NYC 9/11 Public Portal Document

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Project: H.S. Of Economics And Finance
100 Trinity Place, New York, NY

Received: 4/15/02 9:00:00 PM
ATC Group #: 7423
Analysis Date: 4/15/02

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Sample	Volume	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures 0.5µ-5	# Structures 5µ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)	Notes
03 *7423 -1*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
04 *7423 -2*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
05 *7423 -3*	1816.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
06 *7423 -4*	1848.00	0.0450	0	None Detected	0	0	0.0046	<22.24	<0.0046	
07 *7423 -5*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
08 *7423 -6*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
09 *7423 -7*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	

ROMAN PEYSAKHOV
Analyzed by:

MICHAEL A. GORYCKI, Ph.D.
Approved by:

Disclaimer: The laboratory is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. This lab is only responsible for data reported in structures/mm². This report may not be reproduced, except in full, without written approval by ATC Associates Inc. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This reports relates only to the samples reported above. Quality control data (including 95% confidence limits and laboratory and analysis' accuracy and precision) is available upon request.

Accredited for NVLAP PLM/TEM #101187-0, NY State ELAP #10879

CONFIDENTIAL, CITY_21MC100_003460131

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257556

Attn: Mr. Bernard Orlan
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28-11 Queens Plaza North
Long Island City, NY 11101
Fax: (212) 475-4122 Phone: (212) 477-8941

Project: H.S. Of Economics And Finance
100 Trinity Place, New York, NY

Received: 4/15/02 9:00:00 PM
ATC Group #: 7423
Analysis Date: 4/15/02

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Sample	Volume	Area Analyzed	Non Asb	Asbestos Type(s)	# Structures 0.5μ-5	# Structures 5μ	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)	Notes
10 *7423 -8*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
11 *7423 -9*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
12 *7423 -10*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
13 *7423 -11*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
14 *7423 -12*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
15 *7423 -13*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
16 *7423 -14*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
17 *7423 -15*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
18 *7423 -16*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	

ROMAN PEYSAKHOV
Analyzed by:

MICHAEL A. GORYCKI, Ph.D.
Approved by:

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NYC 9/11 Public Portal Document

Attn: Mr. Bernard Orlan
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28-11 Queens Plaza North
Long Island City, NY 11101

Fax: (212) 475-4122 **Phone:** (212) 477-8941

Project: H.S. Of Economics And Finance
100 Trinity Place, New York, NY

Received: 4/15/02 9:00:00 PM
ATC Group #: 7423
Analysis Date: 4/15/02

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Sample	*Volume*	*Area Analyzed*	*Non Asb*	*Asbestos Type(s)*	*# Structures 0.5µ-5*	*5µ*	*Analytical Sensitivity (S/cc)*	*Asbestos Concentration (S/mm²)*	*(S/cc)*	*Notes*
19 *7423 -17*	1824.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	

ROMAN PEYSAKHOV
Analyzed by:

MICHAEL A. GORYCKI, Ph.D.
Approved by:

Disclaimer: The laboratory is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. This lab is only responsible for data reported in structures/mm². This report may not be reproduced, except in full, without written approval by ATC Associates Inc. This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. This reports relates only to the samples reported above. Quality control data (including 95% confidence limits and laboratory and analysis' accuracy and precision) is available upon request.

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SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257558

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TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	1	**Grid Opening Size:**	0.01124
Client Sample #:	03	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	6DF	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1	I2	NSD											
2	P2	4											
3	T2	4											
4	Q2	11											

6D

6F

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	2	**Grid Opening Size:**	0.01124
Client Sample #:	04	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	645	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP

ROMAN PEYSAKHOV

GO		Structure No	Structure Type				Length		ID of Structure N or √				EDS (Nonadb Elements)
No	Coord		F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	
1	I2	NSD											
2	P2	"											
3	J2	"											
4	Q2	"											

64

65

Struct= > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber

B = Bundle (<3 fibers <1 fiber diameter apart

C = Cluster (>3 Intersections)

M = Matrix

NSD = No Structures Detected

Grid acceptance:

