

**ASBESTOS SURVEY RESULTS  
2220 JEFFERSONVILLE ROAD  
MACON, GEORGIA  
GEC JOB # 160190.240**

**PREPARED FOR**

**MR. DAVID FORTSON, DIRECTOR  
MACON BIBB ENGINEERING DEPARTMENT  
780 THIRD STREET  
MACON, GEORGIA 31201**

**PREPARED BY**

**GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, INC.  
514 HILLCREST INDUSTRIAL BOULEVARD  
MACON, GEORGIA 31204**

**ISSUE DATE:  
May 3, 2016**





May 3, 2016

Mr. David Fortson, Director  
Macon Bibb Engineering Department  
780 Third Street  
Macon, Georgia 31201

Via email: [DFortson@maconbibb.us](mailto:DFortson@maconbibb.us)

**SUBJECT: Asbestos Survey Results  
2220 Jeffersonville Road  
Macon, Georgia  
GEC JOB # 160190.240**

Dear Mr. Fortson:

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

Mr. Jayro Lucas, an AHERA/ASHARA accredited Asbestos Inspector with GEC performed the sampling. Bulk samples were submitted 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. According to the results, **NONE** of the materials sampled tested positive as Asbestos Containing Materials (ACM), with 1% or greater asbestos, and therefore; none are considered ACM.

The suspect materials observed and sampled in this survey were limited to: plaster wall and roll roofing debris within the grounds of the property.

**Asbestos containing materials were not encountered during this survey.** Notification to the Georgia EPD 10 days prior to the demolition is required under the NESHAP regulation regardless of whether ACM is present.

Along with the Asbestos Laboratory Report, the Chain of Custody, and the inspectors' latest accreditation, a description of the survey methodology, the laboratory's procedures, and accreditation information can be viewed in the Appendix to 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.**



Jayro Lucas  
Environmental Technician  
Asbestos Certification #15343



Robert T. Hadden  
Environmental Department Manager  
Asbestos Inspection/Mgmt. Planner #15476

JL/RTH/hm  
Attachments

CC: Mr. Brian Farr via email: [bfarr@maai.net](mailto:bfarr@maai.net)



# APPENDIX

**ANALYTICAL ENVIRONMENTAL SERVICES, INC.**

1604K52

3080 Presidential Drive, Atlanta, GA 30340-3704  
(770) 457-8177 / Toll Free (800) 972-4889 / Fax (770) 457-8188

**CHAIN OF CUSTODY  
BULK ASBESTOS ANALYSIS**

Client Name: GEC Phone: (478) 757-1606  
 Address: 514 Hillcrest Industrial Blvd Fax: (478) 757-1608  
 City, State, Zip: Macon, GA 31204 Project Name: 2220 Jeffersonville Rd  
 Contact: Jayro Lucas, Bob Hadden Project Number: 160190.240  
 Sampler's Name: Jayro Lucas Sampling Date: 4-21-2016

Sample ID	Sample Location/Description	Analysis Requested	Turnaround Time	Comments	For AES Use Only	
1	2220-1A	Plaster wall - left wall	PLM	STD	150 SF	
2	2220-1B	Plaster wall - ground debris	↓	↓		
3	2220-1C	Plaster wall - left wall				
4	2220-2A	Roll roofing debris - front door				2 SF
5	2220-2B	~ ~ ~				
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Relinquished by: Jayro Lucas Date/Time: 4-21-2016 / 12 pm  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Lab Recipient: Mae Jones Date/Time: 4/22/16 10:25 Method of Shipment: Fedex



**ANALYTICAL ENVIRONMENTAL SERVICES, INC.**  
**Bulk Sample Summary Report**



Lab Code 102082-0

27-Apr-16

Client Name:	<b>GeoTechnical &amp; Env. Consultants</b>	AES Job Number:	<b>1604K52</b>
Project Name:	<b>2220 JEFFERSONVILLE RD</b>	Project Number:	<b>160190.240</b>

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
2220-1A Layer: 1	1604K52-001A	Plaster Wall - Left Wall	ND	ND	ND	ND	ND	ND	
2220-1B Layer: 1	1604K52-002A	Plaster Wall - Ground Debris	ND	ND	ND	ND	ND	ND	
2220-1C Layer: 1	1604K52-003A	Plaster Wall - Left Wall	ND	ND	ND	ND	ND	ND	Paint included as binder
2220-2A Layer: 1	1604K52-004A	Roll Roofing Debris - Front Door	ND	ND	ND	ND	ND	ND	
2220-2B Layer: 1	1604K52-005A	Roll Roofing Debris - Front Door	ND	ND	ND	ND	ND	ND	

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.

This report must not be reproduced except in full without written approval of Analytical Environmental Services, Inc.

Microanalyst:

Svetlana Arkhipov

QC Analyst:

Yelena Khanina

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# ***The Environmental Institute***

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## *Jayro Lucas*

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Social Security Number - XXX-XX-1273  
GEC - 514 Hillcrest Industrial Blvd. - Macon, Georgia 31204

*Has completed 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*

January 19, 2016

Course Date

15343

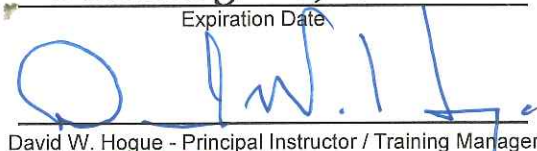
Certificate Number

January 19, 2016

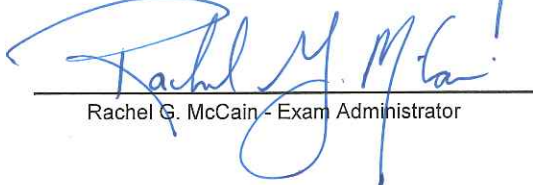
Examination Date

January 18, 2017

Expiration Date



David W. Hogue - Principal Instructor / Training Manager



Rachel G. McCain - Exam Administrator



(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 - 1841 West Oak Parkway, Suite F - Marietta, Georgia 30062 - (770) 427-3600 - [www.tei-atl.com](http://www.tei-atl.com)

## 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.
- Bulk samples were submitted under appropriate Chain-of-Custody procedures to Analytical Environmental Services, Inc. (AES), in Atlanta, Georgia, a laboratory accredited for PLM analysis of bulk samples for asbestos content.





## 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.*



## **LABORATORY ACCREDITATION**

### **Asbestos 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.

