

Asbestos Survey Report

2816 Avondale Mill Road
Macon, GA

April 27, 2021

GEC Project No. HN217251



Prepared for:

Macon-Bibb County Industrial Authority
Macon, Georgia

Prepared by:

Geotechnical & Environmental Consultants, Inc., A Terracon Company
Macon, Georgia

GEC



GEOTECHNICAL
&
ENVIRONMENTAL
CONSULTANTS, INC
A Terracon COMPANY

April 27, 2021

Mr. Gary Wilson
Project Manager
Macon-Bibb County Industrial Authority
439 Mulberry Street
Macon, Georgia 31201

Email: gwilson@mbcia.com

Re: Asbestos Survey Results
2816 Avondale Mill Road
Macon, Georgia
GEC Project No. HN217251

Dear Mr. Wilson:

Geotechnical & Environmental Consultants, Inc., A Terracon Company (GEC), is pleased to present this letter report of the asbestos survey for the above referenced site. This letter details the results of the sampling and the Appendix contains data and text that outline the procedures documenting the results of the survey event.

Project Information

An Asbestos Hazard Emergency Response Act/Asbestos School Hazard Abatement Reauthorization Act (AHERA/ASHARA) accredited Asbestos Inspector with GEC collected multiple samples of suspect asbestos-containing materials (ACM) from the site. The samples were collected and analyzed to specifically target observed suspect materials within the noted structure interior, exterior, and observed debris within the grounds of the subject property. It is our understanding the structure is scheduled for demolition.

Suspect ACM samples were collected in general accordance with the sampling protocols outlined in EPA regulation 40 CFR 763, (AHERA) and analyzed by EPA Method 600/R-93/116, *Determination of Asbestos in Bulk Building Materials*. The samples were submitted on April 7, 2021, under appropriate Chain-of-Custody procedures to Analytical Environmental Services, Inc. (AES), in Atlanta, Georgia, a laboratory accredited for Polarized Light Microscopy (PLM) and Point Count Method (PCM) analysis of bulk samples for asbestos content.

Although reasonable efforts were made to identify and sample all accessible suspect materials, additional suspect materials could have been located behind walls, above ceilings, in voids or in other concealed areas. Our conclusions and recommendations, with respect to abatement and/or demolition, were based on the available analytical data.

Asbestos Survey Results

2816 Avondale Mill Road ■ Macon, GA

April 27, 2021 ■ GEC Project No. HN217251

This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. No warranty expressed or implied is made.

Findings

The subject property is presently unoccupied. There were three separate structures located on the subject site. For the purpose of this report, each of the structures was assigned a designation of Bldg. 1, Bldg. 2, and Main building. The interior of Bldg. 1 was primarily of masonry block and brick with wood studded walls and a concrete slab, with exterior being of masonry construction and asphalt shingled roof. Bldg. 2 was primarily of wood construction with an asphalt shingle like siding on the exterior with a wood floor. The Main building interior was primarily of sheetrock and wood framed construction. The exterior of the Main building was primarily of brick with an asphalt shingled roof.

The materials sampled in Bldg. 1 & Bldg. 2 included: interior felt paper, roof shingles, roof felt and layered asphalt shingled siding. None of the samples collected from Bldg. 1 or Bldg. 2 were reported to contain asbestos.

The materials sampled in the Main building included: **green flooring front patio**, 12" x 2" ceiling tile, **green 2" x 2" block kitchen flooring**, **wall board joint compound**, wall board (sheetrock), **9" x 9" floor tile bathroom**, 1' x 1' ceiling tile, exterior window caulk, roofing with felt and exterior window glaze.

Table 1 below provides a summary of identified ACM. Along with the asbestos detections, the asbestos laboratory report, the chain of custody, the inspectors' latest accreditation, a description of the survey methodology, the laboratory's procedures, and laboratory accreditation information can be viewed in the Appendix to this report. Photographs are also included.

