

# **RENOVATION ASBESTOS SURVEY REPORT**

**Apalachicola Research Center  
University of Florida  
261 Frederick Humphries Drive  
Apalachicola, Florida**

**GLE Project No.: 16140-01354**

**Prepared for:**

**Mr. Ronnie Cooper  
University of Florida - IFAS  
PO Box 110850  
Gainesville, FL 32611**

**April 2016**

**Prepared by:**



8659 Baypine Road, Suite 306, Jacksonville, FL 32256  
904-296-1880 • Toll Free 800-398-7613 • Fax 904-296-1860

April 7, 2016

Mr. Ronnie Cooper  
University of Florida - IFAS  
PO Box 110850  
Gainesville, FL 32611

**RE: Renovation Asbestos Survey Report  
Apalachicola Research Center  
University of Florida  
261 Frederick Humphries Drive  
Apalachicola, Florida 32320**

GLE Project No.: 16140-01354

Dear Mr. Cooper:

GLE Associates, Inc. (GLE) performed a renovation survey for asbestos-containing materials (ACM) on March 24, 2016, at the Apalachicola Research Center, located in Apalachicola, Florida. The survey was performed by Mr. Michael D. Harrell with GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions, or if we can be of further service, please do not hesitate to call.

Sincerely,  
**GLE Associates, Inc.**



Michael D. Harrell  
Environmental Scientist



Robert B. Greene, PE, PG, CIH, LEED AP  
President  
Asbestos Consultant, EA 0000009

MDH/RBG/lr

M:\Work\Asb\16140-UF\01354-IFAS Bldgs 7124, 7135, 7167, 8004, 8429, 8416, Apalachicola Research\Apalachicola Research Center\Asbestos Survey Report SurveyReport.doc

GLE Associates, Inc.

# TABLE OF CONTENTS

|            |                                                            |          |
|------------|------------------------------------------------------------|----------|
| <b>1.0</b> | <b>INTRODUCTION</b> .....                                  | <b>1</b> |
| 1.1        | Introduction.....                                          | 1        |
| 1.2        | Facility Description.....                                  | 1        |
| <b>2.0</b> | <b>RESULTS</b> .....                                       | <b>2</b> |
| 2.1        | Asbestos Survey Procedures.....                            | 2        |
| 2.2        | Identified Suspect Asbestos-Containing Materials.....      | 3        |
|            | <b>Table 2.2-1 — Summary of Homogeneous Sampling Areas</b> |          |
| <b>3.0</b> | <b>CONCLUSIONS AND RECOMMENDATIONS</b> .....               | <b>5</b> |
| 3.1        | General.....                                               | 5        |
| <b>4.0</b> | <b>LIMITATIONS AND CONDITIONS</b> .....                    | <b>5</b> |

## APPENDICES

- Appendix A – Analytical Results and Chain of Custody
- Appendix B – Personnel and Laboratory Certifications
- Appendix C – Asbestos Location Plan
- Appendix D – Photographs

## 1.0 INTRODUCTION

### 1.1 INTRODUCTION

The purpose of this renovation survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within the Apalachicola Research Center, located at 261 Dr. Frederick Humphries Drive in Apalachicola, Florida. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) requirements, associated with the scheduled renovation plans. The survey was performed on March 24, 2016, by Mr. Michael D. Harrell, an Environmental Protection Agency/Asbestos Hazard Emergency Response Act (EPA/AHERA) accredited inspector. The scope of this survey did not include demolition of any building components, or evaluation of architectural plans.

### 1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below. A representative view of the facility is shown in **Appendix D**.

|                            |                                   |
|----------------------------|-----------------------------------|
| Facility Type:             | Commercial                        |
| Construction Date:         | Unknown                           |
| Number of Floors:          | One Plus Loft                     |
| <b>Structural</b>          |                                   |
| Foundation:                | Concrete Slab                     |
| Wall Support:              | Wood Frame                        |
| Exterior Finish:           | Vinyl Siding                      |
| Roof Support:              | Wood Truss                        |
| Roof System Type:          | Roofing Shingles                  |
| <b>Mechanical/Plumbing</b> |                                   |
| HVAC Type:                 | Interior AH – Exterior Condenser  |
| Duct Type:                 | Fiberglass                        |
| Pipe Insulation:           | None Observed                     |
| <b>Interior</b>            |                                   |
| Wall Substrate:            | Drywall and Joint Compound        |
| Wall Finishes:             | Paint                             |
| Floor Substrate:           | Concrete                          |
| Floor Finishes:            | Carpet, Ceramic Tile, Sheet Vinyl |
| Ceiling System:            | Drywall and Joint Compound        |
| Ceiling Finishes:          | Paint                             |

## 2.0 RESULTS

### 2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas of the building. An EPA/AHERA accredited inspector performed the visual observations (refer to **Appendix B** for personnel qualifications).

