NYC 9/11 Public Portal Document

ATC Associates

104 East 25 Street, New York, NY 10010

Phone: (212) 353-8280 Fax: (212) 353-8306

Attn: Mr. Bernard Orlan
N.Y.C. Board of Education
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: 4/16/02 9:30:00 PM
ATC Group #: 7434
Analysis Date: 4/17/02

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*
03 *7434 -1*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
04 *7434 -2*	1816.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
05 *7434 -3*	1840.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
06 *7434 -4*	1840.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
07 *7434 -5*	1856.00	0.0450	0	None Detected	0	0	0.0046	<22.24	<0.0046	
08 *7434 -6*	1880.00	0.0450	0	None Detected	0	0	0.0046	<22.24	<0.0046	
09 *7434 -7*	1840.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	

MARK 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_003460155

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257580

NYC 9/11 Public Portal Document

Attn: Mr. Bernard Orlan
N.Y.C. Board of Education
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: 4/16/02 9:30:00 PM
ATC Group #: 7434
Analysis Date: 4/17/02

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*
10 *7434 -8*	1840.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
11 *7434 -9*	1840.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	
12 *7434 -10*	1856.00	0.0450	0	None Detected	0	0	0.0046	<22.24	<0.0046	
13 *7434 -11*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
14 *7434 -12*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
15 *7434 -13*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
16 *7434 -14*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
17 *7434 -15*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	
18 *7434 -16*	1800.00	0.0450	0	None Detected	0	0	0.0048	<22.24	<0.0048	

MARK PEYSAKHOV
Analyzed by:

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

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

CONFIDENTIAL, CITY_21MC100_003460156
SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257581

NYC 9/11 Public Portal Document

Attn: Mr. Bernard Orlan
N.Y.C. Board of Education
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: 4/16/02 9:30:00 PM
ATC Group #: 7434
Analysis Date: 4/17/02

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 7434 -17	1816.00	0.0450	0	None Detected	0	0	0.0047	<22.24	<0.0047	

MARK 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_003460157
SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257582

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

Page 1 of 3

TURNAROUND TIME: ☐ 2 hrs ☐ 6 hrs ☐ 48 hrs ☐ Standard ☐ 4 hrs ☐ 24 hrs ☐ 72 hrs ☒ Other RSD

7434

PROJECT INFORMATION

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	HP-38
	2a. Project Address: 100 TRINITY PL NY 10006			

5. Date:	6. Abatement Location:	7. ☒ PCM (0.8 micron MCE)	8. ☐ PCM (0.45 micron MCE)	9. Type:
04/16/02	AS PER PROTOCOL	Cassette/Filter Manufacture: Multimetrics; Lot #: 01206916	Cassette/Filter Manufacture: ; Lot #: N/A	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
Ø1				Field Blank									
Ø2				Field Blank									
Ø3				OUTSIDE BY MAIN ENTRANCE	0730	1115	225	8.0	8.0	8.0	1800		
Ø4				1st FLOOR LOBBY AT H/WAY	0733	1120	227	8.0	8.0	8.0	1816		
Ø5				AUDITORIUM AT 1st FLOOR	0735	1125	230	8.0	8.0	8.0	1840		
Ø6				CAFETERIA AT 8th FLOOR	0740	1130	230	8.0	8.0	8.0	1840		
Ø7				STAIRCASE "B" 7th FLOOR OPEN STAIR CASE	0745	1137	232	8.0	8.0	8.0	1856		
Ø8				UPPER ROOF	0750	1145	235	8.0	8.0	8.0	1880		

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I M.G. Khan	MT	4.16.2	9:30
II			
III			

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

22. Lab Name: NICO FEO	23. Date:	24. Time:
a. Analyzed By: [signature]	4/17	3:00
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: MARK TERJESEN

27. Result To: Mr. Yiannis Esthiou; 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)

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

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

Page 2 of 3

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

PROJECT INFORMATION

7434

1. Client:	2. Project Name	3. Project #	4. Project Monitor:	4c. Rotameter Number:
NYC BOE	H.S. FOR ECONOMICS and FINANCE M833	14584-865	[illegible]	HP-38
	2a. Project Address: 100 TRINITY PL NY 10006		4a. Air Sampler: M.G. KHAN	

5. Date:	6. Abatement Location:	7. ☒ PCM (0.8 micron MCE)	8. ☐ PCM (0.45 micron MCE)	9. Type:
04/16/02	AS PER PROTOCOL	Cassette/Filter Manufacture: Multimetrics; Lot #: 01206916	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									
09				OUTSIDE BY MAIN ENTRANCE	1115	1505	230	8.0	8.0	8.0	1840		
10				1st FLOOR LOBBY OUTSIDE AUDITORIUM.	1120	1510	230	8.0	8.0	8.0	1840		
11				STAIRCASE "B" AT 7th FL. OPEN STAIRCASE.	1125	1515	230	8.0	8.0	8.0	1840		
12				UP AT THE ROOF —	1130	1522	232	8.0	8.0	8.0	1856		
13				AT MAIN HALLWAY 9th FLOOR	1530	1915	225	8.0	8.0	8.0	1800		
14				ROOM NO (KITCHEN) 8th FLOOR	1540	1925	225	8.0	8.0	8.0	1800		

CHAIN OF CUSTODY

	18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I	M.G. Khan	MJ	4.16.2	9:30
II				
III				