Table 1: Asbestos Containing Materials (>1% Asbestos) and Assumed Materials

Sample ID	Material Description	Sample Location	% and Type Asbestos	Category	Estimated Quantity*
2816M-1A Layer 2	Green Flooring – Backing	Front Patio	40% Chrysotile	Cat I	192 SF
2816M-1B Layer 2	Green Flooring – Backing	Front Patio	40% Chrysotile		
2816M-3A Layer 2	Green 2"x2" Block Flooring – Backing	Kitchen	35% Chrysotile	Cat I	324 SF
2816M-3B Layer 2	Green 2"x2" Block Flooring – Backing	Kitchen	35% Chrysotile		
2816M-4A Layer 1	Joint Compound	Wall	2% Chrysotile	RACM	4,250 SF
2816M-4B Layer 1	Joint Compound	Wall	2% Chrysotile		
2816M-4C Layer 1	Joint Compound	Ceiling	2% Chrysotile		
2816M-6A Layer 1	9"x9" Floor Tile	Bathroom	2% Chrysotile	Cat I	60 SF
2816M-6B Layer 1	9"x9" Floor Tile	Bathroom	2% Chrysotile		

SF =Square Feet; Cat I= Nonfriable ACM that can become friable during demolition and or renovation; Cat II = All other nonfriable ACM (i.e. caulks, putties, mastics, window glaze compound, etc.); RACM = Regulated ACM

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***Estimated quantities** are based on cursory field observations, and actual quantities may vary significantly, especially if ACM are present in hidden and/or inaccessible areas not evaluated as part of this survey

The ACM listed above may be found in rooms of the structure other than the sampled areas listed in the above sample location column. If any asbestos is detected in a sampling group (homogeneous area), all material of this type is considered ACM, even if some sampled locations do not report asbestos. Other sampled materials in sampling groups were reported as non-detect (ND) for asbestos and results can be found in the attached laboratory report.

Recommendations and General Comments

Asbestos was detected in the suspect samples collected. Notification to the Georgia EPD 10 days prior to the demolition is required under the National Emissions Standards for Hazardous Air Pollutants (NESHAP) regulation regardless of whether ACM is present.

This survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions and locations. The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during our survey. Consequently, the information contained herein should not be relied upon to represent conditions that existed prior to or after this survey. Terracon does not warrant the services of regulatory agencies, laboratories, or other third parties supplying information that may have been used in the preparation of this report.

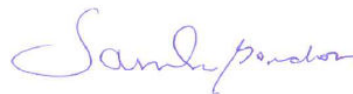
GEC greatly appreciates the opportunity to serve you and remains available to further assist you as needed. If you have any questions about this report, please do not hesitate to contact us at (478) 757-1606.

Sincerely,

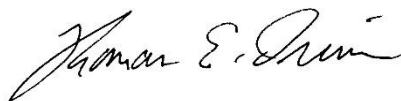
Geotechnical & Environmental Consultants, Inc., A Terracon Company