After the overall visual survey was completed, representative sampling areas were determined. The surveyor delineated homogeneous areas of suspect materials and samples of each material were obtained, in general accordance with regulations as established by the Occupational Safety and Health Administration (OSHA) and NESHAP. The field surveyor determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of building components to access suspect material.

After completion of the fieldwork, the samples were delivered to GLE's National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining, in general accordance with EPA-600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than 1% asbestos as an "asbestos-containing material" (ACM).

Regulated Asbestos-Containing Material (RACM) is defined as (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) 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 regulated by this subpart.

Category I and Category II non-friable ACM, as defined by the EPA:

- Category I non-friable ACM means asbestos containing packings, gaskets, resilient floor covering, asphalt roofing products, and pliable sealants and mastics that are in good condition and not friable, containing more than 1 percent asbestos, as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.
- Category II non-friable ACM means any material, excluding Category I non-friable ACM, containing more than 1 percent asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763 Section 1, PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

## **2.2 IDENTIFIED SUSPECT ASBESTOS-CONTAINING MATERIALS**

A total of thirty-nine (39) samples of suspect building materials were collected from the facility during the survey, representing thirteen (13) different homogeneous areas. The results of the laboratory analyses are included in **Appendix A**, and approximate sample locations and the approximate extent to which ACM was observed to be present are indicated on the Asbestos Location Plan in **Appendix C**. Photographs of the various materials sampled are included in **Appendix D**.

A summary of the homogenous sampling areas of suspect ACM determined to be present is outlined in the following table:

| TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS<br>APALACHICOLA RESEARCH CENTER<br>UNIVERSITY OF FLORIDA – APALACHICOLA, FLORIDA |                                                    |                                                    |                   |             |                        |                      |              |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|-------------------|-------------|------------------------|----------------------|--------------|
| HA #                                                                                                                                | HOMOGENEOUS MATERIAL DESCRIPTION                   | HOMOGENEOUS MATERIAL LOCATION                      | FRIABILITY (F/NF) | % ASBESTOS* | # OF SAMPLES COLLECTED | APPROXIMATE QUANTITY | ACM CATEGORY |
| DW-01                                                                                                                               | Drywall with Joint Compound                        | Throughout                                         | NF                | ND          | 3                      | NIS                  | NA           |
| M-01                                                                                                                                | Concrete                                           | Slab                                               | NF                | ND          | 3                      | NIS                  | NA           |
| M-02                                                                                                                                | Gray Ceramic Tile Grout                            | Entrance                                           | NF                | ND          | 3                      | NIS                  | NA           |
| M-03                                                                                                                                | White Caulk                                        | Windows and Exterior Doors                         | NF                | ND          | 3                      | NIS                  | NA           |
| M-04                                                                                                                                | Epoxy Floor Coating                                | Southwest Rooms                                    | NF                | ND          | 3                      | NIS                  | NA           |
| M-05                                                                                                                                | Black Caulk                                        | Glass Canopy Room                                  | NF                | ND          | 3                      | NIS                  | NA           |
| M-06                                                                                                                                | White Door Frame Caulk                             | Interior Doors                                     | NF                | ND          | 3                      | NIS                  | NA           |
| MAS-01                                                                                                                              | Gray HVAC Mastic                                   | Attic, Duct Penetrations                           | NF                | ND          | 3                      | NIS                  | NA           |
| MAS-02                                                                                                                              | Black and Yellow Floor Mastic                      | Under Carpet, Main Front Area                      | NF                | ND          | 3                      | NIS                  | NA           |
| MSV-01                                                                                                                              | Gray Pebble Pattern Sheet Vinyl with Yellow Mastic | Bathrooms, Entry Storage, Southeast Rooms          | NF                | ND          | 3                      | NIS                  | NA           |
| RS-01                                                                                                                               | Roofing Shingles                                   | Roof                                               | NF                | ND          | 3                      | NIS                  | NA           |
| VB-01                                                                                                                               | 4" Gray Cove Base with Tan Mastic                  | Associated with MSV-01, and in South Center Office | NF                | ND          | 3                      | NIS                  | NA           |
| VB-02                                                                                                                               | 4" Black Cove Base with Tan Mastic                 | Associated with East Wall of Epoxy Floor           | NF                | ND          | 3                      | NIS                  | NA           |

