PO Box 1020 Cairo, NY 12413 Phone (518) 622-9667 Fax (518) 622-9047 www.keaeng.com contactus@keaeng.com

January 22, 2014

Greene County EDTP PO Box 996 Tannersville, N.Y. 12485 Att: Michelle Yost

Re: Certified NYS Asbestos survey

For purpose of demolition to the West single family residence

824 Cauterskill Road Catskill, Greene County, NY Tax Map # 155.00-4-8.2 KA # 81513.37.03

Dear Michelle,

The following report is the result of our asbestos survey for the single family residence (mentioned above) required for demolition. As requested, building material samples were taken December 13, 2013 of suspect Asbestos containing material (ACM) as per New York State Industrial Code Rule 56-5.1 Survey Requirements for Building/Structural Demolition, Remodeling and Repair (ICR56) and OSHA Code of Federal Regulations, 40 CFR Ch. 1 (7-1-03 Edition) S763.86, sampling by Michael P. Bliss (see attached NYS Certification Number AH 01-159929). The samples (see attached Bulk Sampling Chain of Custody one page, dated December 13, 2013 were then delivered to Spectrum Environmental Associates December 13, 2013 for purposes of laboratory analysis (see attached PLM Bulk Asbestos Reports three pages and Summary of Bulk Asbestos Analysis Results one page for results.

Although none of the lab results came back positive (contained asbestos with more than 1% asbestos by weight), a **NYS certified asbestos abatement contractor is required** to remove the debris pile prior to demolition of the house. The debris pile is located outside the house (approximately an area 8' x 8' x 1' high, 64 cu.ft.) to the front and right side of the house as you face it from the road. The debris pile consist of suspect ACM interior finishes such as wall and ceiling gypsum board or plaster and flooring material that were removed after Hurricane Irene damaged the house and piled up outside. Because the debris pile consists of mixed material, it cannot be considered homogenous making taking adequate samples impossible because suspect ACM could exist within the pile and the pile cannot be disturbed because it is considered suspect ACM. If during demolition any suspect ACM is observed from within the crawlspace that had only a visual inspection performed from the access opening, the demolition needs to stop immediately and a Certified Asbestos Inspector notified to take additional samples for testing before any further demolition can continue in that area.

Remember to forward this report to the DOL for your demolition permit and also keep a copy of this report at the building during any of the demolition. If you have any questions please call.

Respectfully,

Kaaterskill Associates

Michael P. Bliss, NYS Certified Asbestos Inspector

CC: Darrin Elsom, PE

Encl: Asbestos Inspector Certificate, Inspector Refresher Requirements Certificate, Bulk Sampling Chain of Custody Report, PLM Bulk Asbestos Report, Summary of Bulk Asbestos Analysis Results, Spectrum Environmental Associates Asbestos handling license, and credentials.



P. O. Box 1024 Schenectady, NY 12301 (518) 346-6374 (Phone) (518) 346-4062 (Fax) www.4spectrum.com

December 19, 2013

Mr. Mike Bliss Kaaterskill Associates 517 Main Street Cario, New York 12413

RE:

FEMA Buyout West

Dear Mr. Bliss:

Spectrum Environmental Associates, Inc. (Spectrum) has attached the laboratory results and chain of custody record for the bulk sample(s) submitted to our office on December 13, 2013 for asbestos analysis.

According to USEPA and New York State Department of Labor - Industrial Code Rule 56 (NYS ICR 56) an asbestos containing material contains more than one percent (1%) of asbestos by weight. Analytical results indicating a "trace" means there was less than 1% asbestos observed in the sample. Therefore, the material may be considered non-asbestos containing. NAD means that no asbestos was detected. Based on these guidelines, the following materials were determined to be asbestos containing and should only be disturbed by individuals properly trained to perform such work.

