



Limited Asbestos Assessment  
Swift Creek Elementary-Boiler Room  
5601 Tryon Road  
Raleigh, North Carolina  
S&ME Project No. 22050006C

PREPARED FOR:

Wake County Public Schools, Environmental & Grounds Department  
1551 Rock Quarry Road  
Raleigh, North Carolina 27610

PREPARED BY:

S&ME, Inc.  
3201 Spring Forest Road  
Raleigh, North Carolina 27616

February 19, 2024



February 20, 2024

Wake County Public Schools, Environmental & Grounds Department  
1551 Rock Quarry Road  
Raleigh, North Carolina 27610

Attention: Ms. Rebecca Howell

Sent Via Email to: [rhowell@wcpss.net](mailto:rhowell@wcpss.net)

Reference: **Limited Asbestos Assessment**  
**Swift Creek Elementary-Boiler Room**  
**5601 Tryon Road**  
Raleigh, North Carolina  
S&ME Project No. 22050006C

Dear Ms. Howell:

S&ME, Inc. (S&ME) provides the enclosed report detailing our Asbestos Assessment of the Swift Creek Elementary-Boiler Room located at 5601 Tryon Road in Raleigh, North Carolina. The purpose of the assessment was to identify asbestos containing materials (ACM) prior to the deconstruction and removal of the boiler. Our field services were performed on January 30, 2024, in general accordance with S&ME Proposal No. 22050006C, dated January 30, 2024 and the Master Environmental Consulting Services Agreement established between Wake County Public School System (WCPSS) and S&ME, dated June 8, 2023. The following report includes the project background, sampling and analysis procedures, findings and results, and conclusions recommendations, as necessary.

This report is provided for the sole use of Wake County Public Schools. 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 assessment and of the specific areas referenced. Based on the laboratory results, no asbestos was detected in the materials sampled.

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.**

A handwritten signature in blue ink that reads "James A. Waters".

James Waters

ENV/IH Senior Technician  
[jwaters@smeinc.com](mailto:jwaters@smeinc.com)  
919-621-6031

A handwritten signature in blue ink that reads "Josephine Martin".

Jo Martin

Project Manager  
[jmartin@smein.com](mailto:jmartin@smein.com)  
919-954-6267

Senior Reviewed by Tom Behnke, PG



# Table of Contents

Executive Summary ..... 1

1.0 Introduction ..... 2

2.0 Site and Project Description ..... 2

    2.1 Purpose ..... 2

    2.2 Site Description ..... 3

3.0 Assessment Methods ..... 3

    3.1 Asbestos Sampling and Analysis ..... 3

    3.2 Asbestos Assessment ..... 3

4.0 Results ..... 4

    4.1 Asbestos Results ..... 4

5.0 Conclusions and Recommendations ..... 4

    5.1 Asbestos Conclusions/Recommendations ..... 4

6.0 Assumptions and Limitations ..... 4

## Appendices

- Appendix I – Summary of Sampling Results
- Appendix II – Photographs
- Appendix III – Asbestos Inspector Accreditation
- Appendix IV – Laboratory Reports



## Executive Summary

S&ME Inc. (S&ME) conducted a Limited Asbestos Assessment of the Swift Creek Elementary-Boiler Room located at 5601 Tryon Road in Raleigh, North Carolina, on January 30, 2024. The purpose of the assessment was to identify the presence of asbestos containing materials (ACM) in the recently exposed boiler equipment located in the basement boiler room.

Based on the representative bulk samples collected from the boiler room equipment, and analyzed by polarized light microscopy (PLM), **asbestos was not detected.**

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



## 1.0 Introduction

Wake County Public Schools retained S&ME to conduct an asbestos assessment of the Swift Creek Elementary-Boiler Room Equipment located at 5601 Tryon Road, Raleigh, NC. The purpose of the assessment was to identify the presence of ACM in the boiler room where the boiler has been taken apart, with suspect ACM observed among the exposed equipment. The assessment was performed by Mr. Bob Bryant on January 30, 2024, in general accordance with S&ME Proposal No. 22050006C, dated January 29, 2024.