David F. Price
Environmental Technician IV
Asbestos Inspector #18347



Tameka Gordon
Environmental Services Manager
Asbestos Inspector #5384



Thomas E. Driver, P.E.
President/Senior Principal

Attachments

Asbestos Survey Results

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ATTACHMENTS

Site Photographs



**General
Photo
of Bldg.
1**



**General
view of
Bldg. 2**

Site Photographs

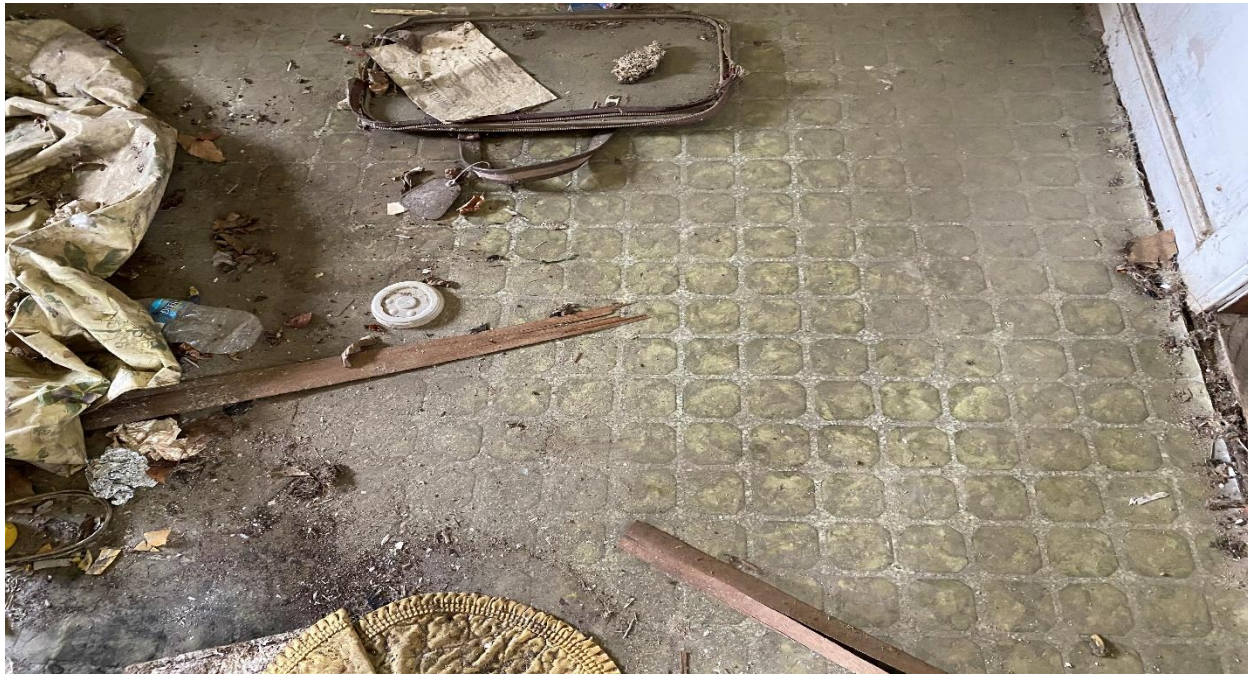


**General
view of
Main
Building**



**General
of the
asbestos
flooring
located
in the
patio
area**

Site Photographs



General view of the asbestos containing flooring in the kitchen



General of the asbestos floor tile located in the bathroom

Site Photographs



General view of the asbestos containing joint compound wll system located on the interior

**CHAIN OF CUSTODY
 BULK ASBESTOS ANALYSIS**

Client Name: CFC Project Name: 2816 Avondale Mill Rd
 Address: 514 Hester Industrial Blvd Project Number: HN217251
 City, State, Zip: Macon GA 31204 Sampling Date: 4-15-21
 Contact: D. Price Phone #: _____
 Sampler's Name: D. Price Invoice To Name(s): _____
 Report To: _____ Invoice To Email(s): _____
 Report to Email: _____ PO #: _____

Sample ID	Sample Location/Description	Analysis Requested	Turnaround Time (TAT)	Comments
1 2816M-1A	Green flooring - front patio	PLM STC		Main
2 2816M-1B	Green flooring - front patio			
3 2816M-2A	12'x12' ceiling tile - front patio			
4 2816M-2B	12'x12' ceiling tile - front patio			
5 2816M-3A	Green 2"x2" block kitchen flooring			
6 2816M-3B	Green 2"x2" block kitchen flooring			
7 2816M-4A	Joint compound			
8 2816M-4B	Joint compound			
9 2816M-4C	Joint compound - ceiling			
10 2816M-5A	Wall board			
11 2816M-5B	Wallboard			
12 2816M-6A	9"x9" floor tile - bathroom			
13 2816M-6B	9"x9" floor tile - bathroom			
14 2816M-7A	1'x1' ceiling tile - back bedroom			
15 2816M-7B	1'x1' ceiling tile - back bedroom			
16 2816M-8A	Exterior window caulk			
17 2816M-8B	Exterior window caulk			
18 2816M-9A	Roof shingle with felt			
19 2816M-9B	Roof shingle with felt			
20 2816M-10A	Exterior window glaze - patio			↓

Relinquished by: [Signature]
 Received by: [Signature]
 Relinquished by: [Signature]
 Received by: _____

Date/Time: _____
 Date/Time: 4-16-21 10:30
 Date/Time: 4-16-21
 Date/Time: _____

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT.

