



FLI Environmental

69 BRIDGE STREET
DEDHAM, MA 02026
PHONE 781.251.0040
FAX 781.251.0901

August 14, 2014

Town of Franklin
355 East Central Street Suite 3
Franklin, Massachusetts 02038

RE: Inspection for Asbestos Containing Materials at
87 Grove Street Franklin, Massachusetts
FLI Project #: 14-1471

Dear Mr. D'Angelo,

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:	June 13 and 25, 2014
Total Materials Sampled:	12
Samples Analyzed At:	EMSL Analytical, Inc.
NIST/NVLAP Certification#:	101147-0
MassDLS Lab Certification#:	AA000188

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.

Asbestos Containing Materials:

Any homogeneous material having at least one (1) sample analyzed to contain greater than one percent (1%) asbestos is categorized as an asbestos containing material. A summary of materials determined 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 unforeseen suspect materials may be present beneath surfaces (multiple layers) or within chases or crawlspace areas that were unknown 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.
2. 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

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 # ('s)
Window Glazing	New Building	400 LF	625-3 A,B,C
Roofing	Garage New Building	400 SF	625-4 A,B,C
Mastic with Floor Tile	Old Building	N/A	625-6 A,B,C
12" x 12" Floor Tile	Bathroom New Building	15 SF	625-7 A,B,C

APPENDIX B

Suspect Materials Found Not to Contain Asbestos				
Sample # ('s)	Material	Sample Location A	Sample Location B	Sample Location C
613-1 A,B,C	Gypsum Board	Rubble Pile	Rubble Pile	Rubble Pile
613-2 A,B,C	Roofing	Rubble Pile	Rubble Pile	Rubble Pile
613-3 A,B,C	Felt Paper	Rubble Pile	Rubble Pile	Rubble Pile
625-1 A,B,C	Gypsum Board	New Building	New Building	New Building
625-2 A,B,C	Joint Compound	New Building	New Building	New Building
625-5 A,B,C	Floor Tile	Top of Stairs Old Building	Top of Stairs Old Building	Top of Stairs Old Building
625-8 A,B,C	Mastic with 12" x 12" Floor Tile	Bathroom New Building	Bathroom New Building	Bathroom New Building
625-9 A,B,C	Roof Shingle	Pitched Roof Old Building	Pitched Roof Old Building	Pitched Roof Old Building

APPENDIX C

**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com>bostonlab@emsl.com

EMSL Order: 131402521

CustomerID: FLIE62

CustomerPO:

ProjectID:

Attn: **Steve Shea**
FLI Environmental, Inc.
69 Bridge Street
Dedham, MA 02026

Phone: (781) 251-0040
 Fax: (781) 251-0901
 Received: 06/27/14 11:08 AM
 Analysis Date: 7/2/2014
 Collected: 6/25/2014

Project: 14-1471 / Town of Franklin; 87 Grove Street; Granklin, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
1A 131402521-0001	New Building - Gypsum Board	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
HA: 1					
1B 131402521-0002	New Building - Gypsum Board	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
HA: 1					
1C 131402521-0003	New Building - Gypsum Board	Tan Fibrous Homogeneous	5% Cellulose 3% Glass	92% Non-fibrous (other)	None Detected
HA: 1					
2A 131402521-0004	New Building - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA: 2					
2B 131402521-0005	New Building - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA: 2					
2C 131402521-0006	New Building - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (other)	None Detected
HA: 2					
3A 131402521-0007	New Building - Window Glazing	Gray Non-Fibrous Homogeneous		98% Non-fibrous (other)	2% Chrysotile
HA: 3					

Analyst(s)

Fievel Lam (16)

Sean Ryan (11)

Steve Grise, Laboratory Manager
or other approved signatory

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 Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

Initial report from 07/02/2014 12:20:08

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Sample	Description	Appearance	%	<u>Non-Asbestos</u>		<u>Asbestos</u>
				Fibrous	Non-Fibrous	Type
3B 131402521-0008	New Building - Window Glazing	Gray Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
			HA: 3			
3C 131402521-0009	New Building - Window Glazing	Tan Non-Fibrous Homogeneous			98% Non-fibrous (other)	2% Chrysotile
			HA: 3			
4A 131402521-0010	Garage New Building - Roofing	Black Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile
			HA: 4			
4B 131402521-0011	Garage New Building - Roofing	Black Non-Fibrous Homogeneous			95% Non-fibrous (other)	5% Chrysotile
			HA: 4			
4C 131402521-0012	Garage New Building - Roofing	Black Non-Fibrous Homogeneous	15%	Cellulose	82% Non-fibrous (other)	3% Chrysotile
			HA: 4			
5A 131402521-0013	Top of Stairs Old Building - Floor Tile	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			HA: 5			
5B 131402521-0014	Top of Stairs Old Building - Floor Tile	Gray Non-Fibrous Homogeneous			100% Non-fibrous (other)	None Detected
			HA: 5			

