211 WEST BROADWAY
Block: 178 Lot: 7502
BIN: 1079278

New York, New York 10013
Phone: 212-925-5557
Fax: 212-966-7031

Fax

To:	Department of Environmental Protection	**From:**	211 West Broadway
Fax:	718-595-3744	**Date:**	May 18, 2002
Phone:	718-595-3682	**Pages:**	19, including this page
Re:	Environmental Hazard Assessments	**CC:**	Karen Shaberman

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

•Comments:

Attached, as requested, is the Environmental Hazard Assessment Report as was commissionedBy our building in November. If you have any questions, kindly contact our managing agent, Karen Shaberman, of Andrews Building Corporation, at 212-529-5688 ext. 217. Thank you.

The City of New York
Department of Environmental Protection
59-17 Junction Boulevard
Corona, New York
11368-5107

Joel A. Miele Sr., P.E.
Commissioner

Robert C. Avaltroni
Deputy Commissioner
Bureau of
Environmental Compliance
Tel (718) 595-4418
Fax (718) 595-4422

May 17, 2002

Building Owner Name: _____

Address: 211 W. Broadway
NYC

Subject: _____

Dear Sir/ Madam:

In September 2001, the New York City Department and Environmental Protection (NYC DEP) and the Department of Health (NYC DOH) advised building owners regarding building maintenance and re-occupancy issues following the collapse of the World Trade Center. The steps included the professional assessment of building contamination for possible hazardous components, including asbestos, and a retrospective filing, as required, if applicable.

The NYC DEP is hereby requesting copies of the environmental hazard assessments including bulk sample results and air monitoring results and a summary of clean-up activities at the above referenced site. Please forward the requested documents to our offices within FIVE BUSINESS DAYS. They may be faxed to (718) 595-3744 or sent to the NYC DEP Asbestos Control Program at 59-17 Junction Boulevard, 8th floor, Corona, New York 11373-5108.

Please be advised building owners are responsible for the cleaning of building exteriors, grounds, and common areas. Adherence to proper cleaning methods is important for the protection of public health and the environment. DEP inspectors will be following up on this matter.

If you have any questions, you may reach the Department at (718) 595-3682 during office hours or the 24-hour Help Center at (718) DEP-HELP. DEP staff is available to provide guidance and technical assistance.

Sincerely,

R. Radhakrishnan, P.E.
Director
Asbestos Control Program

DEP
www.nyc.gov/dep
(718) DEP-HELP

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCIENTIFIC LABORATORIES, INC.
117 EAST 30TH STREET
NEW YORK, NY 10016
TEL: (212) 679-8600 • FAX: (212) 679-9392

November 5, 2001

R.K.M. Inc.
Attn: Robert Marlow
305 East 11th Street
New York, NY 10009

RE: R.K.M. Inc.
Job Number 201111306
P.O. # Marlow
211 West Broadway

Dear Robert Marlow:

Enclosed are the results for TEM asbestos analysis of the following R.K.M. Inc. samples received at Scientific Laboratories on Saturday, November 03, 2001, for a 48 hour turnaround:

110201TD01, 110201TD02, 110201TD03, 110201TD04, 110201TD05, 110201TD06

The 6 air samples were sent to SciLab via Hand Delivered These samples were prepared and analyzed according to AHERA Protocol as contained in 40 CFR, Part 763, Subpart E, Appendix A.

Table I represents a summary of all pertinent information used for the structure (fiber) density and concentration calculations. Included are the size of each structure counted, the structure density and concentration, type of asbestiform material detected and the analytical sensitivity, which represents the concentration by the detection of one structure in the TEM structure count. Copies of the Asbestos Count Sheets are included. These data sheets contain information for structure (fiber) length/width, structure type, structure morphology and pertinent information on EDS. SAED and photography

This report relates ONLY to the sample analysis expressed as structure density. SciLab assumes no responsibility for customer supplied data such as "sample location" or "air volume sampled". This report must not be used to claim product endorsement by SciLab, NVLAP or any agency of the U. S. Government. The National Institute of Standards and Technology Accreditation requirements, mandates that this report must not be reproduced, except in full without the approval of the laboratory.

SciLab appreciates this opportunity to serve your organization. Please contact us for any further assistance or questions.

Sincerely,

Paul Mucha
Laboratory Director

11/3
1245

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES
SCIENTIFIC LABORATORIES, INC.
117 EAST 30TH STREET
NEW YORK, NY 10016
TEL: (212) 679-8600 • FAX: (212) 679-9392

SciLab Job #: **201111306**
Client Name: R.K.M. Inc.