An ACM is defined by State and Federal regulations as a building material containing greater than one percent (>1%) of one of the six asbestos minerals regulated by the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA).

Renovation and demolition activities in public and commercial buildings are regulated by OSHA, EPA, and the North Carolina Department of Health and Human Services, Health Hazards Control Unit (NC-HHCU). The EPA and NC-HHCU require asbestos assessments, conducted by licensed/accredited individuals, prior to renovation and/or demolition projects. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and NC-HHCU require asbestos assessments, followed by the proper removal, and disposal of ACM that is affected by a renovation or demolition. The identification of ACMs will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos. Identification of ACM is also required by OSHA 1926.1101. The EPA, OSHA and NC-HHCU define ACM as materials containing greater than one (1) percent asbestos in a representative sample. However, OSHA also regulates materials containing less than or equal to one percent asbestos.

S&ME performed an asbestos assessment of the Swift Creek Elementary school in April and July 2022 of three permanent buildings, two modular buildings (trailers), a small storage building and the Swift Creek Park prior to demolition. Our assessment activities and findings were reported in *Asbestos Assessment (Revised)* dated September 7, 2022 (S&ME Project No, 22050006). In summary, asbestos was reported in sink coating at five classrooms, window glazing at the windows of the Gym building (Building C), and cement board over the door in the custodial closet in Room 306.

S&ME prepared an *Asbestos Abatement Design Specification*, dated November 3, 2023, for the asbestos materials identified in our assessment (S&ME Project No. 22050006B).

## 2.0 Site and Project Description

### 2.1 Purpose

The purpose of the assessment was to identify the presence of ACM prior to the deconstruction and removal of equipment in the boiler room. The assessment included the gaskets, insulations, and other interior boiler materials. An assessment strategy believed by S&ME to be appropriate for this purpose was presented in our proposal and is described in this report. The report should be interpreted only with regard to the specific location and materials referenced.



## 2.2 Site Description

The basement boiler room is located in Building C/Gym building, and was constructed in 1954, with walls of concrete masonry unit (CMU) block (CMU block sampled during a previous asbestos assessment). The equipment that was assessed included boiler sections and piping. The boiler sections and piping are comprised of metal with insulation and gaskets. Many of the boiler structures had previously been disassembled and placed in an orderly fashion near the entrance, while other sections remain in place.

## 3.0 Assessment Methods

### 3.1 Asbestos Sampling and Analysis

A visual assessment of the boiler room equipment materials was performed to determine the homogeneous areas (HAs) of suspect ACMs. Based on EPA definitions used in the Asbestos Hazard Emergency Response Act (AHERA), 40 CFR 763, a HA of asbestos-suspect (building) material has the same color and texture and is thought to be installed within the same timeframe. S&ME assessed the interior and exterior of the boiler room equipment for suspect ACMs, including thermal system insulation (TSI), surfacing materials, and miscellaneous materials. Representative samples of asbestos-suspect building materials were collected from each HA in accordance with the EPA's AHERA protocol and applicable state regulations.

Information regarding the bulk samples of each HA was collected, recorded on a chain of custody record, and submitted to Eurofins | CEI asbestos Laboratory in Cary, North Carolina for analysis by Polarized Light Microscopy (PLM), coupled with dispersion staining in general accordance with the EPA 600/R-93/116 Method. Laboratories used for sample analysis are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). The laboratory analysis reports the specific type of asbestos mineral identified (if any) and the percentage of asbestos present in each sample.

