



July 24, 2015

South Carolina Department of Transportation  
955 Park Street, Room 319  
Columbia, South Carolina 29201

Attention: Trapp Harris, P.E.  
[HarrisMD@scdot.org](mailto:HarrisMD@scdot.org)

**Reference: Asbestos Assessment Report**  
Exit 217 North Meeting Street On and Off-ramps  
Structure# 101002600891 and 102005200191  
North Charleston, South Carolina  
S&ME Project No. 1413-15-075

Dear Mr. Harris:

S&ME, Inc. (S&ME) is pleased to provide the enclosed report detailing our asbestos assessment for the referenced on/off-ramp bridge, performed in general accordance with Work Order Number SME#3-18-37345 dated June 5, 2015, and Scope of Services dated May 26, 2015. The report includes the executive summary, project background, assessment procedures, findings and results, and conclusions and recommendations regarding the bridge structure as related to asbestos containing materials.

This report is provided for the use of the South Carolina Department of Transportation and their assignees. Use of this report by any other parties will be at such party's sole risk and S&ME, Inc. 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 assessment and of the specific areas referenced.

We appreciate the opportunity to provide you with our industrial hygiene services. If you have any questions concerning this report, please do not hesitate to call us at (843) 884-0005.

Sincerely,

**S&ME, Inc.**

Terry W. Richburg  
Environmental Location Coordinator

James L. Killingsworth, CHMM  
Environmental Area Manager, V.P.

Attachments

**ASBESTOS ASSESSMENT REPORT**  
**EXIT 217 NORTH MEETING STREET ON AND OFF-RAMPS**  
**STRUCTURE# 101002600891 AND 102005200191**  
**NORTH CHARLESTON, SOUTH CAROLINA**  
S&ME Project No. 1413-15-075

Prepared for:  
South Carolina Department of Transportation  
955 Park Street, Room 319  
Columbia, South Carolina 29201  
(803) 737-0766

Assessment Performed by:

  
\_\_\_\_\_  
William R. Seaborn  
(SCDHEC Accreditation #BI-01317)

  
\_\_\_\_\_  
Date

Report Prepared by:

  
\_\_\_\_\_  
Terry W. Richburg  
(SCDHEC Accreditation #MP-00110)

  
\_\_\_\_\_  
Date



620 Wando Park Boulevard  
Mount Pleasant, South Carolina 29464  
(843) 884-0005

July 24, 2015

	<b>Yes, Asbestos Was Found</b>
✓	<b>No, Asbestos Was Not Found</b>

## **TABLE OF CONTENTS**

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>2. ASSESSMENT PROCEDURES.....</b>	<b>2</b>
<b>3. FINDINGS AND RESULTS.....</b>	<b>3</b>
<b>4. ABBREVIATIONS AND HAZARD KEY ASSESSMNET .....</b>	<b>5</b>
<b>5. CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>5</b>
<b>APPENDIX I .....</b>	<b>I-1</b>
<b>APPENDIX II.....</b>	<b>II-1</b>
<b>APPENDIX III .....</b>	<b>III-1</b>
<b>APPENDIX IV.....</b>	<b>IV-1</b>
<b>APPENDIX V .....</b>	<b>V-1</b>

## EXECUTIVE SUMMARY

An asbestos assessment was conducted on July 9, 10 and 22, 2015, of the Exit 217 North Meeting Street on and off-ramps located in North Charleston, South Carolina (location map provided in Appendix I). The purpose of the assessment was to identify asbestos containing materials (ACMs) associated with the structure, prior to demolition activities in order to construct on and off-ramps servicing a planned roadway. The structure is labeled with two identification numbers assigned by the owner for each ramp (101002600891 and 102005200191), however both ramps join together as one structure and is considered one structure for the purpose of this assessment. It should be noted that the ID label for structure 102005200191 was not observed on the structure, however ID label 101002600891 was confirmed on the structure.

The Exit 217 North Meeting Street on/off-ramps are approximately 1,900 feet long and 20 to 45 feet wide. The roadway is comprised of concrete, situated on steel I-beams, on concrete bents. An asphaltic expansion joint material was located between the roadway deck sections, and no other suspect ACMs were observed between bent caps and steel I-beams. Materials associated with each ramp and common section appeared to be homogeneous.

