

September 16, 2019

Edward Forte Forte Architecture + Design 705 Centre Street Boston, Massachusetts 02130

RE: FLI Project #: 19-2174

Inspection for Asbestos Containing Materials at

Norwell DPW Shed 322 Main Street

Norwell, Massachusetts

Dear Mr. Forte,

FLI Environmental, Inc. performed an inspection for asbestos containing materials (ACMs) at the property located at the address noted above. This report outlines the initial visual survey, sample collection and summary of analytical results provided by FLI.

Inspection Summary:

Asbestos Inspector: Jody Freitas

License #: AI900238

Date of Inspection: August 28, 2019

Total Materials Sampled: 7

Samples Analyzed At: Asbestos Identification Laboratory, Inc.

NIST/NVLAP Certification#: 200919-0 MassDLS Lab Certification#: AA000208

Scope and Approach:

FLI provided a state licensed and EPA AHERA accredited asbestos inspector to perform an inspection of the subject area(s). The purpose of the inspection was to identify and sample building materials suspected to contain asbestos. Suspect materials include thermal system insulation, fireproofing, soundproofing, plasters, skimcoating, spray-applied or trowel applied finishes, ceiling & floor tiles, sheet flooring, caulking, glazing, mastics, adhesives, cement board products, roofing materials and numerous other products. Materials having the same function/application, similar color, texture or other observed similar characteristics were grouped together and sampled as one homogeneous material. A minimum of 2 samples of each homogenous material were collected.



Homogeneous materials determined to be non-suspect by the inspector (if observed), include concrete floors, wood flooring/joists, concrete block, black/brown vinyl flexible duct connectors, fiberglass insulation, armaflex (neoprene) insulation, rubber, plastic, ceramic tile, glass and metal.

If present, areas within walls, drywall encased columns and above ceilings were inspected where possible in accessible representative locations. However, each individual enclosed area was not inspected. Accessible areas beneath such surfaces were examined and sampled, and material quantities were estimated based on these observations.

Bulk Sampling:

Bulk samples were collected in a random manner and submitted via chain of custody to the analytical laboratory. The samples were analyzed by Polarized Light Microscopy per EPA Method 600/R-93-116, July 1993. The detection limit of the EPA recommended method is one percent asbestos by weight. Materials containing greater than one percent asbestos are treated as asbestos-containing as required by the EPA. The laboratory is accredited by the National Institute of Standards and Technologies NIST/NVLAP Program and licensed by the Massachusetts Department of Labor Standards (DLS) for asbestos analysis in bulk materials.

<u>Asbestos Containing Materials:</u>

Any homogeneous material having at least one (1) sample analytically identified as containing one percent (1%) asbestos or greater is categorized as an asbestos containing material. Any material analytically identified as containing any asbestos fibers is categorized as an asbestos containing waste material. A summary of materials identified to contain asbestos is provided in Appendix A including approximate location(s) of the material and estimated quantities. Laboratory Analytical Data Sheets for each sample analyzed are included in Appendix C.

Non-Asbestos Containing Materials:

Homogeneous materials where each sample analyzed was determined not to contain asbestos are categorized as non-asbestos. A summary of non-asbestos materials is provided in Appendix B. Laboratory Analytical Data Sheets for each sample analyzed are included in Appendix C.

Remarks and Limitations:

1. Additional suspect materials may be present beneath surfaces (multiple layers) or within chases or crawlspace areas that were unknown or unaccessible at the time of the inspection but may be discovered during demolition, renovation or maintenance activities. Any additional suspect materials not identified in this report that become exposed during building renovation, maintenance or demolition should be sampled and analyzed for asbestos content prior to disturbing.



- Each identified asbestos containing material must be removed by a licensed asbestos abatement contractor prior to being disturbed by building maintenance, renovation or demolition activities.
- 3. This report is not meant to be used as an asbestos abatement plan or abatement specification. Material quantities and locations are estimates and approximations and should not be used to obtain pricing from contractors. FLI recommends contracting for abatement after an abatement specification is prepared by a licensed Asbestos Project Designer.
- 4. A list of suspect hazardous materials is included as Appendix D.

Should you have any questions or need additional information, please contact our office at (781) 251-0040. Thank you for the opportunity to provide you with our services and we look forward to working together in the future.