<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES

Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

CONFIDENTIAL, CITY_21MC100_003460135

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257560

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1816
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	3	**Grid Opening Size:**	0.01124
Client Sample #:	05	**Area Examined:**	0.04496 mm²
GRID BOX:	1034	**Magnification:**	20,000
GRID ID:	7FC	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1	Q3	NSD											
2	J3	4											
3	I2	4											
4	P2	9											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257561

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1848
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	4	**Grid Opening Size:**	0.01124
Client Sample #:	06	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	7ER	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP

ROMAN PEYSAKHOV

GO		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1	F2	NSD											
2	D2	1											
3	J2	1											
4	Q2	1											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber

B = Bundle (<3 fibers <1 fiber diameter apart

C = Cluster (>3 Intersections)

M = Matrix

NSD = No Structures Detected

Grid acceptance:

<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

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TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	5	**Grid Opening Size:**	0.01124
Client Sample #:	07	**Area Examined:**	0.04496 mm²
GRID BOX:	1034	**Magnification:**	20,000
GRID ID:	7283	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1	C Q 2	NSD											
2	J 2	"											
3	I 2	"											
4	P 2	"											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257563

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	6	**Grid Opening Size:**	0.01124
Client Sample #:	08	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	8	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.	Structure	Structure Type				Length		ID of Structure N or √				EDS
No Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1 Q2	NSD											
2 J2	"											
3 I2	"											
4 P2	"											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257564

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	7	**Grid Opening Size:**	0.01124
Client Sample #:	09	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	DHS	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
DH 1	J2	NSD											
2	Q2	"											
3	I2	"											
DS 4	P2	"											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257565

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	Volume (liters):	1800
Lab Group #:	7423	Filter Type / Filter Area:	MCE 385 mm²
Lab Sample #:	8	Grid Opening Size:	0.01124
Client Sample #:	10	Area Examined:	0.04496 mm²
GRID BOX:	1037	Magnification:	20,000
GRID ID:	9A6	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1	Q2	NSD											
2	J2	11											
3	P2	11											
4	I2	11											

9A

9C

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:

<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	9	**Grid Opening Size:**	0.01124
Client Sample #:	11	**Area Examined:**	0.04496 mm²
GRID BOX:	1839	**Magnification:**	20,000
GRID ID:	05E0	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.	Structure	Structure Type				Length		ID of Structure N or √				EDS
No Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1 Q2	NSD											
2 S2	4											
3 I2	4											
4 P2	4											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257567

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	10	**Grid Opening Size:**	0.01124
Client Sample #:	12	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	9I 10B	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.		Structure	Structure Type				Length		ID of Structure N or √				EDS
No	Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1	J2	ND											
2	Q2	4											
3	P2	4											
4	I2	4											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257568

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	11	**Grid Opening Size:**	0.01124
Client Sample #:	13	**Area Examined:**	0.04496 mm²
GRID BOX:	1037	**Magnification:**	20,000
GRID ID:	1005	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.	Structure	Structure Type				Length		ID of Structure N or √				EDS
No Coord	No	F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	(Nonadb Elements)
1 P2	NSD											
2 I 2	4											
3 J 2	4											
4 P2	4											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

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NYC-WTC_000257569

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	12	**Grid Opening Size:**	0.01124
Client Sample #:	14	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	10H5	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP

ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	>=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
104	C12	NSD											
	3P2	11											
	3S2	11											
	4Q2	11											
105													

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to *laboratory identification criteria observed*

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber

B = Bundle (<3 fibers <1 fiber diameter apart

C = Cluster (>3 Intersections)

M = Matrix

NSD = No Structures Detected

Grid acceptance:

<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	13	**Grid Opening Size:**	0.01124
Client Sample #:	15	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	1LN	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	>=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1L 1	I2	NSD											
2	P2	4											
3	J2	4											
4	O2	4											
1N													