Asbestos COC 7.6.18

FOR LAB USE ONLY

Lab Recipient: Yadot Kazanjis Date/Time: 4/16/21 1:24p Method of Shipment: Courier

**CHAIN OF CUSTODY
 BULK ASBESTOS ANALYSIS**

Client Name: _____	Project Name: <u>2816 Avondale Mill Rd</u>
Address: _____	Project Number: <u>HNZ17251</u>
City, State, Zip: _____	Sampling Date: <u>4-15-21</u>
Contact: _____	Phone #: _____
Sampler's Name: _____	Invoice To Name(s): _____
Report To: _____	Invoice To Email(s): _____
Report to Email: _____	PO #: _____

Spring As Phase 1

Sample ID	Sample Location/Description	Analysis Requested	Turnaround Time (TAT)	Comments
1 <u>2816-M 10B</u>	<u>Exterior window glaze - patio</u>	<u>PLM</u>	<u>STU</u>	<u>Main</u>
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Relinquished by: _____	Date/Time: <u>4-16-21 1030</u>
Received by: _____	Date/Time: <u>4-16 1030</u>
Relinquished by: _____	Date/Time: <u>4-16 124</u>
Received by: _____	Date/Time: _____

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT.

Asbestos COC 7.6.18

FOR LAB USE ONLY		
Lab Recipient: _____	Date/Time: _____	Method of Shipment: _____



3080 Presidential Drive
Atlanta, GA 30340
Tel : (770) 457-8177
Fax: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report



Report Date: 23-Apr-21

Client Name:	GeoTechnical & Environmental Consultants	AES Job Number:	2104L25
Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-1A Layer: 1	2104L25-001A	Green Flooring - Front patio	ND	ND	ND	ND	ND	ND	Vinyl
2816M-1A Layer: 2	2104L25-001A	Green Flooring - Front patio	40	ND	ND	ND	ND	ND	Backing
2816M-1A Layer: 3	2104L25-001A	Green Flooring - Front patio	ND	ND	ND	ND	ND	ND	Glue
2816M-1B Layer: 1	2104L25-002A	Green Flooring - Front patio	ND	ND	ND	ND	ND	ND	Vinyl
2816M-1B Layer: 2	2104L25-002A	Green Flooring - Front patio	40	ND	ND	ND	ND	ND	Backing
2816M-1B Layer: 3	2104L25-002A	Green Flooring - Front patio	ND	ND	ND	ND	ND	ND	Glue

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite

For comments on the samples, see the individual analysis sheets.

ND = None Detected

AES, Inc. is accredited by NIST's National Voluntary Laboratory Accreditation Program (NVLAP) for Polarized Light Microscopy (PLM) analysis, Lab Code 102082-0. All analyses performed in accordance with EPA "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (EPA 600/M4-82-020), 1982 as found in 40 CFR, Part 763, Appendix E to Subpart E and "Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116), 1993.

These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

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Microanalyst:

Svetlana Arkhipov

QC Analyst:

Yelena Khanina



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Atlanta, GA 30340
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Fax: (770) 457-8188

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Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-2A Layer: 1	2104L25-003A	12'X12' Ceiling tile - Front patio	ND	ND	ND	ND	ND	ND	Paint included as binder
2816M-2B Layer: 1	2104L25-004A	12'X12' Ceiling tile - Front patio	ND	ND	ND	ND	ND	ND	Paint included as binder
2816M-3A Layer: 1	2104L25-005A	Green 2"x2" block kitchen flooring	ND	ND	ND	ND	ND	ND	Vinyl
2816M-3A Layer: 2	2104L25-005A	Green 2"x2" block kitchen flooring	35	ND	ND	ND	ND	ND	Backing
2816M-3A Layer: 3	2104L25-005A	Green 2"x2" block kitchen flooring	ND	ND	ND	ND	ND	ND	Wood
2816M-3B Layer: 1	2104L25-006A	Green 2"x2" block kitchen flooring	ND	ND	ND	ND	ND	ND	Vinyl