APPENDIX A

Asbestos Containing Materials Summary Table								
Material Location Estimated Quantity Sample #								
Tan Floor Tile	Break Room	100 SF	01 A,B,C					



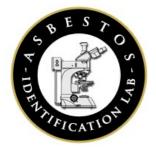
APPENDIX D

Suspect Materials Found Not to Contain Asbestos									
Sample # ('s)	Material	Sample Location A	Sample Location B	Sample Location C					
02 A,B,C	Mastic with Tan Floor Tile	Break Room	Break Room	Break Room					
03 A,B,C	Orange Floor Tile	Mezzanine	Mezzanine	Mezzanine					
04 A,B,C	Mastic with Orange Floor Tile	Mezzanine	Mezzanine	Mezzanine					
05 A,B,C	1'x1' Flat Ceiling Tile	Ground Level Office	Ground Level Office	Ground Level Office					
06 A,B,C	1' x 1' Textured Ceiling Tile	Mezzanine	Mezzanine	Mezzanine					
07 A,B,C	1'x1' Pinhole Ceiling Tile	Hallway	Hallway	Hallway					



APPENDIX C

BULK SAMPLE LABORATORY DATA SHEETS



Asbestos Identification Laboratory

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com **Batch:** 46236



September 06, 2019

Project Name:

Norwell DPW Shed- 322 Main Street,

Norwell, MA

19-2174

Project Number:

Date Sampled: 2019-08-28

Work Received: 2019-09-03

Work Analyzed: 2019-09-04

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Jody Freitas,

Jody Freitas

FLI Environmental

Dedham, MA 02026

69 Bridge Street

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Jody Freitas for your business.

Michael Thuring

Michael Manning Owner/Director

September 06, 2019

Jody Freitas FLI Environmental 69 Bridge Street Dedham, MA 02026

Friday 06 September

Project Name: Norwell DPW Shed- 322 Main Street,

Page 1 of 2

Norwell, MA

 Project Number:
 19-2174

 Date Sampled:
 2019-08-28

 Work Received:
 2019-09-03

 Work Analyzed:
 2019-09-04

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

	Location	Color	Non-Asbestos %	Asbestos %			
	Break Room	tan	Non-Fibrous 98	Detected Chrysotile 2			
	Break Room	tan	Non-Fibrous 98	Detected Chrysotile 2			
	Break Room	tan	Non-Fibrous 98	Detected Chrysotile 2			
n Floor Tile	Break Room	yellow	Non-Fibrous 100	None Detected			
n Floor Tile	Break Room	yellow	Non-Fibrous 100) None Detected			
n Floor Tile	Dieak Room	yellow	Non-Fibrous 100	None Detected			
n Floor Tile	Break Room	yellow	Non-Fibrous 100	None Detected			
ГіІе	Mezzanine	orange	Non-Fibrous 100	None Detected			
Γile	Mezzanine	orange	Non-Fibrous 100	None Detected			
Γile	Mezzanine	orange	Non-Fibrous 100	None Detected			
ange Floor	Mezzanine	black	Non-Fibrous 100	None Detected			
ange Floor	Mezzanine	black	Non-Fibrous 100	None Detected			
ange Floor	Mezzanine	black	Non-Fibrous 100	None Detected			
ng Tile	Ground Level Office	gray	Cellulose 60				
ng Tile	Ground Level Office	gray		None Detected			
	ng Tile	ng Tile Ground Level Office	ng Tile Ground Level Office gray	Non-Fibrous 10 Ing Tile Ground Level Office gray Mineral Wool 20			

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %		
LabID							
05C	1'x1' Flat Ceiling Tile	Ground Level Office	gray	Mineral Wool 30 Cellulose 60	None Detected		
512787				Non-Fibrous 10			
06A	1'x1' Textured Ceiling Tile	Mezzanine	brown	Cellulose 90 Non-Fibrous 10	None Detected		
512788							
06B	1'x1' Textured Ceiling Tile	Mezzanine	brown	Cellulose 90 Non-Fibrous 10	None Detected		
512789							
06C	1'x1' Textured Ceiling Tile	Mezzanine	brown	Cellulose 90 Non-Fibrous 10	None Detected		
512790							
07A	1'x1' Pinhole Ceiling Tile	Hallway	brown	Cellulose 98 Non-Fibrous 2	None Detected		
512791							
07B	1'x1' Pinhole Ceiling Tile	Hallway	brown	Cellulose 98 Non-Fibrous 2	None Detected		
512792							
07C	1'x1' Pinhole Ceiling Tile	Hallway	brown	Cellulose 98	None Detected		
512793							