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	14	**Grid Opening Size:**	0.01124
Client Sample #:	16	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	AR	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO.		Structure No	Structure Type				Length		ID of Structure N or √				EDS (Nonadb Elements)
No	Coord		F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	
1	H6	NSD											
2	N2	4											
3	X2	4											
4	Q2	11											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded <10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	15	**Grid Opening Size:**	0.01124
Client Sample #:	17	**Area Examined:**	0.04496 mm²
GRID BOX:	1039	**Magnification:**	20,000
GRID ID:	1T2K	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1T	1J2	NSD											
	2D2	0											
	3Q2	1											
	4S2	1											
2K													

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257573

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	16	**Grid Opening Size:**	0.01124
Client Sample #:	18	**Area Examined:**	0.04496 mm²
GRID BOX:	1034	**Magnification:**	20,000
GRID ID:	2M00	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1	Q2	NSD											
2	S2	4											
3	I2	11											
4	P2	11											

2M / 20

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257574

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1824
Lab Group #:	7423	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	17	**Grid Opening Size:**	0.01124
Client Sample #:	19	**Area Examined:**	0.04496 mm²
GRID BOX:	Q37	**Magnification:**	20,000
GRID ID:	283	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/15/02

Analysis Performed By: RP
ROMAN PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1	Q2	NSD											
2	Q2	1											
3	Q2	11											
4	Q2	11											

Struct = > 0.5µ > 5:1 Aspect Ratio

√= Positive diffraction pattern properties conforming to laboratory identification criteria observed

√= EDS spectrum conforming to laboratory identification criteria observed

F = Single Fiber
B = Bundle (<3 fibers <1 fiber diameter apart
C = Cluster (>3 Intersections)
M = Matrix
NSD = No Structures Detected

Grid acceptance:
<50% undissolved filter, overlapped or folded
<10% particulate coverage >50% coverage ate least 20 unfolded or overlapped grid squares <5% holes or opaque areas

AMPHIBOLES
Amosite
Crocidolite
Anthophyllite
Tremolite
Actinolite

Totals

	F	B	C	M	>5µ
Chrysotile					
Amphibole					
Ambiguous					
Non-Asbestos					
Non-Identified					

NYC-WTC_000257575

NYC-WTC_000257576

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

CONFIDENTIAL,

CITY_21MC100_003460151

NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

TURNAROUND TIME

☐ 2 hrs ☐ 6 hrs ☐ 48 hrs ☐ Standard
☐ 4 hrs ☐ 24 hrs ☐ 72 hrs ☒ Other KUSH

PROJECT INFORMATION

7423 17/20 85105-85124

1. Client:	2. Project Name	3. Project #	4. Project Monitor:	4c. Rotameter Number:
NYC BOE	H.S. FOR ECONOMICS and FINANCE M833	14584-865	4a. Air Sampler: M.G. KHAN	HV 27
	2a. Project Address 100 TRINITY PL NY 10006			

5. Date:	6. Abatement Location:	7. ☒ PCM (0.45 micron MCE) Cassette/Filter Manufacture TOM Multimetrics Lot # 0120 6916	8. ☐ PCM (0.45 micron MCE) Cassette/Filter Manufacture N/A Lot #	9. Type: a. ☐ Background b. ☐ Pre-Abate c. ☐ Abatement d. ☐ Post-Abate e. ☐ OSHA f. ☐ Environmental g. ☒ Ambient h. ☐ Other
4/15/02	AS PER PROTOCOL			

DAILY AIR SAMPLE RECORD

10. Sample I.D. Number	11. Pump Number	12. Sample Location 12a. IWA	12b. OWA	12c. Sample Coordinates	13. Time (24 hrs clock) 13a. Start	13b. End	13c. Total	14. Flow Rate (L/min.) 14a. Start	14b. End	14b. Avg	15. Total Air Vol. (liters)	16. # Fibers/Fields Minus Blank	17. Fiber Conc. F/CC
Ø1				Field Blank									
Ø2				Field Blank									
Ø3				OUTSIDE BY MAIN ENTRANCE	0800	1145	225	8.0	8.0	8.0	1800		
Ø4				1st FL. LOBBY OUTSIDE THE AUDITORIUM	0802	1147	225	8.0	8.0	8.0	1800		
Ø5				STAIRCASE #"B" OPEN S/C 7th FLOOR	0807	1154	227	8.0	8.0	8.0	1816		
Ø6				UP AT THE ROOF	0814	1205	231	8.0	8.0	8.0	1848		
Ø7				AUDITORIUM AT 1st FLOOR	0830	1215	225	8.0	8.0	8.0	1800		
Ø8				CAFETERIA AT 8th FLOOR	0840	1225	225	8.0	8.0	8.0	1800		