|                                                 |                                                                                                                                                                                                                                                                  |  |                                    |  |                                      |  |  |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------|--|--------------------------------------|--|--|
| <b>ASBESTOS CONTENT</b><br>Expressed as percent | * = The facility owner has the option of point-counting by polarized light microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.<br>PC = Results based on Point-Count analysis |  |                                    |  |                                      |  |  |
|                                                 | F = Friable Material                                                                                                                                                                                                                                             |  | NF = Non-Friable Material          |  |                                      |  |  |
| <b>FRIABILITY</b>                               | RACM = Regulated ACM                                                                                                                                                                                                                                             |  | CAT I = Category I non-friable ACM |  | CAT II = Category II non-friable ACM |  |  |
| <b>ACM CATEGORY</b>                             | NA = Not Applicable                                                                                                                                                                                                                                              |  | ND = None Detected                 |  | NIS = Not in Scope                   |  |  |
| <b>ABBREVIATIONS:</b>                           | HA = Homogeneous Area                                                                                                                                                                                                                                            |  | SF = Square Feet                   |  | LF = Linear Feet                     |  |  |
|                                                 |                                                                                                                                                                                                                                                                  |  |                                    |  | CF = Cubic Feet                      |  |  |

## **3.0 CONCLUSIONS AND RECOMMENDATIONS**

### **3.1 GENERAL**

**No asbestos-containing materials were identified in the scope of this survey.**

## **4.0 LIMITATIONS AND CONDITIONS**

As a result of previous renovations, there may be hidden materials, such as floor tile, sheet vinyl flooring, insulation, etc. These materials may be found in various areas hidden under existing flooring materials or in wall cavities. Any materials found during construction activities, either not addressed in this survey report, or similar to the ACM identified in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

Because of the hidden nature of many building components (i.e. within mechanical chases), it may be impossible to determine if all of the suspect building materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect our best efforts based upon the prevailing standard of care in the environmental industry.

The Florida Department of Environmental Protection (FDEP) has issued an interpretation regarding the testing of concrete flooring, walls and roofing materials, which states that “if concrete will be recycled or reused, the concrete must be sampled and analyzed for the presence of asbestos prior to the commencement of activities that may release asbestos fibers into the environment”, and that “all of the different layers or types of concrete in a sample must be analyzed, individually, using the method specified in Appendix E, subpart E, 40 CFR Part 763, Section 1, Polarized Light Microscopy, with point-counting”, as applicable.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of the client and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

**APPENDIX A**  
**Analytical Results and Chain of Custody**

## SUMMARY OF BULK SAMPLE ANALYSIS

### UF; Apalachicola Research Center

16140-01354

| Sample    | Sample Type              | Fiber Type |                                      |
|-----------|--------------------------|------------|--------------------------------------|
| DW-01A    | Drywall & Joint Compound | 100%       | Gypsum, Quartz, Calcite, Clay        |
| DW-01B    | Drywall & Joint Compound | 100%       | Gypsum, Quartz, Calcite, Clay        |
| DW-01C-QC | Drywall & Joint Compound | 100%       | Gypsum, Quartz, Calcite, Clay        |
| M-01A     | Concrete                 | 100%       | Quartz, Calcite, Clay, Mica          |
| M-01B     | Concrete                 | 100%       | Quartz, Calcite, Clay, Mica          |
| M-01C     | Concrete                 | 100%       | Quartz, Calcite, Clay, Mica          |
| M-02A     | Gray Ceramic Tile Grout  | 100%       | Quartz, Calcite, Clay, Mica          |
| M-02B     | Gray Ceramic Tile Grout  | 100%       | Quartz, Calcite, Clay, Mica          |
| M-02C     | Gray Ceramic Tile Grout  | 100%       | Quartz, Calcite, Clay, Mica          |
| M-03A     | White Window Caulk       | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-03B     | White Window Caulk       | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-03C     | White Window Caulk       | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-04A-QC  | Epoxy Floor Coating      | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-04B     | Epoxy Floor Coating      | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-04C     | Epoxy Floor Coating      | 100%       | Polymer, Quartz, Calcite, Clay, Mica |

Analyst / Approved  
Signatory:



Darryl Neldner

\* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

\*\* The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

\*\*\* This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 19681

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 3/30/2016

Page 1 of 3

## SUMMARY OF BULK SAMPLE ANALYSIS

### UF; Apalachicola Research Center

16140-01354

| Sample     | Sample Type                      | Fiber Type |                                      |
|------------|----------------------------------|------------|--------------------------------------|
| M-05A      | Black Caulk                      | 100%       | Polymer                              |
| M-05B      | Black Caulk                      | 100%       | Polymer                              |
| M-05C      | Black Caulk                      | 100%       | Polymer                              |
| M-06A      | White Door Frame Caulk           | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-06B      | White Door Frame Caulk           | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| M-06C      | White Door Frame Caulk           | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| MAS-01A    | Gray HVAC Caulk                  | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| MAS-01B-QC | Gray HVAC Caulk                  | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| MAS-01C    | Gray HVAC Caulk                  | 100%       | Polymer, Quartz, Calcite, Clay, Mica |
| MAS-02A    | Black/Yellow Mastic              | 100%       | Bitumen, Polymer                     |
| MAS-02B    | Black/Yellow Mastic              | 100%       | Bitumen, Polymer                     |
| MAS-02C    | Black/Yellow Mastic              | 100%       | Bitumen, Polymer                     |
| MSV-01A    | Gray Sheet Vinyl & Yellow Mastic | 20%<br>80% | Cellulose/paper<br>Polymer           |
| MSV-01B    | Gray Sheet Vinyl & Yellow Mastic | 20%<br>80% | Cellulose/paper<br>Polymer           |
| MSV-01C    | Gray Sheet Vinyl & Yellow Mastic | 20%<br>80% | Cellulose/paper<br>Polymer           |

Analyst / Approved  
Signatory:



Darryl Neldner

\* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

\*\* The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

\*\*\* This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 19681

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 3/30/2016

Page 2 of 3

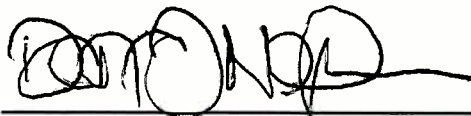
## SUMMARY OF BULK SAMPLE ANALYSIS

### UF; Apalachicola Research Center

16140-01354

| Sample    | Sample Type                     | Fiber Type |                                |
|-----------|---------------------------------|------------|--------------------------------|
| RS-01A    | Roof Shingles                   | 10%        | Glass Fibers                   |
|           |                                 | 90%        | Bitumen, Quartz, Calcite, Mica |
| RS-01B    | Roof Shingles                   | 10%        | Glass Fibers                   |
|           |                                 | 90%        | Bitumen, Quartz, Calcite, Mica |
| RS-01C-QC | Roof Shingles                   | 10%        | Glass Fibers                   |
|           |                                 | 90%        | Bitumen, Quartz, Calcite, Mica |
| VB-01A    | 4" Gray Cove Base & Tan Mastic  | 100%       | Polymer                        |
| VB-01B    | 4" Gray Cove Base & Tan Mastic  | 100%       | Polymer                        |
| VB-01C    | 4" Gray Cove Base & Tan Mastic  | 100%       | Polymer                        |
| VB-02A    | 4" Black Cove Base & Tan Mastic | 100%       | Polymer                        |
| VB-02B    | 4" Black Cove Base & Tan Mastic | 100%       | Polymer                        |
| VB-02C    | 4" Black Cove Base & Tan Mastic | 100%       | Polymer                        |

Analyst / Approved  
Signatory:



Darryl Neldner

\* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

\*\* The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

\*\*\* This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 19681

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 3/30/2016

Page 3 of 3

## CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM

CLIENT: UF



GLE Associates, Inc.  
2228 NW 40<sup>th</sup> Terrace, Suite C  
Gainesville, FL 32605  
PHONE: (352) 335-6648 FAX: (352) 335-6187

