

LIMITED RENOVATION ASBESTOS SURVEY REPORT

**Spring Park Pump Station
4511 Spring Park Road
Jacksonville, Florida**

GLE Project No.: 17112-00147

Prepared for:

**JEA, T04
21 West Church Street
Jacksonville, Florida 32202**

April 2017

Prepared by:



8659 Baypine Road, Suite 306, Jacksonville, FL 32256
904-296-1880 • Fax 904-296-1860

April 19, 2017

Ms. Mindy H. Grinnan, PE
Project Manager
JEA, T04
21 West Church Street
Jacksonville, Florida 32202-3139

**RE: Limited Renovation Asbestos Survey Report
Spring Park Pump Station
4511 Spring Park Road
Jacksonville, Florida**

GLE Project No.: 17112-00147

Dear Ms. Grinnan:

GLE Associates, Inc. (GLE) performed a limited renovation survey for asbestos-containing materials (ACM) on April 12, 2017, at Spring Park Pump Station, located in Jacksonville, Florida. The survey was performed by Mr. Arturo Confiado 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.



Arturo R. Confiado III
Senior Project Manager



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

ARC/MBC/RBG/lr

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GLE Associates, Inc.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Introduction	1
1.2	Facility Description	1
2.0	RESULTS	1
2.1	Asbestos Survey Procedures	1
2.2	Identified Suspect Asbestos-Containing Materials	2
	Table 2.2-1 — Summary of Homogeneous Sampling Areas	
3.0	CONCLUSIONS AND RECOMMENDATIONS	4
3.1	General	4
3.2	Specific	5
4.0	LIMITATIONS AND CONDITIONS	5
APPENDICES		
	Appendix A – Analytical Results and Chain of Custody	
	Appendix B – Personnel and Laboratory Certifications	

1.0 INTRODUCTION

1.1 INTRODUCTION

The purpose of this limited renovation survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within the Spring Park Pump Station, located at 4511 Spring Park Road in Jacksonville, Florida. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) requirements, associated with the scheduled renovations plans. The survey was performed on April 12, 2017, by Mr. Arturo Confiado, 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, evaluation of architectural plans, or the quantification of materials for abatement purposes, or removal cost estimating.

1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below.

Facility Type:	Pump Station
Construction Date:	Unknown
Number of Floors:	Two
Exterior	
Floor Support:	Concrete
Wall Support:	Concrete
Exterior Finish:	Brick
Roof System Type:	Rolled Roof
Interior	
Wall Substrate:	Concrete Masonry Units
Wall Finishes:	Paint, Tectum Panels
Floor Finishes:	Paint
Ceiling System:	Concrete, 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. EPA/AHERA accredited inspectors 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 in-house 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 one 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 one 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 15 samples of suspect building materials were collected from the facility during the survey, representing five different identified homogeneous areas. The results of the laboratory analyses are included in Appendix A.

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 SPRING PARK PUMP STATION – JACKSONVILLE, FLORIDA							
HA #	HOMOGENEOUS MATERIAL DESCRIPTION	HOMOGENEOUS MATERIAL LOCATION	FRIABILITY (F/NF)	% ASBESTOS*	# OF SAMPLES COLLECTED	APPROXIMATE QUANTITY	ACM CATEGORY
DW-01	Drywall & Joint Compound	Bathroom Ceiling	NF	ND	3	NIS	NA
M-01	Red Gasket	Dryside Pumps	NF	ND	3	NIS	NA
M-02	Tectum Wall Panel	Generator Room	NF	ND	3	NIS	NA
M-03	Rolled Roof	Roof	NF	ND	3	NIS	NA
RF-01	Roof Flashing	Roof Seams & Penetrations	NF	10% C	3	1,500 SF	CAT I

ASBESTOS CONTENT 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. PC = Results based on Point-Count analysis					
	F = Friable Material	NF = Non-Friable Material				
ACM CATEGORY	RACM = Regulated ACM	CAT I = Category I non-friable ACM	CAT II = Category II non-friable ACM			
ABBREVIATIONS:	NA = Not Applicable	ND = None Detected	NIS = Not in Scope	C = Chrysotile	A = Amosite	
	HA = Homogeneous Area	SF = Square Feet	LF = Linear Feet	CF = Cubic Feet		

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 GENERAL

Asbestos-containing materials (ACMs) were identified in the scope of this survey. General and specific conclusions and recommendations are provided below.