Suspect ACMs observed, sampled and analyzed included the referenced asphaltic expansion joint material. Based on the bulk sampling and analysis performed as part of this assessment, no ACMs were identified. The Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) defines a material asbestos containing if an asbestos content greater than one percent (>1%) is detected in a bulk sample.

If additional suspect ACMs are discovered during the planned demolition and disposal activities, bulk samples should be collected by a South Carolina Department of Health and Environmental Control (SCDHEC) licensed inspector and analyzed for asbestos content. An application for demolition, along with a copy of this report, must be submitted to SCDHEC 10 weekdays prior to demolition activities. This report should be provided to the contractor(s) to assist with compliance with applicable State and Federal regulations.



## **1. BACKGROUND**

S&ME was contracted to perform an asbestos assessment of the Exit 217 North Meeting Street on and off-ramps located in North Charleston, South Carolina. The purpose of the assessment was to identify asbestos containing materials (ACMs) associated with the structure, prior to demolition activities in order to construct on and off-ramps servicing a planned roadway. The structure is labeled with two identification numbers assigned by the owner for each ramp (101002600891 and 102005200191), however the two referenced ramps join together as one structure, and is considered one structure for the purpose of this assessment.

The Exit 217 North Meeting Street on/off-ramps are approximately 1,900 feet long and 20 to 45 feet wide. The roadway is comprised of concrete, situated on steel I-beams, on concrete bents. An asphaltic expansion joint material was located between the roadway deck sections, and no other suspect ACMs were observed between bent caps and steel I-beams. Materials associated with each ramp and common section appeared to be homogeneous.

The identification of ACMs will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos during destructive activities. Identification of ACMs also complies with Title 40 Code of the Federal Regulations, part 61, and State regulation 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). The following report describes the assessment procedures used, results of the suspect ACMs sampled and analyzed, and conclusions and recommendations regarding the subject structure as related to ACMs.

## **2. ASSESSMENT PROCEDURES**

The assessment was performed by observing and sampling suspect ACMs. Significant destructive testing was not performed; therefore the possibility exists that additional suspect asbestos-containing materials may be present in inaccessible areas such as concrete or asphalt overlays, and between components. If additional suspect materials are discovered during the planned demolition activities, destructive actions to the suspect ACM should not proceed until bulk samples are collected and analyzed for asbestos content.

A sampling strategy was developed to provide representative samples in accordance with SCDHEC and the Environmental Protection Agency (EPA). Bulk samples were collected from suspect ACMs and recorded on a chain of custody record and submitted to our in-house Polarized Light Microscopy (PLM) laboratory in Charlotte, North Carolina for analysis for asbestos content. Confirmation analysis was performed by Transmission Electron Microscopy (TEM) by EMSL Analytical of Charlotte, North Carolina for non-

friable organically bound materials reported negative by 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.

### **3. FINDINGS AND RESULTS**

The asbestos assessment performed of the Exit 217 North Meeting Street on/off-ramps in July 2015 included the assessment and bulk sampling of suspect ACMs to include asphaltic expansion joint material associated with the concrete roadway decking. Based on the bulk samples collected and analyzed no ACMs were identified. The EPA and OSHA define materials as asbestos containing if an asbestos content >1% is detected in a representative sample.

A location map is provided in Appendix I, and a diagram of the asbestos bulk sample locations is provided in Appendix II. A copy of the inspector's SCDHEC license is provided in Appendix II, and the laboratory analyses and chain-of-custody records are provided in Appendix IV. Photographs of the structure are provided in Appendix VI.

The following summary table (Table 1) exhibits the sample number, location, type of material tested, approximate quantity of the material sampled, condition of the material, and corresponding result for each sample.