PROJECT #: 16140-01354

PROJECT: Apalachicola Research Center

LABORATORY SENT TO: GLE Tampa

DATE: 03/24/16

## SAMPLE INFORMATION

| SAMPLE #                                            | DESCRIPTION/ LOCATION                              | SAMPLE #           | DESCRIPTION/ LOCATION |
|-----------------------------------------------------|----------------------------------------------------|--------------------|-----------------------|
| DW-01A-C                                            | Drywall with Joint Compound                        |                    |                       |
| M-01A-C                                             | Concrete                                           |                    |                       |
| M-02A-C                                             | Gray Ceramic Tile Grout                            |                    |                       |
| M-03A-C                                             | White Window Caulk                                 |                    |                       |
| M-04A-C                                             | Epoxy Floor Coating                                |                    |                       |
| M-05A-C                                             | Black Caulk                                        |                    |                       |
| M-06A-C                                             | White Door Frame Caulk                             |                    |                       |
| MAS-01A-C                                           | Gray HVAC Caulk                                    |                    |                       |
| MAS-02A-C                                           | Black and Yellow Mastic                            |                    |                       |
| MSV-01A-C                                           | Gray Pebble Pattern Sheet Vinyl with Yellow Mastic |                    |                       |
| RS-01A-C                                            | Roof Shingles                                      |                    |                       |
| VB-01A-C                                            | 4" Gray Cove Base with Tan Mastic                  |                    |                       |
| VB-02A-C                                            | 4" Black Cove Base with Tan Mastic                 |                    |                       |
|                                                     |                                                    |                    |                       |
| <b>IMPORTANT TOTAL NUMBER OF SAMPLES SUBMITTED:</b> |                                                    | 39                 |                       |
| <b>IMPORTANT POSITIVE STOP ANALYSIS:</b>            |                                                    | Yes                |                       |
| <b>IMPORTANT CODE TYPE:</b>                         |                                                    | PLM4               |                       |
| <b>IMPORTANT E-MAIL RESULTS TO:</b>                 |                                                    | P. Zak, M. Harrell |                       |

SAMPLE DUE DATE/TIME:

04/ 01/ 16

AM / PM

|                                           |                      |
|-------------------------------------------|----------------------|
| PACKAGED BY: Michael D. Harrell           | SAMPLES RECEIVED BY: |
| DATE PACKAGED: 03/25/16                   | DATE:                |
| METHOD OF TRANSMITTAL: FedEx              | TIME:                |
| TRANSMITTED BY: <i>Michael D. Harrell</i> | Comments:            |

PAGE: 1 OF 1

**APPENDIX B**  
**Personnel and Laboratory Certifications**



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**ASBESTOS LICENSING UNIT  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783**

**(850) 487-1395**

**GLE ASSOCIATES INC  
5405 CYPRESS CENTER DRIVE  
SUITE 110  
TAMPA FL 33609**

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



**DETACH HERE**

**RICK SCOTT, GOVERNOR**

**KEN LAWSON, SECRETARY**

**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
ASBESTOS LICENSING UNIT**

| <b>LICENSE NUMBER</b> |  |
|-----------------------|--|
| ZA0000034             |  |

The ASBESTOS BUSINESS ORGANIZATION  
Named below IS LICENSED  
Under the provisions of Chapter 469 FS.  
Expiration date: NOV 30, 2017

**GLE ASSOCIATES INC  
5405 CYPRESS CENTER DRIVE  
SUITE 110  
TAMPA FL 33609**



**ISSUED: 12/01/2015**

**DISPLAY AS REQUIRED BY LAW**

**SEQ # L1512010002475**



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

**ASBESTOS LICENSING UNIT  
1940 NORTH MONROE STREET  
TALLAHASSEE FL 32399-0783**

**(850) 487-1395**

**GREENE, ROBERT BLAIR  
GLE ASSOCIATES INC  
4300 W CYPRESS STREET SUITE 400  
TAMPA FL 33607**

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **[www.myfloridalicense.com](http://www.myfloridalicense.com)**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND  
PROFESSIONAL REGULATION**

**EA0000009**

**ISSUED: 11/30/2014**

**ASBESTOS CONSULTANT - ENGINEER  
GREENE, ROBERT BLAIR  
GLE ASSOCIATES INC**

**IS LICENSED under the provisions of Ch.469 FS  
Expiration date : NOV 30, 2016 L1411300002420**

**DETACH HERE**

**RICK SCOTT, GOVERNOR**

**KEN LAWSON, SECRETARY**

**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
ASBESTOS LICENSING UNIT**

| <b>LICENSE NUMBER</b> |  |
|-----------------------|--|
| <b>EA0000009</b>      |  |

**The ASBESTOS CONSULTANT - ENGINEER  
Named below IS LICENSED  
Under the provisions of Chapter 469 FS.  
Expiration date: NOV 30, 2016**

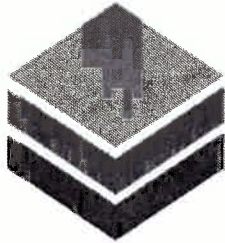
**GREENE, ROBERT BLAIR  
GLE ASSOCIATES INC  
4300 W. CYPRESS STREET  
SUITE 400  
TAMPA FL 33607**



**ISSUED: 11/30/2014**

**DISPLAY AS REQUIRED BY LAW**

**SEQ # L1411300002420**



**M·E·T·A**  
Mayhew Environmental Training Associates  
I N C O R P O R A T E D

Certificate # MEA87487170AB347B

**Michael Harrell**

*completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646*  
*has on 8/13/2015, in Tampa, FL*