Table I
Summary of Transmission Electron Microscopy (TEM) Results for Asbestos (air)
211 West Broadway

SciLab Sample #	Client Sample #	Dilution Factor	Air Filtered (liters)	Area Analyzed (sq. mm.)	* Analytical Sensitivity (struc/cc air)	Asbestos Structures Detected (Microns) 0.5-5.0	>5.0	Total	Structure Density (struc/sq. mm.) >5.0	Total	Structure Concentration (struc/cc air) >5.0	Total	Type of Asbestos
01	110201TD01 4th Floor Livingroom		1500	.06	0.0043	0.0	0.0	0.0	<16.7	<16.7	<0.0043	<0.0043	NSD
02	110201TD02 4th Floor Bedroom		1500	.06	0.0043	0.0	0.0	0.0	<16.7	<16.7	<0.0043	<0.0043	NSD
03	110201TD03 5th Floor Apt. Livingroom		1500	06	0.0043	0.0	0.0	0.0	<16.7	<16.7	<0.0043	<0.0043	NSD
04	110201TD04 6th Floor Master Bedroom		1500	.06	0.0043	0.0	0.0	0.0	<16.7	<16.7	<0.0043	<0.0043	NSD
05**	110201TD05 Field Blank												
06**	110201TD06 Field Blank												

* concentration represented by the detection of 1 structure
** not analyzed
NSD: No Asbestos Structures Detected

Reviewed By: _____ Analyzed By: _____ Date: 11/5/01
Mikhail Gruzman

NVLAP#: 200546-0

SciLab Job#: **201111307**
Client Name: R.K.M. Inc.

Table I
Summary of Bulk Asbestos Analysis Results
211 West Broadway

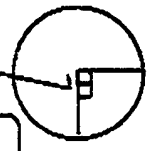
SciLab Sample #	Client Sample# Location	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	Asbestos by PLM/DS	Asbestos by TEM
01	110201TD05		---	---	---	---	NA	NVA
	4th Floor Livingroom Window Sill Area 6x6 Wipes							
02	110201TD06		---	---	---	---	NA	NVA
	5th Floor Livingroom Window Sill Area 6x6 Wipes							
03	110201TD07		---	---	---	---	NA	NVA
	6th Floor Livingroom Window Sill Area 6x6 Wipes							
04	110201TD08		---	---	---	---	NA	NVA
	Debris "Outside" 4th Floor Window Sill Area 6x6 Wipes							

Analyzed by: Mark Peysakhov; Date Analyzed. 11/4/01

*NAD/NSD = no asbestos detected; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200546-0) and ELAP PLM Analysi Protocol 198.1 for New York samples (NYSDOH ELAP Lab # 11480); ELAP TEM Analysis Protocol 198.4 for negative NY NOB samples. Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. 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 New York 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 laboratory. This PLM report relates ONLY to the items tested.
AIHA# 102843; VT Cert# AL016055 NVA=No Visible Asbestos

Reviewed By:

TEM Asbestos (air) Count Sheet



Client Name: R.K.M. Inc.
Job #: 201111306
Lab Sample #: 01
Client Sample #: 110201TD01
Received: 11/03/2001 12:45:00
Date Analyzed: 11/05/2001
Scope #:

Volume (liters): 1 500.0
Filter Type / Filter Area: MCE 385 mm2
Grid Opening Size: 0.01000
Area Examined: 0.06000 mm2
Magnification: 20,000
Accelerating Voltage: 100 KeV

Analysis Performed by: Mikhail Gruzman

Location	Grid Opening	Fiber	Length µM	Width µM	Fiber Type	Morphology	EDS	Orient.	SAED	Photo
E9-B4/1	1	NSD							☐	
E9-C4/1	2	NSD							☐	
E9-E4/1	3	NSD							☐	
E9-F4/1	4	NSD							☐	
E9-G4/1	5	NSD							☐	
E10-G4/1	6	NSD							☐	

NSD: No Asbestos Structures Detected

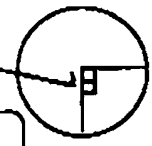
Comments

		Structure Density (str/mm2)	Concentration (str/cc air)
Total Grid Openings:	6		
Chrysotile Asbestos Structures:	0	<16.7	<0.0043
Amphibole Asbestos Structures:	0	<16.7	<0.0043
Asbestos Structures >=5 microns:	0	<16.7	<0.0043
Total Non-Asbestos Structures.			
Total Asbestos Structures:	0	<16.7	<0.0043
Analytical Sensitivity:		16.7	0.0043