The EPA, OSHA and the State of Florida have promulgated regulations dealing with asbestos. For commercial building owners, the EPA NESHAP (40 CFR 61) regulations require removal of RACM, prior to conducting activities which might disturb the material. They also deal with notification, handling and disposal of asbestos.

No homogenous areas of suspect RACM were determined to contain less than 10% asbestos by PLM analysis. According to the NESHAP, when the asbestos content of a bulk sample of suspect RACM is determined to be less than 10% by PLM visual estimation, you may:

1. Assume the amount to be greater than 1% and treat the material as asbestos-containing; or
2. Conduct confirmatory verification by point-counting. Note, the results obtained by point-counting are considered the definitive analytical result.

The EPA recommends that an Operations and Maintenance (O&M) Program be developed for any facilities with ACM, and this Program should address all ACM (known and/or assumed) present. The O&M Program establishes notification and training requirements along with special procedures for working around the ACM. The O&M Program would remain in effect until all asbestos is removed.

Category I and Category II non-friable materials, as defined by the EPA, may remain within a facility during demolition with no potential cessation of work, provided they remain non-friable and the appropriate engineering controls (i.e., wet methods) are utilized, with the resulting waste disposed of as asbestos-containing waste. However, there is no guarantee that these materials will remain non-friable. If the materials become friable, then they are classified as RACM.

RACM, as defined by the EPA, must be removed prior to renovation or demolition activities that may disturb the materials.

The OSHA regulations deal with employee exposure to airborne asbestos fibers. The regulations restrict employee exposure, and require special monitoring, training and handling procedures when dealing with asbestos. Additionally, OSHA has regulations that may supersede the EPA regulations. In order to protect the worker, OSHA has established a permissible exposure limit (PEL), which limits employee exposure to airborne fiber concentrations. OSHA requires objective evidence that the PEL will not be exceeded, as justification that personal air monitoring and engineering controls will not be required. OSHA has also established rules requiring the containerization and labeling of asbestos waste.

The State regulations require that anyone involved in asbestos consulting activities be a licensed asbestos consultant and that anyone involved in asbestos abatement, with the exception of roofing materials, be a licensed asbestos abatement contractor.

3.2 SPECIFIC

Roof Flashing

This material is defined by the EPA as a Category I non-friable material. This material does not appear to present a significant issue, as observed, at the time of the survey. We recommend that the identified ACM be maintained as part of an O&M Program and periodically monitored for any changes in condition. Additionally, we recommend that a licensed asbestos abatement contractor properly remove and dispose of the ACM prior to conducting renovation activities that might disturb the ACM. However, Florida regulations do allow a properly trained and licensed roofing contractor to disturb asphalt roofing materials.

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 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

JEA; Spring Park Lift Station

17112-00147

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	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
M-01B	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
M-01C	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
M-02A	Tectum Wall Panel	90% 10%	Cellulose/paper Quartz, Calcite, Clay, Mica
M-02B	Tectum Wall Panel	90% 10%	Cellulose/paper Quartz, Calcite, Clay, Mica
M-02C	Tectum Wall Panel	90% 10%	Cellulose/paper Quartz, Calcite, Clay, Mica
M-03A	Rolled Roof	100%	Bitumen, Quartz, Calcite, Mica
M-03B	Rolled Roof	100%	Bitumen, Quartz, Calcite, Mica
M-03C	Rolled Roof	100%	Bitumen, Quartz, Calcite, Mica
RF-01A-QC	Roof Flashing	10% 90%	Chrysotile Asbestos Bitumen

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 # 21029

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: 4/14/2017

Page 1 of 2

SUMMARY OF BULK SAMPLE ANALYSIS

JEA; Spring Park Lift Station

17112-00147

Sample	Sample Type	Fiber Type
RF-01B	Roof Flashing	Positive Stop/Sample not analyzed
RF-01C	Roof Flashing	Positive Stop/Sample not analyzed

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.