Although PLM (Method EPA 600/R-93/116) is the recommended method for analysis of bulk material samples for asbestos fibers under the EPA AHERA, there have been reports that this method alone may not identify asbestos when fiber sizes are extremely small or if they are bound in a resinous material. Typical examples of these materials include but are not limited to; floor tile and associated mastics, vinyl sheet flooring (linoleum) and mastic/adhesive, roof shingles, asphaltic roof materials, glazing putty, caulking, cove base mastic and other construction mastics/adhesives. Currently, reanalysis by Transmission Electron Microscopy (TEM) to verify results of less than one percent or "None Detected" for these materials is recommended by EPA but not currently required in North Carolina. TEM analysis has not been performed as a part of this survey effort .

Photographs of suspect materials collected as part of this survey are included in **Appendix II**.

### 3.2 Asbestos Assessment

Suspected ACM were assessed based on the observed condition (good, fair, or poor) and potential for disturbance due to the scheduled deconstruction and removal. Suspected ACM are also categorized based on the EPA's 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 includes intact ACM roofing materials, gaskets, packing, and resilient floor coverings 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).

## 4.0 Results

### 4.1 Asbestos Results

Based on the representative bulk samples collected from the boiler room equipment, analyzed by PLM, **asbestos was not detected.**

The summary of bulk asbestos results for this assessment is provided in **Appendix I**. A photographic log is provided in **Appendix II**. A copy of the asbestos inspector's accreditation is provided in **Appendix III**. The laboratory report and chain of custody records are provided in **Appendix IV**.

## 5.0 Conclusions and Recommendations

### 5.1 Asbestos Conclusions/Recommendations

**ACM was not identified** in areas to be affected by the deconstruction of equipment in the boiler room. Therefore, special measures are not required in the removal of the boiler room equipment. Maintain a copy of this report.

If additional suspect ACMs not included in this report are discovered and will be disturbed by demolition activities, bulk samples must be collected by an accredited asbestos inspector and analyzed for asbestos content, prior to disturbance of the suspect material(s).

## 6.0 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.

S&ME did not perform destructive sampling or access areas which were deemed unsafe or inaccessible in the subject structure. Suspected ACMs may be located in other walls, voids, pipe chases, heaters, air handling units, etc. If concealed materials are subsequently encountered, they should be assumed to contain asbestos until bulk samples are collected and analyzed for asbestos content. The possibility exists that suspect materials were undetected in inaccessible or concealed areas such as pipe chases or wall voids. If additional suspect materials are discovered during the planned destructive activities, bulk samples must be collected by an accredited asbestos inspector and analyzed for asbestos content.

# Appendices

## **Appendix I – Summary of Sampling Results**

# SUMMARY OF ASBESTOS SAMPLING



<b>General Information</b>							
<b>Project Name:</b>	WCPSS/Swift Creek Elementary	<b>Inspector:</b>	Bob Bryant	<b>Accreditation / License Number:</b>	10545	<b>State:</b>	North Carolina
<b>S&amp;ME Project Number:</b>	22050006C	<b>Description of Structure:</b> Boiler Room					
<b>Date of Assessment:</b>	1/30/24						

HA	Material Description		Material Location	<sup>1</sup> Quantity (Units)		<sup>2</sup> Cat	<sup>3</sup> Type	<sup>4</sup> Cond	<sup>5</sup> PFD	Sample Information				
										Sample Number	Building Floor	<sup>6</sup> Location	Layer	Percent / Type Asbestos
X	<b>Type:</b>	Gasket	Perimeter of Boiler Sections	11	SF	F	Misc	Poor	High	SC24-01		Remaining Section of Boiler in Place	Gasket	None Detected
	<b>Texture:</b>	Fluffy										Section of Boiler Beside the Door	Gasket	None Detected
	<b>Color:</b>	Gray												
	<b>Size:</b>													
	<b>Other:</b>													
Y	<b>Type:</b>	Insulation	Top of Boiler Sections	11	SF	F	Misc	Poor	High	SC24-03		Remaining Section of Boiler in Place	Insulation	None Detected
	<b>Texture:</b>	Fluffy										Section of Boiler Near Door	Insulation	None Detected
	<b>Color:</b>	White										Section of Boiler Beside Wall	Insulation	None Detected
	<b>Size:</b>													
	<b>Other:</b>													
Z	<b>Type:</b>	Gasket	Inside of Boiler, Between Sections	22	SF	I	Misc	Fair	High	SC24-06		Remaining Section of Boiler in Place	Gasket	None Detected
	<b>Texture:</b>	Smooth										Section of Boiler Near Door	Gasket	None Detected
	<b>Color:</b>	Black												
	<b>Size:</b>													
	<b>Other:</b>													