CHAIN OF CUSTODY

	18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I	[signature]	[signature]	4.15.29	
II				
III	M.G. Khan			

LAB INFORMATION (ATC ELAP # 10879, ATC NVLAP # 1187)

22. Lab Name: ATC-TEM	23. Date:	24. Time:
a. Analyzed By: RR	4/16/02	2:30
b. QC By:		
c. Lab Batch #:		

25. Microscope Make/Serial #:
☐ Nikon Labophot 238913
☐ Nikon Labophot 238917
☐ Nikon Labophot 239079

Analysis Methodology
PCM - NIOSH 7400A
TEM - AHERA

26. ATC Project Manager: M. TERJESEN
Mr. YIANNIS ESFTHIOU

27. Result To: Mr. Yiannis Esfthiou
Beeper/Phone #'s 641-772-1155

28. Comments: Please call Project Manager with results

WHITE - File YELLOW - Client/Report PINK - Lab GOLDENROD - Field

NY-1 (3/99)

NYC-WTC_000257577

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008 CONFIDENTIAL,

CITY_21MC100_003460152

NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

7423

TURNAROUND TIME

☐ 2 hrs ☐ 6 hrs ☐ 48 hrs ☐ Standard
☐ 4 hrs ☐ 24 hrs ☐ 72 hrs ☒ Other RUSH

PROJECT INFORMATION

1. Client:	2. Project Name / 2a. Project Address	3. Project #	4. Project Monitor: / 4a. Air Sampler:	4c. Rotameter Number:
NYC BOE	H.S. FOR ECONOMICS and FINANCE M833 / 100 TRINITY PL NY 10006	14584-865	[redacted] / M.G. KHAN	HV 27

5. Date:	6. Abatement Location:	7. ☒ PCM (0.8 micron MCE)	8. ☐ PCM (0.45 micron MCE)	9. Type:
04/15/02	SEE PROTOCOL	Cassette/Filter Manufacture: Multimetrics Lot #: 0120 6916	Cassette/Filter Manufacture: N/A Lot #:	a. ☐ Background b. ☐ Pre-Abate c. ☐ Abatement d. ☐ Post-Abate e. ☐ OSHA f. ☐ Environmental g. ☒ Ambient h. ☐ Other

DAILY AIR SAMPLE RECORD

10. Sample I.D. Number	11. Pump Number	12. Sample Location: 12a. IWA	12b. OWA	12c. Sample Coordinates	13. Time (24 hrs clock): 13a. Start	13b. End	13c. Total	14. Flow Rate (L/min.): 14a. Start	14b. End	14b. Avg	15. Total Air Vol (liters)	16. # Fibers/Fields Minus Blank	17. Fiber Conc. F/CC
				Field Blank									
				Field Blank									
09				OUTSIDE BY THE MAIN ENTRANCE	1145	1530	225	8.0	8.0	8.0	1800		
10				FIRST FLOOR LOBBY OUTSIDE AUDITORIUM	1147	1532	225	8.0	8.0	8.0	1800		
11				STAIRCASE "B" OPEN S/C. AT 7th FLOOR	1154	1539	225	8.0	8.0	8.0	1800		
12				UP AT THE ROOF.	1205	1550	225	8.0	8.0	8.0	1800		
13				9th FLOOR HALLWAY	1545	1930	225	8.0	8.0	8.0	1800		
14				CLOSE TO RM. 801	1555	1940	225	8.0	8.0	8.0	1800		

CHAIN OF CUSTODY

	18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I	[redacted]	[redacted]	4/15/02	
II				
III	M.G. Khan			

LAB INFORMATION (ATC ELAP # 10879, ATC NVLAP # 1187)