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Client Name:	GeoTechnical & Environmental Consultants	AES Job Number:	2104L25
Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-3B Layer: 2	2104L25-006A	Green 2"x2" block kitchen flooring	35	ND	ND	ND	ND	ND	Backing
2816M-3B Layer: 3	2104L25-006A	Green 2"x2" block kitchen flooring	ND	ND	ND	ND	ND	ND	Wood
2816M-4A Layer: 1	2104L25-007A	Joint Compound	2	ND	ND	ND	ND	ND	Joint compound. Paint included as binder
2816M-4B Layer: 1	2104L25-008A	Joint Compound	2	ND	ND	ND	ND	ND	Joint compound. Paint included as binder
2816M-4C Layer: 1	2104L25-009A	Joint Compound - Ceiling	2	ND	ND	ND	ND	ND	Joint compound. Paint included as binder
2816M-4C Layer: 2	2104L25-009A	Joint Compound - Ceiling	ND	ND	ND	ND	ND	ND	

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Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-5A Layer: 1	2104L25-010A	Wallboard	ND	ND	ND	ND	ND	ND	Paint included as binder
2816M-5A Layer: 2	2104L25-010A	Wallboard	ND	ND	ND	ND	ND	ND	
2816M-5B Layer: 1	2104L25-011A	Wallboard	ND	ND	ND	ND	ND	ND	Paint included as binder
2816M-5B Layer: 2	2104L25-011A	Wallboard	ND	ND	ND	ND	ND	ND	
2816M-6A Layer: 1	2104L25-012A	9"x9" floor tile - bathroom	2	ND	ND	ND	ND	ND	Floor tile
2816M-6A Layer: 2	2104L25-012A	9"x9" floor tile - bathroom	ND	ND	ND	ND	ND	ND	Glue

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite
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Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-6A Layer: 3	2104L25-012A	9"x9" floor tile - bathroom	ND	ND	ND	ND	ND	ND	Felt
2816M-6B Layer: 1	2104L25-013A	9"x9" floor tile - bathroom	2	ND	ND	ND	ND	ND	Floor tile
2816M-6B Layer: 2	2104L25-013A	9"x9" floor tile - bathroom	ND	ND	ND	ND	ND	ND	Glue
2816M-6B Layer: 3	2104L25-013A	9"x9" floor tile - bathroom	ND	ND	ND	ND	ND	ND	Felt
2816M-7A Layer: 1	2104L25-014A	1'x1' ceiling tile - back bedroom	ND	ND	ND	ND	ND	ND	Paint included as binder
2816M-7B Layer: 1	2104L25-015A	1'x1' ceiling tile - back bedroom	ND	ND	ND	ND	ND	ND	Paint included as binder

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite
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Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-8A Layer: 1	2104L25-016A	Exterior window caulk	ND	ND	ND	ND	ND	ND	
2816M-8B Layer: 1	2104L25-017A	Exterior window caulk	ND	ND	ND	ND	ND	ND	
2816M-9A Layer: 1	2104L25-018A	Roof Shingle with felt	ND	ND	ND	ND	ND	ND	
2816M-9A Layer: 2	2104L25-018A	Roof Shingle with felt	ND	ND	ND	ND	ND	ND	
2816M-9B Layer: 1	2104L25-019A	Roof Shingle with felt	ND	ND	ND	ND	ND	ND	
2816M-9B Layer: 2	2104L25-019A	Roof Shingle with felt	ND	ND	ND	ND	ND	ND	

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Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816M-10A Layer: 1	2104L25-020A	Exterior window glaze - patio	ND	ND	ND	ND	ND	ND	
2816M-10B Layer: 1	2104L25-021A	Exterior window glaze - patio	ND	ND	ND	ND	ND	ND	

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These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume.

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.