Grid Evaluation

- ☒ Grid Openings Covered > 50%
- ☒ Intact Grid Opening > 50%
- ☒ Undissolved Filter < 10%
- ☒ Folded Replica < 50%
- ☒ Filter Loading < 10%
- ☒ Particulate Even

TEM Asbestos (air) Count Sheet



Client Name: R.K.M. Inc.
Job #: 201111306
Lab Sample #: 02
Client Sample #: 110201TD02
Received: 11/03/2001 12:45:00
Date Analyzed: 11/05/2001
Scope #:

Volume (liters): 1 500.0
Filter Type / Filter Area: MCE 385 mm2
Grid Opening Size: 0.01000
Area Examined: 0.06000 mm2
Magnification: 20,000
Accelerating Voltage: 100 KeV

Analysis Performed by: Mikhail Gruzman

Location	Grid Opening	Fiber	Length µM	Width µM	Fiber Type	Morphology	EDS	Orient.	SAED	Photo
A1-B5/1	1	NSD								
A1-C5/1	2	NSD								
A1-E5/1	3	NSD								
A1-F5/1	4	NSD								
A1-G5/1	5	NSD								
A2-F4/1	6	NSD								

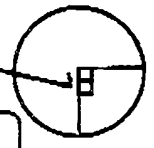
NSD: No Asbestos Structures Detected

Comments

		Structure Density (str/mm2)	Concentration (str/cc air)
Total Grid Openings:	6		
Chrysotile Asbestos Structures:	0	<16.7	<0.0043
Amphibole Asbestos Structures:	0	<16.7	<0.0043
Asbestos Structures >=5 microns:	0	<16.7	<0.0043
Total Non-Asbestos Structures:			
Total Asbestos Structures:	0	<16.7	<0.0043
Analytical Sensitivity:		16 7	0.0043

Grid Evaluation
- ☒ Grid Openings Covered > 50%
- ☒ Intact Grid Opening > 50%
- ☒ Undissolved Filter < 10%
- ☒ Folded Replica < 50%
- ☒ Filter Loading < 10%
- ☒ Particulate Even

TEM Asbestos (air) Count Sheet



Client Name: R.K.M. Inc.
Job #: 201111306
Lab Sample #: 03
Client Sample #: 110201TD03
Received: 11/03/2001 12:45:00
Date Analyzed: 11/05/2001
Scope #:

Volume (liters): 1 500.0
Filter Type / Filter Area: MCE 385 mm2
Grid Opening Size: 0.01000
Area Examined: 0.06000 mm2
Magnification: 20,000
Accelerating Voltage: 100 KeV

Analysis Performed by: Mikhail Gruzman

Location	Grid Opening	Fiber	Length µM	Width µM	Fiber Type	Morphology	EDS	Orient.	SAED	Photo
A3-B4/1	1	NSD								
A3-C4/1	2	NSD								
A3-E4/1	3	NSD								
A3-F4/1	4	NSD								
A4-E4/1	5	NSD								
A4-F4/1	6	NSD								

NSD: No Asbestos Structures Detected

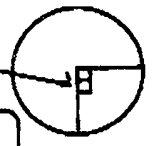
Comments

		Structure Density (str/mm2)	Concentration (str/cc air)
Total Grid Openings:	6		
Chrysotile Asbestos Structures:	0	<16.7	<0.0043
Amphibole Asbestos Structures:	0	<16.7	<0.0043
Asbestos Structures >=5 microns:	0	<16.7	<0.0043
Total Non-Asbestos Structures:			
Total Asbestos Structures:	0	<16.7	<0.0043
Analytical Sensitivity:		16.7	0.0043

Grid Evaluation

- ☒ Grid Openings Covered > 50%
- ☒ Intact Grid Opening > 50%
- ☒ Undissolved Filter < 10%
- ☒ Folded Replica < 50%
- ☒ Filter Loading < 10%
- ☒ Particulate Even

TEM Asbestos (air) Count Sheet



Client Name: R.K.M. Inc.
Job #: 201111306
Lab Sample #: 04
Client Sample #: 110201TD04
Received: 11/03/2001 12:45:00
Date Analyzed: 11/05/2001
Scope #:

Volume (liters): 1 500.0
Filter Type / Filter Area: MCE 385 mm2
Grid Opening Size: 0.01000
Area Examined: 0.06000 mm2
Magnification: 20,000
Accelerating Voltage: 100 KeV

Analysis Performed by: Mikhail Gruzman

Location	Grid Opening	Fiber	Length µM	Width µM	Fiber Type	Morphology	EDS	Orient.	SAED	Photo
A5-C4/4	1	NSD							☐	
A5-E4/4	2	NSD							☐	
A5-F4/4	3	NSD							☐	
A5-G4/4	4	NSD							☐	
A5-H4/4	5	NSD							☐	
B1-E4/1	6	NSD							☐	

