Synthetic	52% Non-fibrous (other)	None Detected
16-Floor Tile 411506844-0013	Rear Porch - Tan FT & Mastic	Tan Non-Fibrous Homogeneous		30% Ca Carbonate 67% Non-fibrous (other)	3% Chrysotile

Analyst(s) _____

Aaron Hartley (17)

Eric Loomis (11)

Lee Plumley, Laboratory Manager
or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:17:29



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

Phone/Fax: (704) 525-2205 / (704) 525-2382

<http://www.EMSL.com>

charlottelab@emsl.com

EMSL Order:	411506844
CustomerID:	AXEM25
CustomerPO:	
ProjectID:	

Attn: Rebecca Shultz Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone: (864) 640-5274 Fax: Received: 09/23/15 9:30 AM Analysis Date: 9/26/2015 Collected: 9/22/2015
Project: 0815-163 787 N. Vernon	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
16-Mastic 411506844-0013A	Rear Porch - Tan FT & Mastic	Black Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
17-Floor Tile 411506844-0014	Rear Porch - Tan FT & Mastic				Stop Positive (Not Analyzed)
17-Mastic 411506844-0014A	Rear Porch - Tan FT & Mastic				Stop Positive (Not Analyzed)
19-Skim Coat 411506844-0015	Throughout - Plaster	White Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (other)	None Detected
19-Rough Coat 411506844-0015A	Throughout - Plaster	Gray Non-Fibrous Homogeneous		25% Quartz 75% Non-fibrous (other)	None Detected
20 411506844-0016	Throughout - Plaster	Gray Non-Fibrous Homogeneous		30% Quartz 70% Non-fibrous (other)	None Detected
21-Skim Coat 411506844-0017	Throughout - Plaster	White Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (other)	None Detected
21-Rough Coat 411506844-0017A	Throughout - Plaster	Gray Non-Fibrous Homogeneous		20% Quartz 5% Ca Carbonate 75% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (17)
 Eric Loomis (11)



 Lee Plumley, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:17:29



EMSL Analytical, Inc.

376 Crompton Street, Charlotte, NC 28273

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EMSL Order:	411506844
CustomerID:	AXEM25
CustomerPO:	
ProjectID:	

Attn: Rebecca Shultz Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone: (864) 640-5274 Fax: Received: 09/23/15 9:30 AM Analysis Date: 9/26/2015 Collected: 9/22/2015
Project: 0815-163 787 N. Vernon	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
22 411506844-0018	Throughout - Plaster	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
23 411506844-0019	Throughout - Plaster	Gray Non-Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (other)	None Detected
24-Black/Gray Shingle 411506844-0020	Exterior - Roofing	Brown/Gray Fibrous Homogeneous	5% Glass	8% Quartz 15% Ca Carbonate 72% Non-fibrous (other)	None Detected
24-Gray Shingle 411506844-0020A	Exterior - Roofing	Gray/Black Fibrous Homogeneous	1% Cellulose 5% Glass	5% Quartz 10% Ca Carbonate 79% Non-fibrous (other)	None Detected
24-Felt 411506844-0020B	Exterior - Roofing	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (other)	None Detected
25-Black/Gray Shingle 411506844-0021	Exterior - Roofing	Gray/Black Non-Fibrous Homogeneous	8% Glass	10% Quartz 5% Ca Carbonate 77% Non-fibrous (other)	None Detected
25-Gray Shingle 411506844-0021A	Exterior - Roofing	Gray/Black Fibrous Heterogeneous	8% Glass	8% Quartz 8% Ca Carbonate 76% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (17)
 Eric Loomis (11)



 Lee Plumley, Laboratory Manager
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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:17:29



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EMSL Order:	411506844
CustomerID:	AXEM25
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ProjectID:	

Attn: Rebecca Shultz Apex Environmental Management 7 Winchester Court Mauldin, SC 29662	Phone: (864) 640-5274 Fax: Received: 09/23/15 9:30 AM Analysis Date: 9/26/2015 Collected: 9/22/2015
Project: 0815-163 787 N. Vernon	

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
25-White Shingle 411506844-0021B	Exterior - Roofing	White/Black Fibrous Heterogeneous	20% Cellulose	8% Quartz 72% Non-fibrous (other)	None Detected
25-Felt 411506844-0021C	Exterior - Roofing	Black Non-Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (other)	None Detected

Analyst(s)

 Aaron Hartley (17)
 Eric Loomis (11)



 Lee Plumley, Laboratory Manager
 or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Charlotte, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from 09/27/2015 14:17:29