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Microanalyst:

Svetlana Arkhipov

QC Analyst:

Yelena Khanina

End of Report

**CHAIN OF CUSTODY
 BULK ASBESTOS ANALYSIS**

Client Name: BEC Project Name: 2816 Avondale Mill Rd
 Address: 514 Hillcrest Industrial Project Number: HW217251
 City, State, Zip: Marietta GA 30204 Sampling Date: 4-15-21
 Contact: D. Paine Phone #: _____
 Sampler's Name: D. Paine Invoice To Name(s): _____
 Report To: _____ Invoice To Email(s): _____
 Report to Email: _____ PO #: _____

Sample ID	Sample Location/Description	Analysis Requested	Turnaround Time (TAT)	Comments
1 2816 - 1A	Felt Paper on interior wall	PLM	STC	Bldg 1
2 2816 - 1B	Felt paper on interior wall			Bldg 1
3 2816 - 2A	Roof shingle			Bldg 1
4 2816 - 2B	Roof shingle			Bldg 1
5 2816 - 3A	Roof shingle with felt			Bldg 2
6 2816 - 3B	Roof shingle with felt			Bldg 2
7 2816 - 4A	Layered shingle siding			Bldg 2
8 2816 - 4B	Layered shingle siding			Bldg 2
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Relinquished by: [Signature] Date/Time: 4-16-21 1030
 Received by: [Signature] Date/Time: 4-16 1030
 Relinquished by: [Signature] Date/Time: 4-16 124
 Received by: _____ Date/Time: _____

Submission of samples to the laboratory constitutes acceptance of AES's Terms & Conditions. Samples received after 3PM or on Saturday are considered as received the following business day. If no TAT is marked on COC, AES will proceed with standard TAT.

Asbestos COC 7.6.18

FOR LAB USE ONLY
 Lab Recipient: Yodet Mazogh Date/Time: 4/16/21 1:24p Method of Shipment: Carrier

Client: GeoTechnical & Environmental Consultants
Project: 2816 Avondale Mill Rd
Lab ID: 2104L28

Case Narrative

Sample Receiving Nonconformance:

Sample ID "2816-2A" was listed on the Chain of Custody (COC) but not received. Two samples were received labeled "2816-2B". These two samples were arbitrarily logged in as "2816-2A" and "2816-2B."

Sample ID "2816-3A" was listed on the Chain of Custody (COC) but not received. Two samples were received labeled "2816-3B". These two samples were arbitrarily logged in as "2816-3A" and "2816-3B."



3080 Presidential Drive
Atlanta, GA 30340
Tel : (770) 457-8177
Fax: (770) 457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report



Report Date: 23-Apr-21

Client Name:	GeoTechnical & Environmental Consultants	AES Job Number:	2104L28
Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816-1A Layer: 1	2104L28-001A	Felt paper on interior wall	ND	ND	ND	ND	ND	ND	
2816-1B Layer: 1	2104L28-002A	Felt paper on interior wall	ND	ND	ND	ND	ND	ND	
2816-2A Layer: 1	2104L28-003A	Roof Shingle	ND	ND	ND	ND	ND	ND	Shingle
2816-2B Layer: 1	2104L28-004A	Roof Shingle	ND	ND	ND	ND	ND	ND	Shingle
2816-2B Layer: 2	2104L28-004A	Roof Shingle	ND	ND	ND	ND	ND	ND	Felt
2816-3A Layer: 1	2104L28-005A	Roof shingle with felt	ND	ND	ND	ND	ND	ND	Shingle

Note: CH=chrysotile, AM=amosite, CR=crocidolite, AC=actinolite, TR=tremolite, AN=anthophyllite
For comments on the samples, see the individual analysis sheets.
ND = None Detected

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These test results apply only to those samples actually tested, as submitted by the client. All percentages are reported by visually estimated volume. PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials, quantitative TEM is currently the only method that can be used to determine conclusive asbestos content.
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Yelena Khanina



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ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report



Report Date: 23-Apr-21

Client Name:	GeoTechnical & Environmental Consultants	AES Job Number:	2104L28
Project Name:	2816 Avondale Mill Rd	Project Number:	HN217251