**TABLE I: SUMMARY OF ASBESTOS BULK SAMPLE ANALYSIS**

Polarized Light Microscopy									
Sample Number	Location	Material	<sup>2</sup> Approx. Quantity	Asbestos Type	<sup>1</sup> Percent	Condition	Potential for Disturbance	Hazard Assessment	
OPN-EJ-01	Between bridge decking	Asphaltic expansion joint material	580 LF	ND	NA	NA	NA	NA	
OPN-EJ-02				ND	NA	NA	NA	NA	
<sup>3</sup> OPN-EJ-03				ND	NA	NA	NA	NA	NA
OPN-EJ-04				ND	NA	NA	NA	NA	NA

Abbreviations:

ND = No Asbestos Detected  
 NA = Not Applicable  
 LF = Linear Feet

<sup>1</sup>The EPA, SCDHEC and OSHA defines a material as asbestos containing if an asbestos content greater than one percent (>1%) is detected in a representative sample.

<sup>2</sup>The quantities are estimated, and should not be used for bidding purposes, as field conditions should be verified.

<sup>3</sup>Samples analyzed by TEM to confirm negative results reported by PLM analysis.



#### 4. ABBREVIATIONS AND HAZARD KEY ASSESSMENT

In accordance with the EPA and SCDHEC, confirmed ACM is assigned a hazard assessment based on its present condition and potential for disturbance. The hazard assessment is used as a tool for prioritization in remedial actions regarding ACM(s). The following key exhibits the criteria that compose the hazard assessment. No ACMs were identified in the bulk samples collected and analyzed, therefore the hazard assessment key does not apply.

##### Present Condition

F = Friable

NF = Non-friable

G = Good (Very localized limited damage)

D = Damaged (Damage of less than 10% distributed and less than 25% localized)

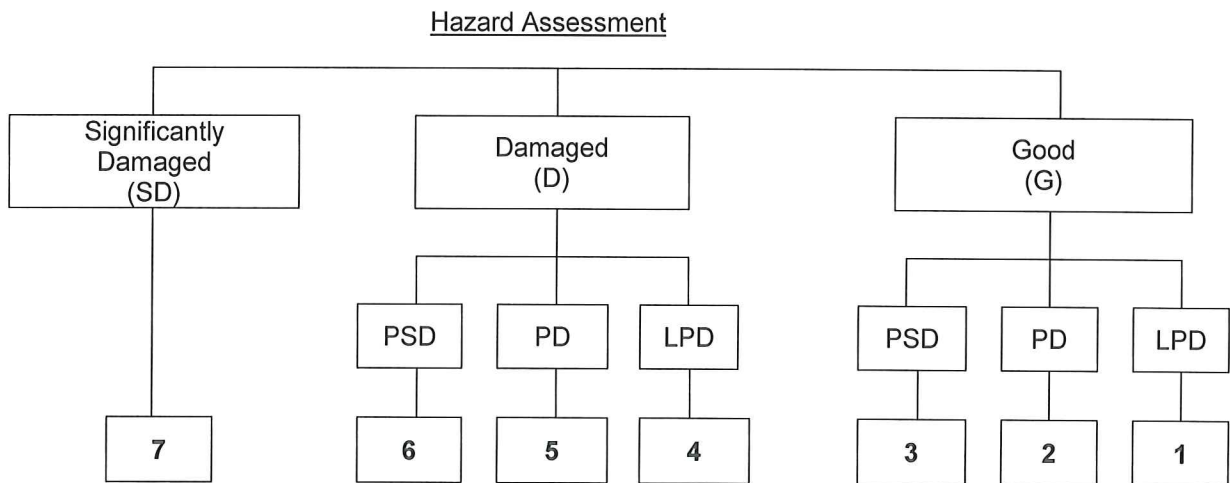
SD = Significantly Damaged (Damage equal to or greater than 10% distributed, 25% localized)

##### Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and Air Erosion all of Low Concern)

PD = Potential for Damage (Contact, Vibration, or Air Erosion of Moderate Concern)

PSD = Potential for Significant Damage (Contact, Vibration, or Air Erosion of High Concern)



#### 5. CONCLUSIONS AND RECOMMENDATIONS

The asbestos assessment conducted in July 2015 of the Exit 217 North Meeting Street on/off-ramps located in North Charleston, South Carolina, did not identify the presence of ACMs. If additional suspect ACMs are discovered during the planned demolition and disposal activities, bulk samples should be collected by a SCDHEC licensed inspector and analyzed for asbestos content. An application for demolition, along with a copy of this report, must be submitted to SCDHEC 10 weekdays prior to demolition activities. This report should be provided to the contractor(s) to assist with compliance with applicable State and Federal regulations.