Friday 06 September

Analyzed by:

Michael Thamy

End of Report

Batch: 46236

Page 2 of 2

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY RECORD

FLI Environmental

	Received by:	Relinquished by:	Received by:	Relinquished by:				07 A,B,C	06 A,B,C	05 A,B,C	04 A,B,C	03 A,B,C	02 A,B,C	01 A,B,C	Sample # (s)		Si	Client:	
	V :	7, 1		X Sold X				1'x1' Pinhole Ceiling Tile	1' x 1' Textured Ceiling Tile	1'x1' Flat Ceiling Tile	Mastic with Orange Floor Tile	Orange Floor Tile	Mastic with Tan Floor Tile	Tan Floor Tile	Material	Norwell, Massachusetts	Site: Norwell DPW Shed 322 Main Street	1	
		1 20 1	6/12/10	8/3/19				Hailway	Mezzanine	Ground Level Office	Mezzanine	Mezzanine	Break Room	Break Room	Location A		Street		
Date/Time	Date/Time	Date/Time	Date∕Time					Hallway	Mezzanine	Ground Level Office	Mezzanine	Mezzanine	Break Room	Break Room	Location B				-
	1			Tu				Haliway	Mezzanine	Ground Level Office	Mezzanine	Mezzanine	Break Room	Break Room	Location C	License #:	Sampled by:	Date:	FLI Project #:
				Turnaround:				×	×	×	×	×	×	×	PLM	→		8/28/2019	19-2174
		Date Needed	3-Day	Rush											PLM TEM Count)238 •	Jody Freitas	2019	174
		eeded	Day	24-Hr											Point				
			5-Day	48-Hr											Positive (y/n)				



APPENDIX D

SUSPECT HAZARDOUS MATERIALS



APPENDIX D

Suspect Materials Found Not to Contain Asbestos						
Material	Quantity					
4' Light Ballasts	13					
4' Flourescent Lamps	52					
8' Light Ballasts	37					
8' Flourescent Lamps	74					
Honeywell Thermostats	2					
New Thermostats	4					
Miscelaneous Waste Oil Drums	NA					



APPENDIX E

LICENSES AND CERTIFICATIONS



William D. McKinney, Director

Asbestos Inspector

JODY FREITAS

Eff. Date 02/11/19 Exp. Date 02/11/20 Al900238

Member of C.O.N.E.S.

BOSR BOS-RENEW

20





William D. McKinney, Director

Asbestos Management Planner

JODY FREITAS

Eff. Date 02/11/19 Exp. Date 02/11/20 AP000051

Member of C.O.N.E.S.

BOSR BOS-RENEW

20







THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT

DEPARTMENT OF LABOR STANDARDS

19 STANIFORD STREET, BOSTON, MASSACHUSETTS 02114

CERTIFICATION FOR ASBESTOS ANALYTICAL SERVICES

ASBESTOS IDENTIFICATION LABORATORY
165 NEW BOSTON STREET
SUITE 227
WOBURN MA 01801

LICENSE: AA000208

EXPIRES: Tuesday, June 23, 2020

IN ACCORDANCE WITH MGL CH. 149 § 6B AND 453 CMR 6.08 THIS CERTIFICATE IS ISSUED BY THE DEPARTMENT OF LABOR STANDARDS TO THE ABOVE NAMED ENTITIY TO PROVIDE THE ASBESTOS ANALYTICAL SERVICES SPECIFICALLY LISTED BELOW.

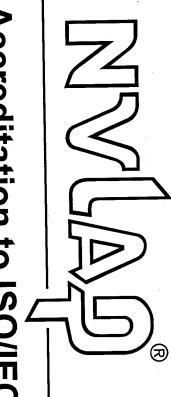
CLASS A CERTIFICATE
CLASS C CERTIFICATE

WILLIAM D. McKINNEY, DIRECTOR

Mailing Address:

ASBESTOS IDENTIFICATION LABORATORY 165 NEW BOSTON STREET SUITE 227 WOBURN, MA 01801

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200919-0

Asbestos Identification Laboratory

Woburn, MA

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

Asbestos Fiber Analysis

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

2019-07-01 through 2020-06-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program