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Sample	Description	Appearance	%	Non-Asbestos		Asbestos
				Fibrous	Non-Fibrous	% Type
5C 131402521-0015	Top of Stairs Old Building - Floor Tile	Tan Non-Fibrous Homogeneous	HA: 5		100% Non-fibrous (other)	None Detected
6A 131402521-0016	Top of Stairs Old Building - Mastic with 5	Brown Non-Fibrous Homogeneous	HA: 6		90% Non-fibrous (other)	10% Chrysotile
6B 131402521-0017	Top of Stairs Old Building - Mastic with 5	Brown Non-Fibrous Homogeneous	HA: 6		90% Non-fibrous (other)	10% Chrysotile
6C 131402521-0018	Top of Stairs Old Building - Mastic with 5	Brown Non-Fibrous Homogeneous	HA: 6		92% Non-fibrous (other)	8% Chrysotile
7A 131402521-0019	Bathroom New Building - 12x12 Floor Tile	Tan Non-Fibrous Homogeneous	HA: 7		98% Non-fibrous (other)	2% Chrysotile
7B 131402521-0020	Bathroom New Building - 12x12 Floor Tile	Tan Non-Fibrous Homogeneous	HA: 7		98% Non-fibrous (other)	2% Chrysotile
7C 131402521-0021	Bathroom New Building - 12x12 Floor Tile	Tan Non-Fibrous Homogeneous	HA: 7		98% Non-fibrous (other)	2% Chrysotile

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
8A 131402521-0022	Bathroom New Building - Mastic with 7	Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
HA: 8					
8B 131402521-0023	Bathroom New Building - Mastic with 7	Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
HA: 8					
8C 131402521-0024	Bathroom New Building - Mastic with 7	Yellow Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
HA: 8					
9A 131402521-0025	Pitched Roof Old Building - Roof Shingle	Black Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
HA: 9					
9B 131402521-0026	Pitched Roof Old Building - Roof Shingle	Black Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
HA: 9					
9C 131402521-0027	Pitched Roof Old Building - Roof Shingle	Black Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (other)	None Detected
HA: 9					

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Phone/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com>bostonlab@emsl.com

EMSL Order: 131402299

CustomerID: FLIE62

CustomerPO:

ProjectID:

Attn: **Steve Shea**
FLI Environmental, Inc.
69 Bridge Street
Dedham, MA 02026

Phone: (781) 251-0040
Fax: (781) 251-0901
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Analysis Date: 6/19/2014
Collected: 6/13/2014

Project: 14-1471; 87 Grove St, Franklin, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A 131402299-0001	Rubble - Gypsum Board	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1B 131402299-0002	Rubble - Gypsum Board	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
1C 131402299-0003	Rubble - Gypsum Board	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (other)	None Detected
2A 131402299-0004	Rubble - Roofing	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
2B 131402299-0005	Rubble - Roofing	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
2C 131402299-0006	Rubble - Roofing	Black Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (other)	None Detected
3A 131402299-0007	Rubble - Felt Paper	Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected
3B 131402299-0008	Rubble - Felt Paper	Black Fibrous Homogeneous	85% Cellulose	15% Non-fibrous (other)	None Detected

Analyst(s)

Fievel Lam (6)

Kevin Pine (3)

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or other approved signatory

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Initial report from 06/19/2014 10:42:50

**EMSL Analytical, Inc.**

7 Constitution Way, Suite 107, Woburn, MA 01801

Phone/Fax: (781) 933-8411 / (781) 933-8412

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	<u>Non-Asbestos</u>		<u>Asbestos</u>
			% Fibrous	% Non-Fibrous	% Type
3C	Rubble - Felt Paper	Black	90% Cellulose	10% Non-fibrous (other)	None Detected
131402299-0009		Fibrous Homogeneous			

Analyst(s)

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Initial report from 06/19/2014 10:42:50

Commonwealth of Massachusetts

Department of Labor Standards

Heather E. Rowe, Director

Asbestos Management Planner



JODY FREITAS

Eff. Date 02/07/14

Exp. Date 02/07/15

AP000051

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

WBR WB-RENEW

15



Commonwealth of Massachusetts

Department of Labor Standards

Heather E. Rowe, Director

Asbestos Inspector



JODY FREITAS

Eff. Date 02/07/14

Exp. Date 02/07/15

A1900238

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

WBR MO

15