**APPENDIX I**

SITE LOCATION MAP



SCALE:	NTS
APPROVED BY:	TWR
DRAWN BY:	TWR
DATE:	JULY 24, 2015



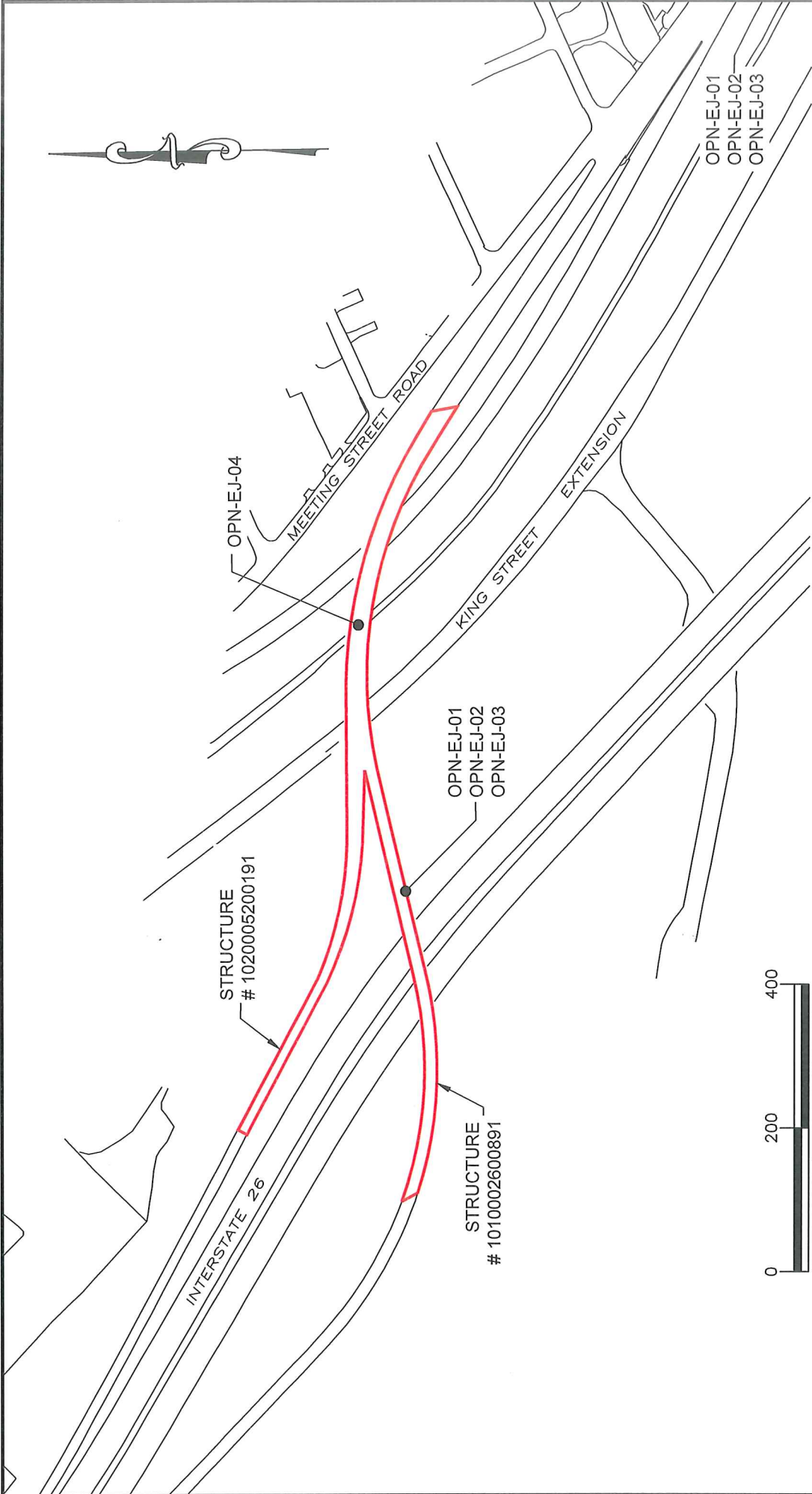
**SITE LOCATION**  
 Exit 217 North Meeting Street On and Off-ramps  
 Structure# 101002600891 and 102005200191  
 North Charleston, South Carolina  
 S&ME Project No. 1413-15-075

FIGURE NO.  
**1**

## **APPENDIX II**

### DIAGRAM OF BULK SAMPLE LOCATIONS





LEGEND

—XXX-XX-XX BULK SAMPLE LOCATION

NOTE: NO ASBESTOS WAS DETECTED IN THE BULK SAMPLES COLLECTED AND ANALYZED.