NSD: No Asbestos Structures Detected

Comments

		Structure Density (str/mm2)	Concentration (str/cc air)
Total Grid Openings:	6		
Chrysotile Asbestos Structures:	0	<16.7	<0.0043
Amphibole Asbestos Structures:	0	<16.7	<0.0043
Asbestos Structures >=5 microns:	0	<16.7	<0.0043
Total Non-Asbestos Structures:			
Total Asbestos Structures:	0	<16.7	<0.0043
Analytical Sensitivity:		16.7	0.0043

Grid Evaluation
- ☒ Grid Openings Covered > 50%
- ☒ Intact Grid Opening > 50%
- ☒ Undissolved Filter < 10%
- ☒ Folded Replica < 50%
- ☒ Filter Loading < 10%
- ☒ Particulate Even

RKM, INC.

105 East 11th Street, Suite 4F
New York, New York 10003
Phone: 212 677 – 3771
Fax: 212 228 – 7729

Bulk Sample Chain of Custody / Data Sheet

Laboratory: Sci Labs, Inc. | Address: 117 East 30th Street, New York, NY 10016 | Job #: 20111306

Project Information: 211 West Broadway

Sampled By:
Number:
Manager:
Site:

Analysis Type	6-8 hr	12 hr	24 hr	48 hr	72 hr	5 day	other
ELAP PLM							
ELAP TEM				X			
ELAP PLM/TEM							
TEM/ Water							
TEM/Chatfield							
PLM							
LEAD							
OTHER							

Comments: Fax Results + Hold Blanks until notified

Results to: RKM, INC.
Invoice to: RKM, INC.
Written Report to: RKM, INC.
Comments: Read for 1st Positive of each material

Return Samples Yes X No
Phone #: 212 677 3771
Fax #: 212 228 7729
Pager #:

Sample I.D.	Sample Location	Material Type	Date Collected	Homogeneous Group
11031-T001	4th Floor living room	1500 l		
T002	4th Floor bedroom	↓		
T003	5th Floor Apt living room	↓		
T004	6th Floor Master bedroom	↓		
T005	Blank			
T006	↓			

AIR SAMPLES

Relinquished By:	Date / Time	Received By:	Date / Time:
R [signature]	11/3/01	[signature]	11/3 1245

SCILAB
FULL SERVICE ENVIRONMENTAL LABORATORIES

SCIENTIFIC LABORATORIES, INC.
117 EAST 30TH STREET
NEW YORK, NY 10016
TEL: (212) 679-8600 • FAX: (212) 679-9392

November 4, 2001

R.K.M. Inc.
Attn: Robert Marlow
305 East 11th Street
New York, NY 10009

RE: R.K.M. Inc.
Job Number 201111307
P.O. # Marlow
211 West Broadway

Dear Robert Marlow:

Enclosed are the results of Asbestos Analysis - Bulk Qualitative Protocol of the following R.K.M. Inc. samples, received at SCILAB on Saturday, November 03, 2001, for a 48 hour turnaround:

110201TD05, 110201TD06, 110201TD07, 110201TD08

The 4 samples, placed in zip lock bag, were shipped to SciLab via Hand Delivered. R.K.M. Inc. requested Bulk-Qualitative analysis of these samples.

The samples were prepared and analyzed by using a Standard Operating Procedure developed by Scientific Laboratories, Inc.. After preparation, using non-quantitative matrix reduction if necessary, the presence or absence of asbestos is determined by PLM and/or TEM as indicated on the attached summary table. Quantification after the fact is not possible without a new preparation. This report relates ONLY to the analysis expressed as "asbestos present" or "no asbestos visible". This report must not be used to claim product endorsement or approval by SciLab, NVLAP, ELAP or any other associated SciLab certifying agency. The National Institute of Standards and Technology Accreditation requirements, mandates that this report must not be reproduced, except in full, and with the approval of the laboratory.

SciLab appreciates this opportunity to serve your organization. Please contact us for any further assistance or with any questions.

Sincerely,

Paul Mucha
Laboratory Director

RKM, INC.