**Notes:** Ceramic tiles in restrooms. 254, no access. Sink coatings in all rooms. Art room and 112 have different sinks. Metal beams visible from 1st floor Mech. Rms. have fireproofing.

Minimum Sampling Requirements		
Thermal System Insulation	Surfacing Materials	Miscellaneous Materials
≥ 3 Samples	< 1,000 SF = 3 Samples	≥ 2 Samples (EPA)
Patch < 6 LF = 1 Sample (EPA)	1,000 SF – 5,000 SF = 5 Samples	≥ 3 Samples (SC)
Patch < 6 LF = 3 Samples (SC)	> 5,000 SF = 7 Samples	

Quantities are approximate and should not be used for cost estimates or bidding purposes.

ND = None Detected	NA = Not Applicable	HA = Homogenous Area
<sup>1</sup> Quantity: SF = Square Feet	LF = Linear Feet	CF = Cubic Feet
<sup>2</sup> Category: F = Friable	I = Category I, Non-Friable	II = Category II, Non-Friable
<sup>3</sup> Type: Misc = Miscellaneous	Sur = Surfacing	TSI = Thermal System Insulation
<sup>4</sup> Condition: Good, Fair, or Poor		
<sup>5</sup> PFD: Potential for Disturbance due to Renovation or Demolition: Low or High		
<sup>6</sup> Sample Location: Refer to attached floor plan(s) / field drawing(s) for specific sample locations.		

# SUMMARY OF ASBESTOS SAMPLING



<b>General Information</b>					
Project Name:	WCPSS/Swift Creek Elementary	Inspector:	Bob Bryant	Accreditation / License Number:	10545
S&ME Project Number:	22050006C	Description of Structure:	Boiler Room		
Date of Assessment:	1/30/24				

HA	Material Description		Material Location	<sup>1</sup> Quantity (Units)		<sup>2</sup> Cat	<sup>3</sup> Type	<sup>4</sup> Cond	<sup>5</sup> PFD	Sample Information				
										Sample Number	Building Floor	<sup>6</sup> Location	Layer	Percent / Type Asbestos
AA	Type:	Gasket	Pipes Connected to Boiler	4 Each	SF	I	Misc	Good	High	SC24-08		Pipe Above Boiler	Gasket	None Detected
	Texture:	Smooth								SC24-09		Pipe Out of Lower Section	Gasket	None Detected
	Color:	Black/Green												
	Size:													
	Other:													
AB	Type:	Interior Material	Inside of Boiler	30	SF	I	Misc	Poor	High	SC24-10		Boiler Section Near Wall	Insulation	None Detected
	Texture:	Rough								SC24-11		Boiler Section Still in Place	Insulation	None Detected
	Color:	White								SC24-12		Boiler Section Near Door	Insulation	None Detected
	Size:													
	Other:													
	Type:													
	Texture:													
	Color:													
	Size:													
	Other:													

**Notes:** Ceramic tiles in restrooms. 254, no access. Sink coatings in all rooms. Art room and 112 have different sinks. Metal beams visible from 1st floor Mech. Rms. have fireproofing.