<p>SCALE: AS SHOWN</p>		<p><b>S&amp;ME</b> ENGINEERING • TESTING ENVIRONMENTAL SERVICES</p>	<p><b>ASBESTOS ASSESSMENT</b> <b>EXIT 217 NORTH MEETING STREET ON/OFF RAMP</b> STRUCTURES 102005200191 AND 101002600891 NORTH CHARLESTON, SOUTH CAROLINA</p>	FIGURE NO.
<p>APPROVED BY: LAJ</p>				1
<p>DATE: 7-24-2015</p>				
<p>PROJECT NO. 1413-15-075</p>				



**APPENDIX III**

COPY OF INSPECTOR'S SCDHEC LICENSE

---

**SCDHEC ISSUED**  
**Asbestos ID Card**

---

William Seaborn

Expires



AIR SAMPLER  
CONSULT BI

AS-00416 02/16/16  
BI-01317 02/17/16

## **APPENDIX IV**

### LABORATORY ANALYSIS SHEETS AND CHAIN OF CUSTODY RECORDS



9771D Southern Pine Boulevard  
 Charlotte, NC 28273  
 704-940-1830 Fax 704-565-4929  
 NVLAP Lab Code 102075-0

**POLARIZED LIGHT MICROSCOPY**  
 Performed by EPA 600/R-93/116 Method

## Asbestos Analysis Summary

**Client Name** Charleston Branch  
**Client Job** SCDOT Port Access N. Meeting St W/E Ramp

**Date Received** 7/13/2015  
**Date Analyzed** 7/16/2015

**Job Number** 1413-15-075

Lab ID:	Sample #:	Appearance	Comments	Asbestos %/Type	Non-Asbestos Fibrous %/Type	Non-Fibrous %/Type
15-8269	OPN-EJ-01	BLACK FIBROUS		ND	5 CELLULOSE	95 OTHER
15-8270	OPN-EJ-02	BLACK FIBROUS		ND	5 CELLULOSE	95 OTHER

Analyzed by: Jane Wasilewski

Additional Comments:

Jane Wasilewski  
 Laboratory Manager

For heterogeneous samples easily separated into subsamples, and for layered samples, each component is analyzed separately. ND = None Detected (Asbestos Not Present In Representative Sample), RCF= (Refractory Ceramic Fiber) The results relate only to the items tested. The sample may not be fully representative of the larger material in question. This sheet may not be reproduced except with permission from SME, Inc. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Although Polarized Light Microscopy (PLM/Dispersion Staining) (Method EPA 600/R-93/116) is the specified method for analysis of bulk material samples for asbestos under the EPA Asbestos Hazard Emergency Response Act, there have been reports that this method may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Such materials include floor tile, mastic and asphaltic roofing. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of <1% or "None Detected" for these materials is recommended.







**EMSL Analytical, Inc.**

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

EMSL Order: 411504889  
CustomerID: SMEI54  
CustomerPO: 62503  
ProjectID:

Attn: **Jane Wasilewski**  
**S&ME, Inc.**  
**9771D Southern Pine Blvd.**  
**Charlotte, NC 28273**


Phone:  
Fax: (704) 565-4929  
Received: 07/17/15 12:30 PM  
Analysis Date: 7/20/2015  
Collected:

Project: 1413-15-075

**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
OPN-EJ-03 411504889-0001	- Exp. Joint	Black Fibrous Heterogeneous	100	<0.1 Fibrous (other)	No Asbestos Detected

Analyst(s)  
Charles Harris (1)