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2816-3B Layer: 1	2104L28-006A	Roof shingle with felt	ND	ND	ND	ND	ND	ND	Shingle
2816-3B Layer: 2	2104L28-006A	Roof shingle with felt	ND	ND	ND	ND	ND	ND	Felt
2816-4A Layer: 1	2104L28-007A	Layered shingle siding	ND	ND	ND	ND	ND	ND	
2816-4A Layer: 2	2104L28-007A	Layered shingle siding	ND	ND	ND	ND	ND	ND	
2816-4B Layer: 1	2104L28-008A	Layered shingle siding	ND	ND	ND	ND	ND	ND	
2816-4B Layer: 2	2104L28-008A	Layered shingle siding	ND	ND	ND	ND	ND	ND	

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ND = None Detected

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Microanalyst:

Svetlana Arkhipov

QC Analyst:

Yelena Khanina

End of Report

The Environmental Institute

David Price

Social Security Number - 2462

Geotechnical & Environmental Consultants - 514 Hillcrest Industrial Boulevard, Macon, GA 31204

*Has completed 4 hours of coursework and satisfactorily
passed an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation*

Asbestos in Buildings: Inspector Refresher

February 12, 2021

Course Date

18347

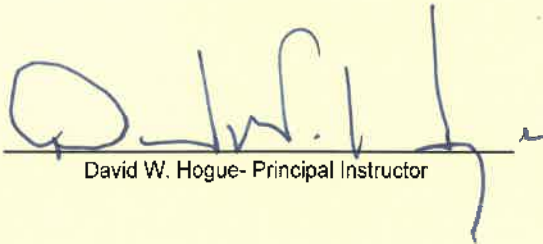
Certificate Number

February 12, 2021

Examination Date

February 11, 2022

Expiration Date


David W. Hogue- Principal Instructor



(Approved by the ABIH Certification Maintenance Committee for 1/2 CM point - Approval #11-577)

(Florida Provider Registration Number FL49-0001342 - Course #FL49-0002805)

TEI - 1395 S. Marietta Parkway SE - Building 100, Suite 124 - Marietta, GA 30067

Phone: 770-427-3600 - Website: www.tei-atl.com

Asbestos Survey Results

2816 Avondale Mill Road ■ Macon, GA

April 27, 2021 ■ GEC Project No. HN217251

SAMPLING METHODOLOGY

The limited survey (limited in that the survey may not have penetrated beyond solid wood or other apparent substrates to ceilings, walls, and more typically flooring) for the area focused primarily on identifying suspect ACMs in the specified areas. Quantities of confirmed ACM that are to be abated/remediated should be corroborated by the prospective abatement contractor. Samples were analyzed by a laboratory accredited in accordance with Georgia law.

The intent of this survey was to identify suspect ACM and to collect and submit bulk samples of such materials for laboratory analysis to identify the presence/absence and percent asbestos content in the suspect materials.

During a walk-through of the survey area, the inspector visually checked for the presence of suspect ACM. The inspection of the subject location included the following activities:

- Suspect materials were examined for variations in color, texture, thickness and other visually apparent characteristics useful in determining the uniformity of the material.
- Each suspect material that appeared to be uniform was assumed to be a Homogeneous Material (HM) and was assigned a number.
- For each HM, descriptions and general locations of suspect ACM were noted, and are presented in the Detected Asbestos Sample Summary Table, the chain of custody, and in the laboratory reports.
- The physical condition of each HM and the presence of visible debris were also noted.
- Since visual survey is inadequate to determine whether a material contains asbestos, each suspect material is presumed to be ACM until a sufficient number of samples of each material are analyzed for asbestos content. The minimum number of samples that must be collected and analyzed for asbestos content in order to establish a suspect material as non-ACM is dependent upon material type and quantity. For each miscellaneous suspect material that appeared to be homogeneous, a minimum of two samples was collected.
- The inspector performed bulk sampling in accordance with U.S. EPA guidelines to minimize release of asbestos fibers during sample collection. Each bulk sample was thoroughly wetted with amended water and collected by removing a small piece or core of the suspect material and placing the sample in a clean, sealable container. An attempt was made to include each layer of suspect material present.
- Each sample was assigned a unique number, which was included on the sample container and on the chain-of-custody.
- Sampling locations were selected based on the goal of representing the area and homogeneity of the materials surveyed. Samples were not located in any way so as to influence the analytical results or findings of this report. Destructive sampling was performed. Sample location descriptions are presented in the Detected Asbestos Sample Summary Table and are also entered on the Chain-of-Custody forms included with the Laboratory Report included in the Appendix.