Environmental Hazard Consultants

305 East 11th Street, Suite 4F
New York, New York 10003
Phone: 212- 677 – 3771
Fax: 212 -228 – 7729

Bulk Sample Chain of Custody / Data Sheet

Laboratory: Sci Labs, Inc. **Address:** 117 East 30th Street, New York, NY 10016 **Job #** 01111307

Project Information:

Sampled By: TD
Number:
Manager:
Site: 211 WEST BROADWAY

Analysis Type	Turnaround Time 6-8 hr	12 hr	24 hr	48 hr	72 hr	5 day	other
ELAP PLM							
ELAP TEM							
ELAP PLM/TEM							
TEM/ Water							
TEM/Chatfield				X			
PLM							
LEAD				X			
OTHER							

Comments: Fax results + HAZ Samples 30 Day

Results to: RKM, INC.
Invoice to: RKM, INC.
Written Report to: RKM, INC.
Comments: NONE

Return Samples ____ Yes _X_ No
Phone #: 212 677 3771
Fax #: 212 228 7729
Pager #:

Sample I.D.	Sample Location	Material Type	Date Collected	Homogeneous Group
110201TD05	4TH FL livingroom LOWER SILL	AHERA 6"x6" wipes	11/02/01	1
06	5th FL			2
07	6TH FL			3
08	DEBRIS "OUTSIDE" 4TH FL LOWER SILL			4

TEM WIPE Samples QUANTITATIVE

Relinquished By:	Date / Time	Received By:	Date / Time:
Robert Martin	11/3/01	[illegible]	11/3 1245

EMSL Analytical, Inc.- 107 Haddon Avenue
Westmont, NJ. 08108
(856) 858-4800

11/13/01

Attention: *Robert Marlow*
RKM, Inc.
305 East 11th Street
Suite 4F
New York, NY. 10003

Air Sample

Project: Dust Characterization
Ref. Number: 360100511

Particle Analysis by Scanning Electron Microscopy (SEM), Energy Dispersive X-Ray Micro Analysis (EDX) and Polarized Light Microscopy (PLM).

Sample # 1A - Inside 4th Fl

Nuisance Particulate:			Biological Particulate:			
Asbestos (T)		ND	Mold	Unidentified	ND	ppcm
			Pollen	Unidentified	ND	ppcm
MMVF's	Fibrous Glass	14.6 ppcf		Dust Mites	ND	
	Mineral Wool	ND		Insect Fragments	7.3	
	RCF	ND				

Common Particulate:			Additional Particulate:		
Cellulose	Natural	97.5		Rust	138.5
	Processed	131.2		Aluminum Oxide	21.9
	Wood	ND		Zinc Oxide	29.2
Synthetics (T)		7.3	Back Painting	Paint Fragments	153.1
				Gypsum	262.4
Hair	Human	ND		Quartz	80.2
	Animal	ND		Calcite	14.6
	Skin Fragments	262.4		Kaolinite	48.7
				Salt	21.9
				Corn Starch	21.9
				Carbon Black	ND
	Inert Organics	7,522.6		UnID'd Inorganics	1,793.2
Totals in ppcf					
	Total Particles >5um=	1,109.0 ppcf		Total Particles=	10,619.5 ppcf

Results are in ppcf unless noted.
ppcf= particles per cubic foot
mppcf= millions per cubic foot
ppcm= particles per cubic meter
ppcc= particles per cubic centimeter

Detection Limits:
ppcf= 7.3
ppcm= 257.4
ppmm2= 1.20

John Newton
Analyst

13 November, 2001
Date of Analysis

TNTQ = Too Numerous To Quantify ND = None Detected

EMSL Analytical, Inc.- 107 Haddon Avenue
Westmont, NJ. 08108
(856) 858-4800

11/13/01

Attention: *Robert Marlow*
RKM, Inc.
305 East 11th Street
Suite 4F
New York, NY. 10003

Air Sample.

Project: Dust Characterization
Ref. Number: 360100511

Particle Analysis by Scanning Electron Microscopy (SEM), Energy Dispersive X-Ray Micro Analysis (EDX) and Polarized Light Microscopy (PLM).

Sample ID	Volume (L)	Particle ID	Concentration (ppcm)	Background
1B - Inside 4th Fl	200	Penicillium/Aspergillus	36.4	Less than Background
		Cladosporium	ND	N/A
		Agrocybe/Coprinus	ND	N/A
		Alternaria	ND	N/A
		Curvularia	ND	N/A
		Pericona	ND	N/A
		Bipolaris	ND	N/A
		Ganoderma	ND	N/A
		Smut	ND	N/A
		Myxomycete	ND	N/A
		Spegazzinia	ND	N/A
		Immature/UnID'd	218.2	Less than Background
		Hyphae	36.4	Less than Background
		Total Mold	290.9	Less than Background
		Grass	ND	N/A
		Conifer	ND	N/A
		Unidentified	ND	N/A
		Total Pollen	ND	N/A
		Fiber Glass	1.03 ppcf	N/A
		Insect Fragment	0	N/A
		Skin Fragments	14.4 ppcf	N/A
		Analytical Sensitivity	/cu.M.= 36.4 /cu.ft.= 1.03	