  
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 07/21/2015 07:54:31





EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

411504889

EMSL ANALYTICAL, INC.  
376 CROMPTON ST  
CHARLOTTE, NC 28273  
PHONE: 704-525-2205  
FAX: 704-525-2382

Company: S&ME Inc.		EMSL-Bill to: <input type="checkbox"/> Same <input checked="" type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 9771D Southern Pine Blvd.		Third Party Billing requires written authorization from third party	
City: Charlotte	State/Province: NC	Zip/Postal Code: 28273	Country:
Report To (Name): Jane Wasilewski		Telephone #: 704-940-1830	
Email Address: jwasilewski@smeinc.com		Fax #:	Purchase Order: 62503
Project Name/Number:		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		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.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO-10312	<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)
<b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Bulk</b> <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique

Check For Positive Stop - Clearly Identify Homogenous Group    Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: \_\_\_\_\_ Samplers Signature: \_\_\_\_\_

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
OPN-EJ-03	Exp. Spout		
<del>OPS-EJ-03</del>	↓		

Client Sample # (s): \_\_\_\_\_ Total # of Samples: 2

Relinquished (Client): \_\_\_\_\_ Date: 7/17/15 Time: \_\_\_\_\_

Received (Lab): J. Cas Date: 7/17/15 Time: 12:30 pm w/

Comments/Special Instructions: Bill to S&ME, Inc., 9751 Southern Pine Blvd., Charlotte NC 28273

1413-15-075



**EMSL Analytical, Inc.**

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

EMSL Order: 411505035  
CustomerID: SMEI51  
CustomerPO: 39450  
ProjectID:

Attn: **Terry Richburg**  
**S&ME, Inc.**  
**620 Wando Park Boulevard**  
  
**Mount Pleasant, SC 29464**  
  
Project: 1413-15-075 Port Access Rd.

Phone: (843) 884-0005  
Fax: (843) 881-6149  
Received: 07/23/15 2:05 PM  
Analysis Date: 7/23/2015  
Collected: 7/22/2015

**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
OPN-EJ-04 411505035-0001	N. Meeting St. - Expansion Joint	Black Non-Fibrous Homogeneous	10% Cellulose	5% Ca Carbonate 85% Non-fibrous (other)	None Detected

Analyst(s) \_\_\_\_\_

Eric Loomis (1)

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 07/23/2015 15:06:07



Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

411505035

Charlotte, NC  
 175 Corporate Blvd  
 Charlotte, NC 28203  
 919.441.6749 ext. 2200  
 Fax: 919.441.6200

Company: ES&E, Inc.	EMSL Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to Different add instructions in Comments**                  Third Party Billing requires written authorization from third party</small>	
Street: 620 Wando Park Blvd		
City/State/Zip: ML Pleasant, SC 29484		
Report To (Name): Terry Richburg	Fax:	
Telephone: 843-984-0005	Email Address: richburg@esmeinc.com	
Project Name/Number: 143-15-075 Port Access Rd		
Please Provide Results:	Purchase Order: 39450	State Samples Taken: SC

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.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Charfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 TEM - Water: EPA 100.2 Fibers >10um <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5756 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) Other: <input type="checkbox"/>
--	--	--

Check For Positive Stop - Clearly Identify Homogenous Group    Filter Pore Size (Air Samples):  0.8µm  0.45µm

Samplers Name: William Seaborn    Samplers Signature: \_\_\_\_\_

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
OPN-EJ-04	Expansion Joint - N. Meeting St	PLM	7-22-15 8:35

Client Sample # (s):	Total # of Samples:
Relinquished (Client): <i>[Signature]</i>	Date: 7-22-15    Time: 11:30
Received (Lab): <i>[Signature]</i>	Date: 7/23/15    Time: 2:05pm Fk


Comments/Special Instructions:  
 Run all samples concurrently, Email to: trichburg@esmeinc.com

**APPENDIX V**

PHOTOGRAPHS



Photo 1	
	
<b>Photographer:</b> Seaborn	<b>Date:</b> 07-09-15
<b>Location/Orientation</b>	ID label on I-26 exit ramp
<b>Remarks</b>	

Photo 2	
	
<b>Photographer:</b> Richburg	<b>Date:</b> 07-24-15
<b>Location/Orientation</b>	Photo taken on King Street Extension facing North
<b>Remarks</b>	