Material

Location

% and Type Asbestos

None Identified

AmeriSci is located in New York, New York and is a New York State Department of Health Environmental Laboratory Approval Program (ELAP) approved laboratory (ELAP #11480). AmeriSci analyzes both friable and non-friable organically bound (NOB) materials using Polarized Light Microscopy (PLM) in accordance with the NYS DOH ELAP Methodologies. Within the scope of this method, all friable materials are analyzed using point counting to quantify the amount of asbestos present. For NOB materials, the method incorporates mandatory matrix reduction techniques including muffle furnace ashing and acid treatment of the sample.

In accordance with ELAP, NOB materials which have a result of less than one percent (<1%) asbestos by PLM analysis, must be analyzed by ELAP Method 198.4 (Transmission Electron Microscope Method for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples). Analysis must be performed via TEM to consider or treat NOB samples originating in New York State as non-asbestos containing.

This report is for the exclusive use of Kaaterskill Associates, its successors and/or assigns. This report and its contents represent confidential information and should not be duplicated without the expressed permission of Kaaterskill Associates, its successors and/or assigns.

Should you have any questions concerning the analysis of these materials, please do not hesitate to contact our office at (518) 346-6374.

Sincerely,

Charles D. Wolford

Project Manager

Ċc: file

Attachments: Chain of Custody

Laboratory Results
Licensure and Certification



AmeriSci New York

117 EAST 30TH ST. NEW YORK, NY 10016

TEL: (212) 679-8600 • FAX: (212) 679-3114

PLM Bulk Asbestos Report

Spectrum Environmental Associates, Inc Date Received

AmeriSci Job # 12/14/13

213122675

Attn: Bill Massman

Date Examined 12/18/13

P.O. #

P.O.Box 1024

Page

ELAP#

11480

1 of

RE: 13-488; FEMA Buyout; West, Project #81513.37.0

Schenectady, NY 12301

	IGA Lab No.	Asbestos Present	Total % Asbestos			
01 1	213122675-01 Location: Roofing - Roof - Front Porch	No	NAD (by NYS ELAP 198.6) by Ella Babayeva on 12/18/13			
Asbestos	ription: Black, Homogeneous, Non-Fibrous, Bulk Ma Types: laterial: Fibrous glass 2 %, Non-fibrous 38.3 %	aterial				
02	213122675-02	No	NAD			
1	Location: Roofing - Roof - Main Roof		(by NYS ELAP 198.6) by Ella Babayeva on 12/18/13			
Asbestos	• •	aterial				
Other M	laterial: Fibrous glass 3 %, Non-fibrous 55.3 %					
03	213122675-03	No	ŅAD			
2	Location: Underlayment - 1st Layer - Walls - E	xt. Walls	(by NYS ELAP 198.6) by Elia Babayeva			
			on 12/18/13			
Asbestos	ription: Black, Homogeneous, Non-Fibrous, Bulk Ma Types: laterial: Non-fibrous 32 %	aterial	on 12/18/13			
Asbestos Other M	Types:	aterial No	on 12/18/13 NAD			
Asbestos Other M	Types: laterial: Non-fibrous 32 %	No	NAD (by NYS ELAP 198.6) by Ella Babayeva			
Asbestos Other M 04 2 Analyst Desc Asbestos	Types: laterial: Non-fibrous 32 % 213122675-04 Location: Underlayment - 1st Layer - Walls - E ription: Black, Homogeneous, Non-Fibrous, Bulk Ma	No xt. Walls	NAD (by NYS ELAP 198.6)			
Asbestos Other M 2 Analyst Desc Asbestos Other M	Types: laterial: Non-fibrous 32 % 213122675-04 Location: Underlayment - 1st Layer - Walls - E ription: Black, Homogeneous, Non-Fibrous, Bulk Ma	No xt. Walls aterial	NAD (by NYS ELAP 198.6) by Ella Babayeva on 12/18/13			
Asbestos Other M 04 2 Analyst Desc Asbestos	Types: laterial: Non-fibrous 32 % 213122675-04 Location: Underlayment - 1st Layer - Walls - E ription: Black, Homogeneous, Non-Fibrous, Bulk Ma Types: laterial: Non-fibrous 28.5 %	No xt. Walls aterial	NAD (by NYS ELAP 198.6) by Ella Babayeva			

AmeriSci Job #: 213122675

Client Name: Spectrum Environmental Associates, Inc.