John Newton
Analyst

13 November, 2001
Date of Analysis

Ppcm = Particle per Cubic Meter
TNTQ = Too Numerous To Quantify

ppcf = Particles per Cubic Foot
ND = None Detected

EMSL Analytical, Inc.- 107 Haddon Avenue
Westmont, NJ. 08108
(856) 858-4800

11/13/01

Attention: Robert Marlow
RKM, Inc.
305 East 11th Street
Suite 4F
New York, NY. 10003

Dust Wipe

Project: Dust Characterization
Ref. Number: 360100511

Particle Analysis by Scanning Electron Microscopy (SEM), Energy Dispersive X-Ray Micro Analysis (EDX) and Polarized Light Microscopy (PLM).

Sample #: 3 - 4th Fl. Living Room

Nuisance Particulate:		(%)
Asbestos		ND
MMVF's	Fibrous Glass	2
	Mineral Wool	<1
	Ceramic Fibers	ND

Biological Particulate:	(%)
Mold (T)	<1
Pollen (T)	<1
Dust Mites	ND
Insect Fragments	<1

Common Particulate:		(%)
Cellulose	Natural	5
	Processed	10
	Wood	<1
Synthetics (T)		<1
Hair	Human	2
	Animal	<1
Skin Fragments		8
Inert Organics		15

Additional Particulate:	(%)
Rust	3
Aluminum Oxide	1
Zinc Oxide	2
Paint Fragments	8
Gypsum	10
Quartz	3
Calcite	2
Kaolin	3
Cement/ Mortar	2
UnID'd Inorganics	14

Specific Particulate:	
Corn Starch	<1
Unidentified Plastic	2

John Newton
Analyst

13 November, 2001
Date of Analysis

TNTQ = Too Numerous To Quantify ND = None Detected

EMSL
307 West 38th Street, New York, NY 10018 212-290-0051 http://www.emsl.com

36 01 0651 L
RKM 13

EMSL ANALYTICAL, Inc. CHAIN OF CUSTODY

EMSL Rep: Sam Petrecky, (212) 290-0051

Third Party Billing requires written authorization from third party

Your Name:		EMSL-Bill to:	SAME
Company:	RKM INC		
Street:	305 EAST 11th St 4F	Street:	
Box #:		Box #:	
City/State:	New York Zip 10003	City/State:	Zip
Phone Results to:		Fax Results to:	
Name:	Same - Robert Marino	Name:	
Telephone #:	Fax 212 228 7729	Fax #:	
Project Name/Number:		Purchase Order #:	

TURNAROUND TIME

☐ 3 Hours ☐ 6 Hours ☐ 12 Hours ☐ 24 Hours ☐ 48 Hours ☒ 72 Hours ☐ 4 Days ☐ 5 Days ☐ 6-10 Days

SAMPLE MATRIX

☒ Air ☐ Bulk ☐ Soil ☒ Wipe ☐ Micro-Vac ☐ Drinking Water ☐ Wastewater ☐ Chips ☐ Other

ASBESTOS ANALYSIS

PCM - Air
- ☐ NIOSH 7400 (A) Issue 2: August 1994
- ☐ OSHA w/TWA

TEM AIR
- ☐ AHERA 40 CFR, Part 763 Subpart E
- ☐ NIOSH 7402 Issue 2
- ☐ EPA Level II

PLM - Bulk
- ☐ EPA 600/R-93/116
- ☐ NY Stratified Point Count
- ☐ California Air Resource Board (CARB) 435
- ☐ NIOSH 9002
- ☐ PLM NOB (Gravimetric) NYS 198.1
- ☐ EPA Point Count (400 Points)
- ☐ EPA Point Count (1,000 Points)
- ☐ Standard Addition Point Count

SOILS
- ☐ EPA Protocol Qualitative
- ☐ EPA Protocol Quantitative
- ☐ EMSL MSD 9000 Method fibers/gram
- ☐ Superfund EPA 540-R097-028 (dust generation)

TEM BULK
- ☐ Drop Mount (Qualitative)
- ☐ Chatfield SOP-1988-02
- ☐ TEM NOB (Gravimetric) NY 198.4

TEM MICROVAC
- ☐ ASTM D 5755-95 (Quantitative)