Minimum Sampling Requirements		
Thermal System Insulation	Surfacing Materials	Miscellaneous Materials
≥ 3 Samples	< 1,000 SF = 3 Samples	≥ 2 Samples (EPA)
Patch < 6 LF = 1 Sample (EPA)	1,000 SF – 5,000 SF = 5 Samples	≥ 3 Samples (SC)
Patch < 6 LF = 3 Samples (SC)	> 5,000 SF = 7 Samples	

Quantities are approximate and should not be used for cost estimates or bidding purposes.

ND = None Detected	NA = Not Applicable	HA = Homogenous Area
<sup>1</sup> Quantity: SF = Square Feet	LF = Linear Feet	CF = Cubic Feet
<sup>2</sup> Category: F = Friable	I = Category I, Non-Friable	II = Category II, Non-Friable
<sup>3</sup> Type: Misc = Miscellaneous	Sur = Surfacing	TSI = Thermal System Insulation
<sup>4</sup> Condition: Good, Fair, or Poor		
<sup>5</sup> PFD: Potential for Disturbance due to Renovation or Demolition: Low or High		
<sup>6</sup> Sample Location: Refer to attached floor plan(s) / field drawing(s) for specific sample locations.		

## **Appendix II – Photographs**

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



<b>1</b>	<b>Location / Orientation</b>	Boiler Room-Right Side of Room from Entrance
	<b>Remarks</b>	Remaining Boiler Section in Place and Piping



Date: 1/30/2024

Photographer: Bob Bryant

<b>2</b>	<b>Location / Orientation</b>	Boiler Room-Wall and Window at Entrance
	<b>Remarks</b>	Boiler Sections



Date: 1/30/2024

Photographer: Bob Bryant

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



		Date: 1/30/2024
		Photographer: Bob Bryant
3	<b>Location / Orientation</b>	Perimeter of Boiler Section in Place
	<b>Remarks</b>	Homogeneous Areas X (gasket), Z (gasket), and AB (interior material). No asbestos reported in materials.

		Date: 1/30/2024
		Photographer: Bob Bryant
4	<b>Location / Orientation</b>	Remaining Boiler Section in Place Perimeter
	<b>Remarks</b>	Sample SC24-01, gray gasket. No asbestos reported.

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



		Date: 1/30/2024
		Photographer: Bob Bryant
<b>5</b>	<b>Location / Orientation</b>	Perimeter of Boiler Section by Door
	<b>Remarks</b>	Sample SC24-02, gray gasket. No asbestos reported.

		Date: 1/30/2024
		Photographer: Bob Bryant
<b>6</b>	<b>Location / Orientation</b>	Remaining Boiler Section in Place Perimeter
	<b>Remarks</b>	Sample SC24-03, white Insulation. No asbestos reported.

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



<b>7</b>	<b>Location / Orientation</b>	Perimeter of Boiler Section by Door
	<b>Remarks</b>	Sample SC24-04, white insulation. No asbestos reported.
		Date: 1/30/2024
Photographer: Bob Bryant		

<b>8</b>	<b>Location / Orientation</b>	Perimeter of Boiler Section by Left Wall
	<b>Remarks</b>	Sample SC24-05, white insulation. No asbestos reported.
		Date: 1/30/2024
Photographer: Bob Bryant		

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



		Date: 1/30/2024
		Photographer: Bob Bryant
<b>9</b>	<b>Location / Orientation</b>	Section of Boiler Near Entrance
	<b>Remarks</b>	Sample SC24-07, black gasket. No asbestos reported.

		Date: 1/30/2024
		Photographer: Bob Bryant
<b>10</b>	<b>Location / Orientation</b>	Pipe Above Boiler in Place
	<b>Remarks</b>	Sample SC24-08, black-green gasket. No asbestos reported.

**WCPSS-Swift Creek Elementary**

**Boiler Room**

5601 Tryon Rd. Raleigh, North Carolina

S&ME Project No. 22050006C



		Date: 1/30/2024
		Photographer: Bob Bryant
11	<b>Location / Orientation</b>	Pipe at the Base of a Boiler Section Near the Entrance
	<b>Remarks</b>	Sample SC24-09, black-green gasket. No asbestos reported.