PLM Bulk Asbestos Report

13-488; FEMA Buyout; West, Project #81513.37.0

Client N	o. / HGA	Lab No.	Asbestos Present	Total % Asbestos
06 3		213122675-06 layment - 2nd Layer - Walls - E		NAD (by NYS ELAP 198.6) by Ella Babayeva on 12/18/13
Ash	t Description: Black, Homog pestos Types: ther Material: Non-fibrous 3	jeneous, Non-Fibrous, Bulk Ma .5 %	erial	
07		213122675-07	No	NAD
4	Location: Aspha	(by NYS ELAP 198.6) by Ella Babayeva on 12/18/13		
Asb	t Description: White, Homogoestos Types: ther Material: Non-fibrous 5	geneous, Non-Fibrous, Bulk Ma .4 %	terial	
08		213122675-08	No	NAD
4	Location: Aspha	ult - Walls - Ext. Wall Skirting		(by NYS ELAP 198.6) by Ella Babayeva on 12/18/13
Asb	t Description: White, Homoզ Destos Types: ther Material: Non-fibrous 4	geneous, Non-Fibrous, Bulk Ma	terial	
09		213122675-09	No	NAD
5	Location: Gyp. E	Board - Outside - Debris Pile		(by NYS ELAP 198.1) by Ella Babayeva on 12/18/13
Asb	estos Types:	eneous, Non-Fibrous, Bulk Mate ce, Fibrous glass Trace, Non-f		
10		213122675-10	No	NAD
5	Location: Gyp. E	Board - Outside - Debris Pile		(by NYS ELAP 198.1) by Ella Babayeva on 12/18/13
		lomogeneous, Fibrous, Bulk M	4	• • •

AmeriSci Job #: 213122675

Reviewed By:_

Client Name: Spectrum Environmental Associates, Inc.

Page 3 of 3

PLM Bulk Asbestos Report

13-488; FEMA Buyout; West, Project #81513.37.0

CFR 763 (NVLAP Lab Code 200546-0), ELAP PLM Method 198.1 for NY frlable samples, which includes the identification and quantitation of vermiculite or 198.6 for NOB samples or EPA 400 pt ct by EPA 600/M4-82-020 (NY ELAP Lab ID11480); Note:PLM is not consistently reliable in	otes: Babayeva	nalyzed; NA/PS=not analyzed/positive stop; P	PLM Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40
detecting asbestos in floor coverings and similar non-friable organically bound materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non asbestos-containing in NY State (also see EPA Advisory for floor tile, FR 59,146,38970,8/1/94) National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the lab. This PLM report relates ONLY to the items tested. AIHA Lab # 102843, RI Cert#AAL-094, CT Cert#PH-0186, Mass Cert#AA000054.	Lab Code 200546-0), ELAP F 6.6 for NOB samples or EPA 40 is In floor coverings and similar method that can be used to de floor tile, FR 59,146,38970,8/1 duced except in full without the	PLM Method 198.1 for NY friable samples, wi 400 pt ct by EPA 600/M4-82-020 (NY ELAP Lar non-friable organically bound materials. Not determine if this material can be considered or b/1/94) National Institute of Standards and Tec the approval of the lab. This PLM report relates	thich includes the identification and quantitation of ab ID11480); Note:PLM is not consistently reliable in AD or Trace results by PLM are inconclusive, TEM is a treated as non asbestos-containing in NY State (also see thoology Accreditation requirements mandate that this report

END OF REPORT___

AmeriSci Job #: 213122675

Client Name: Spectrum Environmental Associates, Inc.