TEM WIPE
- ☐ ASTM D-6480-99
- ☐ Qualitative☐

TEM WATER
- ☐ EPA 100.1
- ☐ EPA 100.2
- ☐ NYS 198.2

OTHER:

LEAD ANALYSIS

Flame Atomic Absorption
- ☐ Wipe, SW846-7420☐ASTM ☐ non ASTM
- ☐ Soil, SW846-7420
- ☐ Air, NIOSH 7082
- ☐ Chips, SW846-7420 or AOAC 5.009 (974.02)
- ☐ Wastewater, SW 846-7420
- ☐ TCLP LEAD SW8[illegible]-1311/7420

Graphite Furnace Atomic Absorption
- ☐ Air, NIOSH 7105
- ☐ Wastewater, SW846-7421
- ☐ Soil, SW846-7421
- ☐ Drinking Water, EPA 239.2

ICP - Inductively Coupled Plasma
- ☐ Wipe, SW846-6010☐ASTM ☐ non ASTM
- ☐ Soil, SW846-6010
- ☐ Air, NIOSH 7300

MATERIALS ANALYSIS

- ☐ Full Particle Identification
- ☐ Optical Particle Identification
- ☐ Dust Mites and Insect Fragments
- ☐ Particle Size & Distribution
- ☐ Product Comparison
- ☐ Paint Characterization
- ☐ Failure Analysis
- ☐ Corrosion Analysis
- ☐ Glove Box Containment Study
- ☐ Petrographic Examination of Concrete
- ☐ Portland Cement in Workplace Atmospheres (OSHA ID-143)
- ☐ Man Made Vitrous Fibers - MMVF's
- ☐ Synthetic Fiber Identification
- ☐ Other:

MICROBIAL ANALYSIS

Air Samples
- ☐ Mold & Fungi by Air O Cell
- ☐ Mold & Fungi by Agar Plate count & id
- ☐ Bacterial Count and Gram Stain
- ☐ Bacterial Count and Identification

Water Samples
- ☐ Total Coliforms, Fecal Coliforms
- ☐ Escherichia Coli, Fecal Streptococcus
- ☐ Legionella
- ☐ Salmonella
- ☐ Giardia and Cryptosporidium

Wipe and Bulk Samples
- ☐ Mold & Fungi - Direct Examination
- ☐ Mold & Fungi - (Culture follow up to direct examination if necessary)
- ☐ Mold & Fungi Culture (Count only)
- ☐ Mold & Fungi Culture (Count/ID)
- ☐ Bacterial Count & Gram Stain
- ☐ Bacterial Count & Identification (3 most prominent types)
- ☐ Other:

IAQ ANALYSIS

- ☐ Nuisance Dust (NIOSH 0500 & 0600)
- ☐ Airborne Dust (PM10, TSP)
- ☐ Silica Analysis by XRD ☐Niosh 7500
- ☐ HVAC Efficiency
- ☐ Carbon Black
- ☐ Airborne Oil Mist
- ☒ Other: FULL PARTICLE ID

Client Sample # (S): 1A 1B 2B 3 TOTAL SAMPLE #: 4

Relinquished:	Robert Marino	Date: 11/3/01	Time:
Received:		Date:	Time:
Relinquished:		Date:	Time:
Received:		Date:	Time:

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R.K.M. INC.

Environmental Hazard Consultants

305 EAST 11TH STREET, SUITE 4P
New York, NY 10003
Tel: (212) 677-3771 Fax: (212) 228-7729

November 23, 2001

Via: Fax 212-966-6644

Patti Greaney
211 West Broadway
New York, NY 10013

Re: Indoor Air Quality Investigation
211 West Broadway

Dear Ms Greaney:

On November 2, 2001, we conducted a walkthrough and sampling inspection of various floors within the above referenced building for the purpose of conducting dust and ambient air testing to determine hazard levels as a result of the 9/11/01 WTC incident. This investigation required gas detection using portable direct read instrumentation, air and dust sampling for asbestos particle identification including fungal identification. The following is a summary of our observations and test results:

Testing & Lab Results:

Air Sampling for Airborne Asbestos: Air sampling for airborne asbestos structures was conducted in 4 locations throughout the building at various apartments located on the 4th, 5th and 6th floors. These samples were prepared and analyzed by Scientific Laboratories in accordance with AHERA Protocol as contained in 40 CFR, Part 763, Subpart E, Appendix A. This method uses Transmission Electron Microscopy (TEM) to determine the asbestos structure type, density and size. Results are reported as structures per cubic centimeter of air. Results indicate: **NO ASBESTOS STRUCTURES DETECTED (NAD).**

Wipe Sampling for Asbestos Dust: Bulk dust sampling for asbestos structures was performed in 4 locations: 4th floor inside and outside window sill area, 5th , and 6th floors window sill areas. Attached please find laboratory results from Scientific Laboratories for 4 dust wipe samples taken for asbestos. Laboratory results indicate: **NO VISIBLE ASBESTOS (NVA).**

Full Particle Identification: Full Particle Identification sampling was performed inside and outside of the 4th floor area. This testing uses Polarized Light Microscopy (PLM), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), and X-Ray Defraction (XRD) to identify nearly all particles from cotton fibers, dander and dust mites to unusual materials such as carbon black, metal oxides and minerals. Also included are the identification of any fungal allergens.