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Report Date: 4/14/2017

Page 2 of 2

CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM


GLE Associates, Inc.
8659 Baypine Road, Suite 306
Jacksonville, FL 32256
PHONE: (904) 296-1880 FAX: (904) 296-1860

CLIENT:	JEA	LAB 21023
PROJECT #:	17112-00147	
PROJECT:	Spring Park Lift Station	
LABORATORY SENT TO:	TAMPA	
DATE:	April 12, 2017	

SAMPLE INFORMATION

SAMPLE #	DESCRIPTION	SAMPLE #	DESCRIPTION
DW-01 ABC	Drywall & Joint Compound		
M-01 ABC	Red Gasket		
M-02 ABC	Tectum Wall Panel		
M-03 ABC	Rolled Roof		
RF-01 ABC	Roof Flashing		

IMPORTANT: TOTAL NUMBER OF SAMPLES SUBMITTED	15
IMPORTANT: POSITIVE STOP ANALYSIS	Y
IMPORTANT: E-MAIL RESULTS TO	AConfiado, J Elliott @gleassociates.com

NOTE:

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time

☐ 3 hour
 ☐ 6 Hour
 ☐ 24 Hour
 ☐ 48 Hour
 ☐ 3 Day
 ☒ 4 Day

REPORT RESULTS TO THE ADDRESS ABOVE

CHAIN OF CUSTODY: GLE ASSOCIATES, INC.		CHAIN OF CUSTODY: LABORATORY	
PACKAGED BY: Arturo Confiado		SAMPLES RECEIVED BY:	
DATE PACKAGED: 4/12/2017		DATE:	
METHOD OF TRANSMITTAL: FedEx		TIME:	
TRANSMITTED BY: Arturo Confiado		CONDITION OF PACKAGED SAMPLES:	
CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC.			
RECEIVED BY:		DATE:	
INVENTORIED BY:		DATE:	
REPACKAGED AND SEALED BY:		DATE:	

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.

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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**

LICENSE NUMBER

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
2601 BLAIR STONE ROAD
TALLAHASSEE FL 32399-0783**

(850) 487-1395

**GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
5405 CYPRESS CENTER DR
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. 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: 11/15/2016

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

**IS LICENSED under the provisions of Ch 469 FS
Expiration date : NOV 30, 2018 L1611150002176**

DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

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

LICENSE NUMBER

EA0000009

**The ASBESTOS CONSULTANT - ENGINEER
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2018**



**GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
5405 CYPRESS CENTER DR
SUITE 110
TAMPA FL 33609**



ISSUED: 11/15/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1611150002176

Asbestos Consulting & Training Systems

41118.4736CERT/BIR

900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311

(954) 524-7208

***This is to Certify that
Arturo Confiado***



X X X - X X - 3 0 0 0

3738 Maddle Lane, Jacksonville, FL 32210

has successfully completed an English

Asbestos Building Inspection Refresher

29-Jul-16

TO

29-Jul-16

Meets state requirements of FL 49-0001020/CN-0006273 and UT (6.0 core).

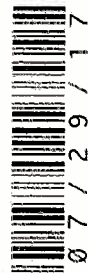
NDAAC Provider #451

Trainer(s): Alberto A. Ania

Training Address: 2233 Park Avenue Suite 202, Orange Park, FL, 32073

Successful course completion based on exam score on: 07/28/16

This Certificate Expires:



29-Jul-17

07 / 29 / 17

Processed By:

Seagull

To Authentic Certificate

www.seagulltraining.com

1-800-966-9933

NOTES AND CRIMINAL PENALTIES OF LAW FOR MAKING OR
ISSUING OF FALSE OR INADEQUATE STATEMENTS OR
FALSIFYING RECORDS (18 U.S.C. 1001 AND 15 U.S.C. 8015), CERTIFY
THAT THIS TRAINING COURSE WITH A SUCCESSFUL COMPLETION
EQUIVALENTS OF TITLE IV OF THE FEDERAL EDUCATION CONTROL
ACT (PART 745 OF THE FEDERAL REGISTER) IS APPLICABLE
FOR THIS STATE, OR ANY OTHER STATE.

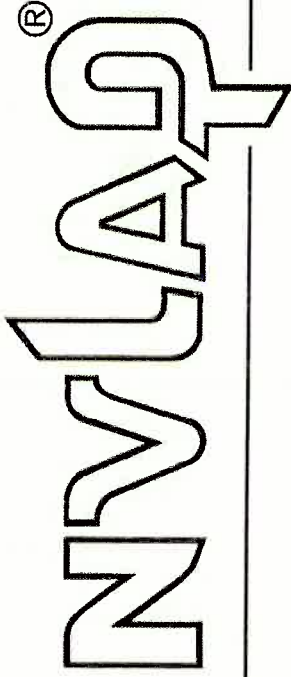
James F. Stump, Course Sponsor



Certificate Number: 169202

Course Number: JE1631

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).

2017-04-01 through 2018-03-31

Effective Dates

A handwritten signature in black ink, appearing to read "Peter S. Lamm".

For the National Voluntary Laboratory Accreditation Program