### 4-hr. Asbestos Building Inspector Refresher

*as approved by FL*  
*and the US EPA under 40 CFR 763 (AHERA)*  
*from 8/13/2015 to 8/13/2015 and passed the associated exam on 8/13/2015*  
*with a score of at least 70%*

*W. Young*

Bill Young  
Instructor

*Thomas Mayhew*

Thomas Mayhew  
President

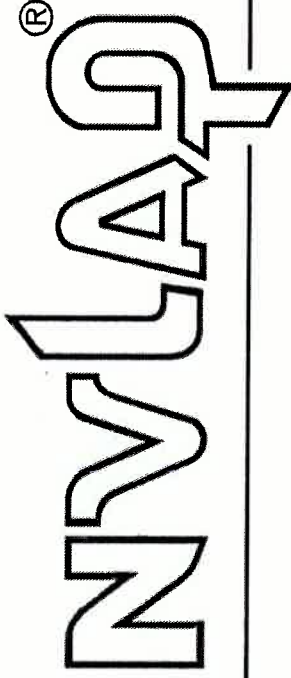
Training Provider #: FL49-0001221  
Course #: 150813ASBIRFL513

SSN: XXX-XX-6236  
Expiration: 8/13/2016

P.O. Box 4693 - Lawrence, KS. 66047 - 800.444.6382  
[www.metaenvironmental.net](http://www.metaenvironmental.net)



United States Department of Commerce  
National Institute of Standards and Technology