## **Appendix III - Asbestos Inspector Accreditation**



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

May 30, 2023

Bobby G Bryant Jr
3201 Spring Forest Rd
Raleigh, NC 27616

Dear Mr. Bryant:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 10545, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on MAY 31, 2024. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to May 31, 2024. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Sincerely,

Ed Norman

Ed Norman
Program Manager
Health Hazards Control Unit

North Carolina Asbestos Accreditation card for Bobby G Bryant Jr. Includes photo, name, address, and a table with expiration date (05-31-2024) and class details (AIR MONITOR, INSPECTOR, SUPERVISOR).

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES . DIVISION OF PUBLIC HEALTH

LOCATION: 5505 Six Forks Road, Building 1, Raleigh, NC 27609
MAILING ADDRESS: 1912 Mail Service Center, Raleigh, NC 27699-1912
www.ncdhhs.gov . TEL: 919-707-5950 . FAX: 919-870-4808



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## **Appendix IV – Laboratory Report**

January 31, 2024

S&ME INC. - Raleigh  
3201 Spring Forest Road  
Raleigh, NC 27616

**CLIENT PROJECT:** WCPSS / Swift Creek, 22050006C  
**CEI LAB CODE:** B241929

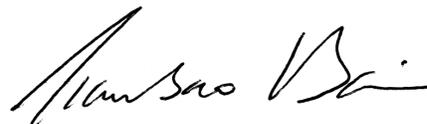
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on January 30, 2024. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director



CEI

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# ASBESTOS ANALYTICAL REPORT

## By: Polarized Light Microscopy

Prepared for

**S&ME INC. - Raleigh**

---

CLIENT PROJECT: WCPSS / Swift Creek, 22050006C

LAB CODE: B241929

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 01/31/24

TOTAL SAMPLES ANALYZED: 12

# SAMPLES >1% ASBESTOS:



CEI

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** WCPSS / Swift Creek, 22050006C

**LAB CODE:** B241929

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
SC24-01		B241929.01	Tan	Gasket	None Detected
SC24-02		B241929.02	Tan	Gasket	None Detected
SC24-03		B241929.03	White	Insulation	None Detected
SC24-04		B241929.04	White	Insulation	None Detected
SC24-05		B241929.05	White	Insulation	None Detected
SC24-06		B241929.06	Black	Gasket	None Detected
SC24-07		B241929.07	Black	Gasket	None Detected
SC24-08		B241929.08	Green	Gasket	None Detected
SC24-09		B241929.09	Green	Gasket	None Detected
SC24-10		B241929.10	White	Insulation	None Detected
SC24-11		B241929.11	White	Insulation	None Detected
SC24-12		B241929.12	White	Insulation	None Detected



CEI

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** S&ME INC. - Raleigh  
3201 Spring Forest Road  
Raleigh, NC 27616

**Lab Code:** B241929  
**Date Received:** 01-30-24  
**Date Analyzed:** 01-31-24  
**Date Reported:** 01-31-24

**Project:** WCPSS / Swift Creek, 22050006C

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>SC24-01</b> B241929.01	Gasket	Homogeneous Tan Fibrous Loosely Bound	90%	Fiberglass	10%	Binder	None Detected
<b>SC24-02</b> B241929.02	Gasket	Homogeneous Tan Fibrous Loosely Bound	90%	Fiberglass	10%	Binder	None Detected
<b>SC24-03</b> B241929.03	Insulation	Homogeneous White Fibrous Loosely Bound	85%	Fiberglass	15%	Mineral Wool	None Detected
<b>SC24-04</b> B241929.04	Insulation	Homogeneous White Fibrous Loosely Bound	85%	Fiberglass	15%	Mineral Wool	None Detected
<b>SC24-05</b> B241929.05	Insulation	Homogeneous White Fibrous Loosely Bound	85%	Fiberglass	15%	Mineral Wool	None Detected
<b>SC24-06</b> B241929.06	Gasket	Homogeneous Black Non-fibrous Bound	<1%	Cellulose	95%	Binder Rust	None Detected
<b>SC24-07</b> B241929.07	Gasket	Homogeneous Black Non-fibrous Bound	<1%	Cellulose	95%	Binder Rust	None Detected