**EMSL Analytical, Inc.**

376 Crompton Street, Charlotte, NC 28273
 Phone/Fax: (704) 525-2205 / (704) 525-2382
<http://www.EMSL.com> charlottelab@emsl.com

EMSL Order: 411506844
 CustomerID: AXEM25
 CustomerPO:
 ProjectID:

Attn: **Rebecca Shultz**
Apex Environmental Management
7 Winchester Court
Mauldin, SC 29662

Phone: (864) 640-5274
 Fax:
 Received: 09/28/15 8:50 AM
 Analysis Date: 10/1/2015
 Collected: 9/22/2015

Project: **0815-163 787 N. Vernon**

**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
12 411506844-0022	Bath - Marble Pattern Tile	Tan/Black Non-Fibrous Homogeneous	99.7	0.31 Fibrous (other)	No Asbestos Detected
15-Beige Flooring 411506844-0023	Kitchen - Multi-Layer Vinyl Floor	Beige Fibrous Homogeneous	100	<0.1 Fibrous (other)	No Asbestos Detected
15-Red Flooring 411506844-0024	Kitchen - Multi-Layer Vinyl Floor	Red Non-Fibrous Homogeneous	99.8	0.20 Fibrous (other)	No Asbestos Detected
26-Black/Gray Shingle 411506844-0025	Exterior - Roofing	Gray/Black Fibrous Homogeneous	99.5	0.52 Fibrous (other)	No Asbestos Detected
26-Gray Shingle 411506844-0026	Exterior - Roofing	Gray Fibrous Homogeneous	99.5	0.49 Fibrous (other)	No Asbestos Detected
26-White Shingle 411506844-0027	Exterior - Roofing	White/Black Non-Fibrous Homogeneous	99.4	0.62 Fibrous (other)	No Asbestos Detected
26-Felt 411506844-0028	Exterior - Roofing	Black Fibrous Homogeneous	100	<0.1 Fibrous (other)	No Asbestos Detected

Analyst(s)
 Charles Harris (7)

Lee Plumley, Laboratory Manager
 or other approved signatory

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

Initial report from 10/01/2015 14:38:14



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

411506844

Charlotte, NC 28273
PHONE: (704) 525-2205
FAX: (704) 525 2382

Company : Apex Environmental Management		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 7 Winchester Court		<i>Third Party Billing requires written authorization from third party</i>	
City: Mauldin	State/Province: SC	Zip/Postal Code: 29662	Country: United States
Report To (Name): Rebecca Shultz		Telephone #: 864-404-3210	
Email Address: rshultz@apex-ehs.com		Fax #:	Purchase Order:
Project Name/Number: 0815-103 781 N. Vernon		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Mail	
U.S. State Samples Taken: SC		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* – Please Check

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

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

PLM - Bulk (reporting limit)	TEM – Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input checked="" type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	Other
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

Check For Positive Stop – Clearly Identify Homogenous Group Date Sampled: 9/22/15

Samplers Name: _____ Samplers Signature: _____

Sample #	HA #	Sample Location	Material Description
1		Exterior	Transite Siding
2			
3			
4			Window Glazing
5			
6			
7		Rear Porch	2x4 Ceiling Tile
8			
9			

Client Sample # (s): 1	-	Total # of Samples: 26
Relinquished (Client): <i>[Signature]</i>	Date: 9/22/15	Time:
Received (Lab): <i>[Signature]</i>	Date: 9/23/15	Time: 9:30 AM EMSL FX
Comments/Special Instructions: 7950 7172 8130		

SECTION IV
Photographic Log



Photo 1 -- Front Elevation



Photo 2 – Plaster Walls



Photo 3 – Multiple Layers of Flooring in the Kitchen



Photo 4 – Rear Porch



Photo 5 – Marbled Tile in Bathroom



Photo 6 – Window Glazing

SECTION V

SC DHEC Asbestos Inspector License

North Carolina
Asbestos Accreditation



Rebecca W Shultz
7 Winchester Ct
Mauldin, SC 29662

108487

EXPIRATION

06-30-2016

DOB	SEX	HT	WT
09-19-1974	F	5'4"	175
CLASS	#	EXP	
DESIGNER	40465	06-16	
INSPECTOR	12394	06-16	
SUPER AIR MONITOR	90151	08-15	

SCDHEC ISSUED
Asbestos ID Card

Rebecca Shultz



CONSULTPD
CONSULTBI

Expires
PD-00060 06/10/16
BI-00492 06/09/16