---

**Certificate of Accreditation to ISO/IEC 17025:2005**

---

NVLAP LAB CODE: 102003-0

**GLE Associates, Inc.**

Tampa, FL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

**Asbestos Fiber Analysis**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2016-04-01 through 2017-03-31

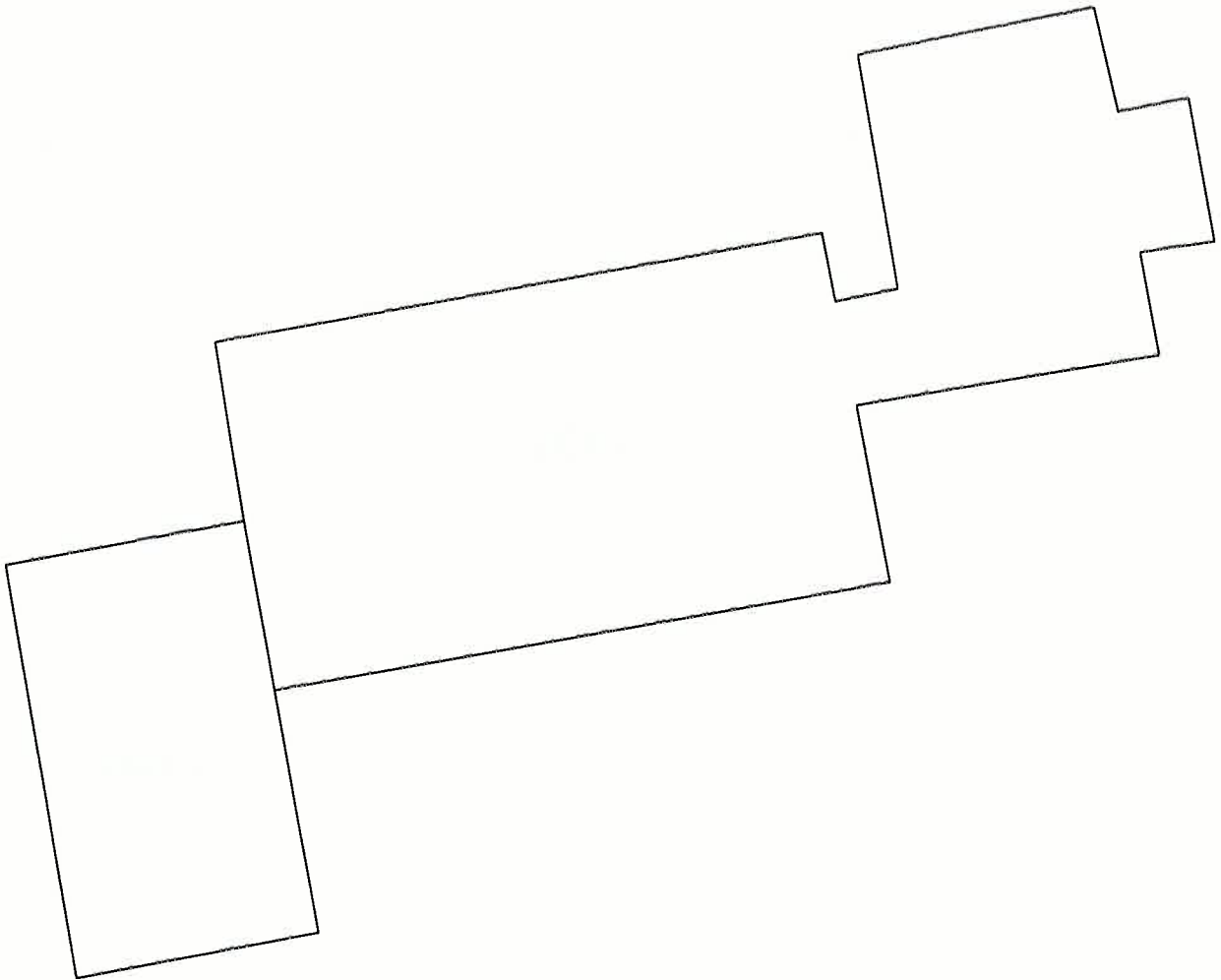
Effective Dates



*David F. Alderman*

For the National Voluntary Laboratory Accreditation Program

**APPENDIX C**  
**Asbestos Location Plan**



NOTE:  
NO ASBESTOS-CONTAINING MATERIALS OBSERVED.



THIS DRAWING IS NOT TO SCALE

ASBESTOS LOCATION PLAN  
APALACHICOLA RESEARCH CENTER  
UNIVERSITY OF FLORIDA  
APALACHICOLA, FLORIDA

Prepared For:  
MR. RONNIE COOPER  
UNIVERSITY OF FLORIDA - IFAS  
P.O. BOX 118050  
GAINESVILLE, FLORIDA 32611  
Prepared By: GLE ASSOCIATES, INC.  
5405 CYPRESS CENTER DR., STE 110  
TAMPA, FLORIDA 33609  
(813) 241-8350 (813) 241-8737



**GLE**

ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

|                      |             |
|----------------------|-------------|
| GLE CAD NO.          |             |
| CAD/PROJ/18140/01354 |             |
| DESIGNED             | DATE        |
| GAZ                  | 18140-01354 |
| CHECKED              | DATE        |
| MH                   |             |
| DATE                 |             |
| 04/05/2018           |             |
| SHEET                |             |
| AL-1                 |             |
| OF 1 SHEET(S)        |             |

## **APPENDIX D**

### **Photographs**



**Photo D-1**

Upper Photo: Apalachicola Research Center  
Lower Photo: DW-01-Drywall with Joint Compound

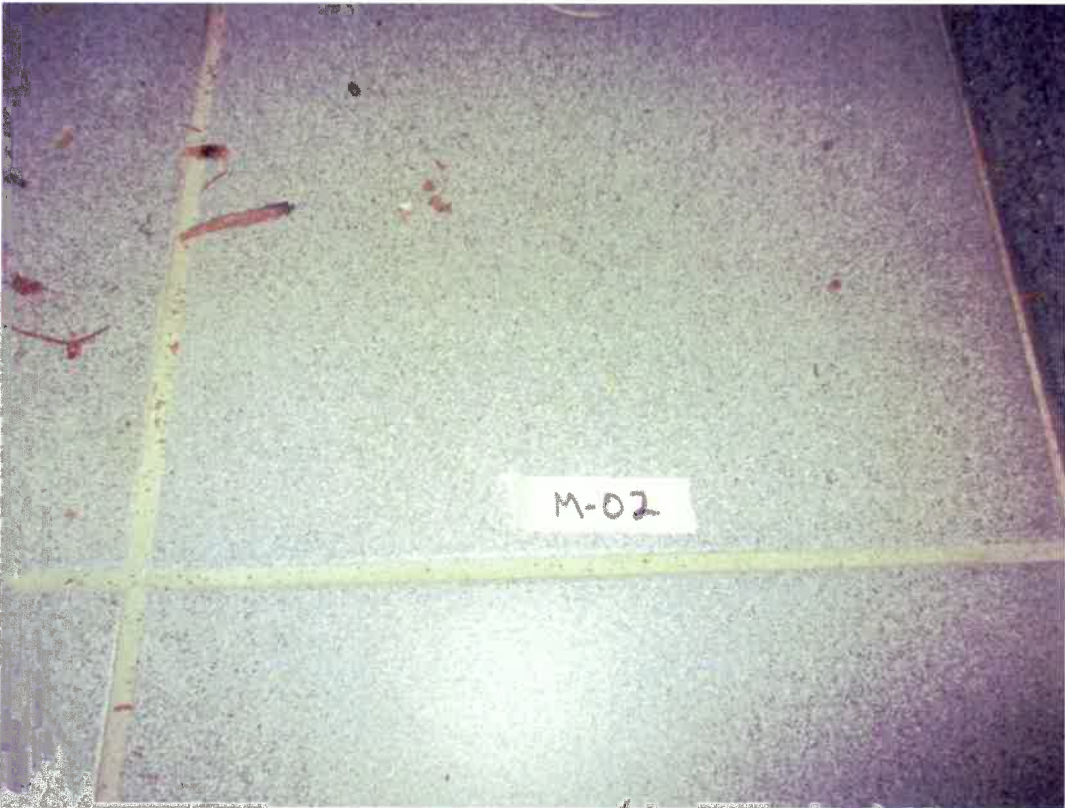
Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2259 NW 40<sup>th</sup> Avenue, Suite C  
Cocoa, Florida 32909  
(321) 335-6648 fax: (321) 335-6187