CEI

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** S&ME INC. - Raleigh  
3201 Spring Forest Road  
Raleigh, NC 27616

**Lab Code:** B241929  
**Date Received:** 01-30-24  
**Date Analyzed:** 01-31-24  
**Date Reported:** 01-31-24

**Project:** WCPSS / Swift Creek, 22050006C

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous	Non-Fibrous			
<b>SC24-08</b> B241929.08	Gasket	Homogeneous Green Fibrous Bound	15%	Cellulose	85%	Binder	None Detected
<b>SC24-09</b> B241929.09	Gasket	Homogeneous Green Fibrous Bound	15%	Cellulose	85%	Binder	None Detected
<b>SC24-10</b> B241929.10	Insulation	Homogeneous White Non-fibrous Bound	<1%	Cellulose	70% 30% <1%	Binder Calc Carb Rust	None Detected
<b>SC24-11</b> B241929.11	Insulation	Homogeneous White Non-fibrous Bound	<1%	Cellulose	70% 30% <1%	Binder Calc Carb Rust	None Detected
<b>SC24-12</b> B241929.12	Insulation	Homogeneous White Non-fibrous Bound	<1%	Cellulose	70% 30% <1%	Binder Calc Carb Rust	None Detected

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**LEGEND:** Non-Anth = Non-Asbestiform Anthophyllite  
Non-Trem = Non-Asbestiform Tremolite  
Calc Carb = Calcium Carbonate

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**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

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**REPORTING LIMIT:** <1% by visual estimation

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**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

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**REGULATORY LIMIT:** >1% by weight

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Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**

  
\_\_\_\_\_  
Madelyn Schmidt

**APPROVED BY:**

  
\_\_\_\_\_  
Tianbao Bai, Ph.D., CIH  
Laboratory Director



# CHAIN OF CUSTODY

12

CEI

730 SE Maynard Road, Cary, NC 27511  
Tel: 866-481-1412; Fax: 919-481-1442

ECEI Lab Code: **B241929**  
ECEI Lab I.D. Range:

COMPANY INFORMATION	PROJECT INFORMATION
ECEI CLIENT #:	Job Contact: <b>Janet Phillips</b>
Company: <b>S2ME Inc</b>	Email / Tel: <b>Jphillips@smeinc.com</b>
Address: <b>3201 Spring Forest Rd</b>	Project Name: <b>WCPSS/Swift Creek</b>
<b>Raleigh, NC 27616</b>	Project ID#: <b>22050006C</b>
Billing Email:	PO #: <b>22050006C</b>
Tel: <b>919-872-2660</b>	State of sample origin <b>NC</b>

ECEI standard terms are Net 30 days

**IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.**

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600/R-93/116	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600/R-93/116	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600/R-93/116	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600/R-93/116	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR*	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD / EPA 600/R-93/116 Sec. 2.5.5.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Blanks should be taken from the same sample lot as field samples.

REMARKS / SPECIAL INSTRUCTIONS:		<input checked="" type="checkbox"/> Accept Samples <input type="checkbox"/> Reject Samples	
Relinquished By:	Date/Time	Received By:	Date/Time
<b>BJ/Bray</b>	<b>1/30/24 / 1425</b>	<b>KM</b>	<b>1/30/24 2:30</b>

By submitting samples, you are agreeing to ECEI's Terms and Conditions.  
Samples will be disposed of 30 days after analysis

drop off