22. Lab Name:	23. Date:	24. Time:
ATC-TEM		
a. Analyzed By: [redacted]	4/16/02	2:50
b. QC By:		
c. Lab Batch #:		

25. Microscope Make/Serial #:
☐ Nikon Labophot 238913
☐ Nikon Labophot 238917
☐ Nikon Labophot 239079

Analysis Methodology
PCM - NIOSH 7400A
TEM - AHERA

26. ATC Project Manager:	27. Result To:	28. Comments:
M. TERLEBEN Mr. YIANNIS ESFTHIOU	Mr. Yiannis Esfthiou Beeper/Phone #'s: 641-772-1155	Please call Project Manager with results

WHITE - File YELLOW - Client/Report PINK - Lab GOLDENROD - Field

NY-1 (3/99)

NYC-WTC_000257578

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008 CONFIDENTIAL,

CITY_21MC100_003460153

NYC 9/11 Public Portal Document

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

TURNAROUND TIME

☐ 2 hrs ☐ 6 hrs ☐ 48 hrs ☐ Standard
☐ 4 hrs ☐ 24 hrs ☐ 72 hrs ☒ Other RUSH

PROJECT INFORMATION

7423

1. Client:	2. Project Name / 2a. Project Address	3. Project #	4. Project Monitor: / 4a. Air Sampler:	4c. Rotameter Number:
NYC BOE	H.S. FOR ECONOMICS and FINANCE M833 / 100 TRINITY PL. NY 10006	14584-865	M.G. KHAN	HV 27

5. Date:	6. Abatement Location:	7. ☒ PCM (0.8 micron MCE)	8. ☐ PCM (0.45 micron MCE)	9. Type:
04/15/02	AS PER PROTOCOL	Cassette/Filter Manufacture: Multimetrics Lot #: 0120 6916	Cassette/Filter Manufacture: / Lot #:	a. ☐ Background b. ☐ Pre-Abate c. ☐ Abatement d. ☐ Post-Abate e. ☐ OSHA f. ☐ Environmental g. ☒ Ambient h. ☐ Other

DAILY AIR SAMPLE RECORD

10. Sample I.D. Number	11. Pump Number	12. Sample Location: 12a. IWA	12b. OWA	12c. Sample Coordinates	13. Time (24 hrs clock): 13a. Start	13b. End	13c. Total	14. Flow Rate (L/min.): 14a. Start	14b. End	14b. Avg	15. Total Air Vol. (liters)	16. # Fibers/Fields Minus Blank	17. Fiber Conc. F/CC
				Field Blank									
				Field Blank									
15				7th FLOOR AT MAIN HALLWAY	1600	1945	225	8.0	8.0	8.0	1800		
16				ROOM NO. 604 AT 6th FLOOR	1603	1948	225	8.0	8.0	8.0	1800		
17				5th FLOOR AT MAIN HALLWAY	1606	1951	225	8.0	8.0	8.0	1800		
18				ROOM NO. 406 AT 4th FLOOR	1609	1954	225	8.0	8.0	8.0	1800		
19				ROOM 304 AT 3rd FLOOR	1612	20.00	228	8.0	8.0	8.0	1824		
20		Sealed Blank —											

CHAIN OF CUSTODY

	18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I	[illegible]	[illegible]	4.15.02	9a
II				
III	[illegible]			

LAB INFORMATION (ATC ELAP # 10879, ATC NVLAP # 1187)

22. Lab Name: ATC-TEM	23. Date:	24. Time:
a. Analyzed By: [illegible]	4.16.02	2:30
b. QC By:		
c. Lab Batch #:		

25. Microscope Make/Serial #:
☐ Nikon Labophot 238913
☐ Nikon Labophot 238917
☐ Nikon Labophot 239079

Analysis Methodology
PCM - NIOSH 7400A
TEM - AHERA

26. ATC Project Manager: MARC TEICHER
MR. YIANNIS ESPHION

27. Result To: MR. YIANNIS ESPHION
Beeper/Phone #'s 641-772-1155

28. Comments: Please call Project Manager with results

WHITE - File YELLOW - Client/Report PINK - Lab GOLDENROD - Field

NY-1 (3/99)