Summary of Bulk Asbestos Analysis Results Table I

13-488; FEMA Buyout; West, Project #81513.37.0

** Asbestos % by TEM	OAN)	UAN	<u>.</u>	NAO)	CAN)	NAD)	NAD) :	Chrysotile Trace		NAD	<u>!</u>	ΦZ.		Ą	ĺ
.# .												-	Ĉ	i						
** Asbestos % by PLM/DS	NAD		NAD	1	NAD		QAN		NAD		NAD		NAD		NAD		NAD	!	NAD	
Insoluble Non-Asbestos Inorganic %	40.3		58.3		32.0		28.5		5.9		3.5		5.3		4.5		ļ		1	
Acid Soluble Inorganic %	32.4		9.9		9.5		44.8		3.0		1.7		2.0		2.0		İ		ļ	
Heat Sensitive Organic %	27.3		31.8		58.5		26.7		91.1		94.8		92.7		93.5		1		***	
Sample Weight (gram)	0.506		1.206		0.325		0.435		0.135		0.172		0.205		0.247				1	
HG Area	1		τ-		2	Valls - Ext. Walls	2	Valls - Ext. Walls	က	Walls - Ext. Walls	ဗ	Walls - Ext. Walls	4	Skirting	4	Skirting	Ŋ	s Pile	2	s Pile
Client Sample#	01	Location; Roofing - Roof - Front Porch	05	Location: Roofing - Roof - Main Roof	03	Location; Underlayment - 1st Layer - Walls - Ext. Walls	90	Location: Underlayment - 1st Layer - Walls - Ext. Walls	90	Location: Underlayment - 2nd Layer - Walls - Ext. Walls	96	Location: Underlayment - 2nd Layer - Walls - Ext. Walls	20	Location: Asphault - Walls - Ext. Wall Skirting	90	Location: Asphault - Walls - Ext. Wall Skirting	90	Location: Gyp. Board - Outside - Debris Pile	10	Location: Gyp. Board - Outside - Debris Pile
AmeriSci Sample #	2	Location:	05	Location:	03	Location:	40	Location:	90	Location:	90	Location:	20	Location:	90	Location:	60	Location:	10	Location:

Analyzed by: Madell E. Collins

_; Date Analyzed 12/19/2013

<1%; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only; Qualitative Analysis: Asbestos analysis results of "Present" or "NVA = No Visible Asbestos" represents results for Qualitative PLM or TEM Analysis only (no accreditation coverage available from any regulatory agency for qualitative analyses); AlHA Lab # 102843, NVLAP Lab Code 200546-0, NYSDOH ELAP</p> (Semi/Full) by EPA 600/R-93/116 (not covered by NVLAP Bulk accreditation) or ELAP 198.4; for New York samples; NAD = no asbestos detected during a quantitative analysis; NA = not analyzed; Trace = "Quantitative Analysis (Semi/Full); Bulk Asbestos Analysis - PLM by EPA 600/M4-82-020 per 40 CFR or ELAP 198.1 for New York friable samples or ELAP 198.6 for New York NOB samples; TEM Lab ID#11480.

Warning Note: PLM limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris for which PLM evaluation is recommended (i.e. soils and other heterogenous materials).

Reviewed By:



213122675

P. O. Bex 1024 Schenectady, NY 12301 (518) 346-6374 (Phone) (518) 346-4062 (Fax) www.4spectrum.com

BULK SAMPLING CHAIN OF CUSTODY Rev 6-1-08

PROJECT IN	FORM	ATION													
Project #: 91513 2	37.0	roject Na	SFEN	VA B	0700	r	Matr	ix A	sbestos Ana	lysis	L	ead An	alysis	Turnaround	
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Comments: Unle	Comments: Unless otherwise stated analyze each group to 1st positive result.					□*Soil	Z	ΓEM ELAP	198.4	ПА	A\$ Du	ıst/Wipe			
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New York State Department of Labor