Apalachicola Research Center

|                       |                      |
|-----------------------|----------------------|
| Drawn<br><b>LR</b>    | J-F-H<br>16140-01354 |
| Checked<br><b>MBC</b> | Figure<br><b>D-1</b> |
| Date<br>4/5/16        |                      |



**Photo D-2**

Upper Photo: M-01-Concrete

Lower Photo: M-02-Gray Ceramic Tile Grout

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2229 NW 40<sup>th</sup> Terrace, Suite C  
Gainesville, Florida 32609  
(352) 335-6688 fax: (352) 335-6187



**GLE**

ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

Drawn

**LR**

Checked

**MB**

Date

4/5/16

Job No.

16140-01354

Figure

**D-2**



**Photo D-3**

Upper Photo: M-03-White Caulk  
Lower Photo: M-04-Epoxy Floor Coating

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2228 NW 40<sup>th</sup> Terrace, Suite C  
Gainesville, Florida 32605  
(352) 335-6688 fax: (352) 335-6187



**GLE**  
ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

Drawn  
**LR**  
Checked  
**MB**  
Date  
4/5/16

Job No.  
16140-D1354

Figure  
**D-3**



**Photo D-4**

Upper Photo: M-05-Black Caulk  
Lower Photo: M-06-White Door Frame Caulk

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2220 NW 40th Terrace, Suite C  
Gainesville, Florida 32609  
(352) 335-6644 Fax: (352) 335-6187



**GLE**

ARCHITECTS • ENGINEERS • ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

|                      |                        |
|----------------------|------------------------|
| Drawn<br><b>LR</b>   | Job No.<br>16140-01354 |
| Checked<br><b>MB</b> | Figure<br><b>D-4</b>   |
| Date<br>4/5/16       |                        |



**Photo D-5**

Upper Photo: MAS-01-Gray HVAC Mastic  
Lower Photo: MAS-02-Black and Yellow  
Floor Mastic

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2209 NW 40th Terrace, Suite C  
Gainesville, Florida 32609  
(352) 335-6648 Fax: (352) 335-6187



**GLE**

ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

|                       |                        |
|-----------------------|------------------------|
| Drawn<br><b>LR</b>    | Job No.<br>16140-01354 |
| Checked<br><b>MBC</b> | Figure<br><b>D-5</b>   |
| Date<br>4/5/16        |                        |



**Photo D-6**

Upper Photo: MSV-01-Gray Pebble pattern  
Sheet Vinyl with Yellow Mastic  
Lower Photo: RS-01-Roofing Shingles

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2228 NW 40<sup>th</sup> Terrace, Suite C  
Gainesville, Florida 32609  
(352) 335-6648 fax: (352) 335-6187



**GLE**  
ARCHITECTS | ENGINEERS | ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

Drawn:  
LR  
Checked:  
MBC  
Date:  
4/5/16

Job No.  
16140-01354  
Figure  
D-6



**Photo D-7**

Upper Photo: VB-01-4" Gray Cove Base with Tan Mastic

Lower Photo: VB-02-Black Cove Base with Tan Mastic

Photograph Date:  
March 24, 2016

Prepared By: GLE Associates, Inc.  
2228 NW 40th Terrace, Suite C  
Gainesville, Florida 32605  
(352) 335-6648 Fax: (352) 335-6187



**GLE**  
ARCHITECTS • ENGINEERS • ENVIRONMENTAL CONSULTANTS

Apalachicola Research Center

Drawn  
LR  
Checked  
MBC  
Date  
4/5/16

Job No.  
16140-01384

Figure  
D-7