Asbestos Survey Results

2816 Avondale Mill Road ■ Macon, GA

April 27, 2021 ■ GEC Project No. HN217251

LABORATORY PROCEDURES

All suspect ACM samples were analyzed for asbestos content by polarized light microscopy (PLM) using dispersion staining (Method for the Determination of Asbestos in Bulk Building Materials" EPA/600/R-93/116). This analytical method, which the U.S. EPA currently recommends for the determination of asbestos in bulk samples, is used for the qualitative identification of six morphologically different types of asbestos fibers: chrysotile, amosite, crocidolite, anthophyllite, tremolite and actinolite. The fibrous composition of the bulk sample is reported in visually estimated percentages of asbestos and non-asbestos materials (i.e. cellulose, fibrous glass, synthetic).

The analytical results indicate the percent asbestos content in the sampled material. The amount of asbestos identified in a sample of ACM may vary in a homogeneous material depending on the sample location. Such variation in content may be due to incomplete mixing of material components during manufacturing processes, or it may indicate that materials with a visually similar appearance are actually of different composition.

Important Note To Our Clients

The PLM method for analysis of bulk samples for asbestos content requires that the microscopist make a visual estimation of the percentage of asbestos in a given sample. By definition, any material with greater than 1% asbestos is considered regulated asbestos-containing material. The extent of regulatory requirements under EPA and OSHA asbestos regulations depends upon the category and condition of the material.

If asbestos is identified in a sample of friable material by PLM analysis, with results between a trace and 10% asbestos, the owner must either assume that the content is greater than 1%, and treat the material as regulated, or the owner may confirm the regulatory status by having samples of these materials re-analyzed by the point counting method. Some of these materials may be confirmed as less than or equal to 1% when the more quantitative point counting technique is used. Samples are not initially analyzed by point counting because the regulations require analysis by PLM. Also, point counting is a more expensive method. Point Counting results supersede the initial results obtained by PLM using the visual estimation of area.

Some resinously bound materials such as mastics and roofing materials, and materials with very small fibers such as floor tiles and joint compounds, may yield false negative PLM results. Resins, bitumen, and similar sticky matrices may obscure the visual identification of asbestos minerals. Fiber sizes may be beneath the visual limit of the light microscope. The presence or absence of asbestos in such samples may be confirmed using the Transmission Electron Microscope (TEM) with the Modified Chatfield (quantitative) or Drop-Mount (qualitative) methods.

Asbestos Survey Results

2816 Avondale Mill Road ■ Macon, GA

April 27, 2021 ■ GEC Project No. HN217251

LABORATORY ACCREDITATION

AES of Atlanta, Georgia, has received accreditation for PLM and TEM analysis under the National Voluntary Lab Accreditation Program (NVLAP) of the National Institute of Standards and Technology. To ensure quality, AES has developed an internal quality control program with the following features:

- Sample collection, preservation, storage, analysis and disposal methods comply with approved EPA and NIOSH methods;
- Analysts participate quarterly in proficiency rounds administered by AES and conducted with two other laboratories.
- Chain-of-Custody Records (COCR) are maintained on all samples both during the collection phase of the work and during the in-house analysis;
- Statistical parameters or control charts are used to monitor accuracy of analysis and overall laboratory effectiveness;
- Laboratory personnel receive formal training in instrument operation and regular performance evaluations;
- A collection of reference samples is used to ensure analysts' accuracy;
- Each sample is analyzed by two separate analysts;
- Sample certificates of analysis, reagent certificates, and sample container certificate files are maintained; and
- Hard copy QA/QC files are maintained for customer examination.