Division of Safety and Health,
License and Certificate Unit

State Campus, Building 12

ASBESTOS HANDLING LICENSE

Spectrum Environmental Associates, Inc

P.O. Box 1024

Schenectady, N

CENSE NUMBER: 29081

LICENSE CLASS: RESTRICTED DATE OF ISSUE: 01/24/2013

EXPIRATION DATE: 02/28/2014

Duly Authorized Representative William ViMassmann

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NY CRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal of local laws with regard to the conduct of an aspestos project, or (2) demonstrated lacks of responsibility in the conduct of any job involving aspectos or aspectos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

> Eleen M. Franko, Acting Director For the Commissioner of Labor

SH 432 (8/12)

NEW YORK STATE DEPARTMENT OF HEALTH



Expires 12:01, AM April 01, 2014 Issued April 01, 2013

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. RÁVI KRISHNAPPA AMERICA SGIENCE TEAM NEW YORK INC 117-EAST 30TH ST NEW YORK, NY 10018 NY Lab ld No: 11480

Is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved subcategories and/or analytes are listed below:

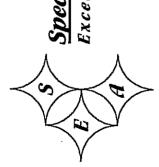
Miscellaneous

Asbestos in Friable Material EPA 600/M4/82/020

Item 198.1 of Manual

Ascestos in Non-Friable Material-PLM . Item 108.6 of Manual (NOB by RLM)

Asbestos In Non-Friable Material-TEM Item 198.4 of Manual



Spectrum Environmental Associates, Inc.

Exceeding our Clients Expectations of Excellence

This is to certify that

Michael P. Bliss

Social Security #: XXX-XXX-5404

Has Successfully Completed The:

Asbestos Building Inspector Refresher Course

This course is EPA and New York State Department Of Health approved pursuant to Article 30, Section 905 of the Also satisfies the N.Y.S.D.O.H. Building Inspector Refresher Requirements New York State Labor Law as required under Title 10, Chapter 11, Subchapter H, Part 73 NYSCRR.

The DOH 2832 certificate issued is the official record of this training course.

	Kathy D. McCollum, Instructor	~		The state of the s	Kathy D'McCollum	Director of Training
4/4/13	Course Date(s)			4/4/2014	Expiration Date	
100	Exam Score	4/4/2013	Exam Date	664225	DOH 2832	Certificate Number

2539 Albany Street, Box 1024 - Schenectady, New York 12301-1024 Phone: (518) 346-6374 I Fax: (518) 346-4062 I www.4spectrum.com

RESPIRATOR FIT CERTIFIC	ATION
NAME Michael Bl	155
S.S.# CXY SO SUPPLY TES	TDUE <u>4126(L4)</u>
EMPLOYER YCCOTECSKIII AS	<u>500! </u>
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TEST OPERATOR	DATE ISSUED

Occupational Health Centers of New York, P.A.
Affiliated with Concentra

1971 WESTERN AVE. ALBANY, NY 12203 FAX: (518) 452-4348 (518) 452-2597

STATE OF NEW YORK - DEPARTMENT OF LABOR **ASBESTOS CERTIFICATE**





CERT# 01-15929 DMV# 134666477 MUST BE CARRIED ON ASBESTOS PROJECTS



EYES GRN HAIR BRO HGT 6' 04"

IF FOUND RETURN TO: NYSDOL - L&C UNIT ROOM 161A BUILDING 12 STATE OFFICE CAMPUS ALBANY NY 12240

New York State Department of Labor Division of Safety and Health

Division of Safety and Health License and Centificate Unit-State Campus, Building 12 Albany, NY 12240

ASBESTOS HANDLING LICENSE

Kaaterskill Associates Land Surveying Architecture and

Engineering P.C.

P.O. Box 1020

Cairo, NY 12413

FILE NUMBER: 00-1040

LICENSE NUMBER: 29739

LICENSE CLASS: RESTRICTED

DATE OF ISSUE: 06/19/2013

EXPIRATION DATE: 06/30/2014

Duly Authorized Representative - Michael PBliss:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal of local laws with regard to the conduct of an issbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos of aspector material

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Eileen M. Franko, Acting Director For the Commissioner of Labor

SH 432 (8/12)