The following samples were taken in the floor 4th floor apartment :

- 1 Air Sample for full particle ID.
- 1 Air sample for full particle ID for fungal components inside only
- 1 Air sample for full particle ID for fungal components (Outside baseline)
- 1 Bulk Dust sample full particle ID including fungal components

A review of the EMSL Analytical data indicates no hazardous materials present nor any excessive fungal components. The array of particles containing rust, paint fragments, gypsum and quartz are most likely the result of the ongoing brick pointing being performed on the building exterior.

Hazardous Gas Monitoring : Listed below are the results of gas detection monitoring performed during the investigation at the above referenced site. All monitoring was performed using an AIM3000 4 gas detector and an MiniRae VOC detector, according to the following guidelines:

- The Occupational Safety and Health Administration (OSHA) Standards and Regulations contained in Title 29, Code of Federal Regulations, Parts 1910 and 1920 (29 CFR 1910 and 1920);
- Subsequent additions and/or modifications, the New York State Labor Law Section 876 (Right-To-Know Law);
- The Interim Standard Operating Safety Guidelines by the United States Environmental Protection Agency and the Office of Emergency and Remedial Response;
- Additional OSHA regulations;
- National Institute for Occupational Safety and Health (NIOSH) pocket guide; and
- The American Conference of Governmental Industrial Hygienists (ACGIH) handbook.

All monitoring was performed by *RKM INC, Tim Donohoe* in compliance with applicable regulations. Reported results are the highest readings found during sampling. All gas detection results reported normal, non-hazardous conditions.

RKM INC.
211 West Broadway
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Hazardous Gas Monitoring
211 West Broadway
11/2/01

Time	Temp	Location	Oxygen %	H2S/Toxic	CO %	VOC	LEL %
12:00	70 F	4th Floor Living Room	20.8	0.0	0.0	0.0	0.0
12:00	70 F	4th Floor Master bedroom	20.8	0.0	0.0	0.0	0.0
12:05	70 F	4th Floor Elevator	20.8	0.0	0.0	0.0	0.0
12:05	70 F	4th Floor TV room	20.9	0.0	0.0	0.0	0.0
12:05	70 F	4th Floor Rear bedroom	20.8	0.0	0.0	0.0	0.0
12:16	70 F	4th Floor Laundry Room	20.9	0.0	0.0	0.0	0.0
12:25	70 F	4th Floor Rear Hallway	20.8	0.0	0.0	0.0	0.0
12:25	70 F	4th Floor Rear Stairs	20.9	0.0	1.0	0.0	0.0
12:40	70 F	5th Floor Hall	20.9	0.0	3.0	0.0	0.0
12:40	70 F	5th Floor Apt kitchen	20.8	0.0	0.0	0.0	0.0
12:45	70 F	5th Floor Elevator	20.9	0.0	2.0	0.0	0.0
12:46	70 F	5th Floor Rear stairs	20.9	0.0	2.0	0.0	0.0
12:50	70 F	6th Floor Utility Room	20.9	0.0	0.0	0.0	0.0
1:00	70 F	6th Floor Bedroom	20.8	0.0	0.0	0.0	0.0
1:05	70 F	6th Floor Train Room	20.9	0.0	0.0	0.0	0.0
1:10	64 F	7th Floor room	20.9	0.0	0.0	0.0	0.0

Using AIM 3000 and MiniRae gas meters

Recommendations

In response to the WTC Disaster, the NYC Department of Health has issued the following recommendations. You may visit their website @ http://www.ci.nyc.ny.us/html/doh/home.html.

- Recommendations for People Re-Occupying Commercial Buildings and Residents Re-entering Their Homes (Pages 1-3),
- Notice to Building Owners Located South Of 14th Street, Manhattan (Pages1-2)
- Asbestos (ACM) Fact Sheet (Pages 1-4)

Please call us anytime if should have any further questions or concerns of any kind.

Very truly yours,

Robert K. Marlow
President

W/encl.