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

22. Lab Name:	ATC TEC	23. Date:	24. Time:
a. Analyzed By:	[illegible]	4/17	3:00
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: MARK TERJESEN

27. Result To: Mr. Yiannis Esthiou; 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 (1/99)

NYC-WTC_000257584

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

CITY_21MC100_003460159

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 Rush

7434

PROJECT INFORMATION

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	HP-38.
	2a. Project Address: 100 TRINITY PL NY 10006			

5. Date:	6. Abatement Location:	7. ☒ PCM (0.8 micron MCE)	8. ☐ PCM (0.45 micron MCE)	9. Type:
04/16/02	AS PER PROTOCOL	Cassette/Filter Manufacture: Multimetrics; Lot #: 01206916	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									
15				MAIN HALLWAY AT 7th FLOOR.	1542	1927	225	8.0	8.0	8.0	1800		
16				ROOM NO. 606 AT 6th FLOOR.	1545	1930	225	8.0	8.0	8.0	1800		
17				MAIN HALLWAY AT 5th FLOOR.	1550	1935	225	8.0	8.0	8.0	1800		
18				ROOM NO. 406 AT 4th FLOOR.	1555	1940	225	8.0	8.0	8.0	1800		
19				MAIN HALLWAY AT 3RD FLOOR OPP. R/308	1558	1945	227	8.0	8.0	8.0	1816		
20				SEALED BLANK									

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I M.G. Khan	[illegible]	4.16.2	9:30
II			
III			

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

22. Lab Name: ATC Tech	23. Date:	24. Time:
a. Analyzed By: [illegible]	4/17	3:00
b. QC By:		
c. Lab Batch #:		

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

26. ATC Project Manager: MARK TERJEBEN

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

28. Comments: Please call Project Manager with results

Analysis Methodology: PCM - NIOSH 7400A; TEM - AHERA

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

NY-1 (3/99)

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

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1800
Lab Group #:	7434	**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:	1042	**Magnification:**	20,000
GRID ID:	9E6	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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	Amoig/ND	EDS (Nonadb Elements)
1	J3	NSD											
2	Q3	—											
3	K1	—											
4	R1	—											

9E
96

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_003460161
SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257586

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	Volume (liters):	1816
Lab Group #:	7434	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:	10 BC	Magnification:	20,000
GRID ID:	9-10C	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK PEYSAKHOV

GO		Structure No	Structure Type				Length		ID of Structure N or √				EDS (Nonasb Elements)
No	Coord		F	B	C	M	>=05 u <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	
1	X9	NSD											
2	Q9	—											
3	X1	—											
4	Y1	—											

9C
10B

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_000257587

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	Volume (liters):	1840
Lab Group #:	7434	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:	1042	Magnification:	20,000
GRID ID:	1042c	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure √ or X Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Ncnadb Elements)
1042	1 09	NSD											
	2 H9	"											
1042c	3 01	"											
	4 C1	"											

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):	1840
Lab Group #:	7434	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:	1082	Magnification:	20,000
GRID ID:	1043	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	Length >=5µ	ID of Structure Y or N Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1042	1 H9	NSD											
	2 H9	"											
	3 E1	"											
1043	4 E9	"											

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_003460164

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257589

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1856
Lab Group #:	7434	**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:	[illegible]	**Magnification:**	20,000
GRID ID:	[illegible]	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: [signature]

MARK PEYSAKHOV

GO		Structure No	Structure Type				Length		ID of Structure N or √				EDS (Ncnadb Elements)
No	Coord		F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	
1	[illegible]	[illegible]											
	2	[illegible]											
1	3	[illegible]											
	4	[illegible]											

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):**	1880
Lab Group #:	7434	**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:	1062	**Magnification:**	20,000
GRID ID:	1062	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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	1 J 9	NSD											
2	2 Q 8	"											
3	3 Z 1	"											
4	4 P 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					

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	Volume (liters):	1840
Lab Group #:	7434	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:	1062	Magnification:	20,000
GRID ID:	15 2K	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK 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	P6	NSD											
2	V6	"											
3	J2	"											
4	Q2	"											

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):	1840
Lab Group #:	7434	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:	1062	Magnification:	20,000
GRID ID:	2 on 0	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK 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	Amb:g/ND	EDS (Nonadb Elements)
1	E7	NSD											
2	D7	"											
3	H3	"											
4	K3	"											

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_003460168

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257593

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1840
Lab Group #:	7434	**Filter Type / Filter Area:**	MCE 385 mm^2
Lab Sample #:	9	**Grid Opening Size:**	0.01124
Client Sample #:	11	**Area Examined:**	0.04496 mm^2
GRID BOX:	10027	**Magnification:**	20,000
GRID ID:	2025	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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 (Nonasb Elements)
1	X1	NSD											
2	X1	—											
3	X8	—											
4	X8	—											

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):	1856
Lab Group #:	7434	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:	1042	Magnification:	20,000
GRID ID:	3 CH	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: _____

MARK 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)
3C 1 K1	NSD											
2 K1	"											
3 E1	"											
3H 4 J1	"											

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 #:	7434	**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:	1062	**Magnification:**	20,000
GRID ID:	3 AE	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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 (Nonasb Elements)
1	PE	NSD											
2	UE	—											
3	AM	—											
4	IM	—											

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 #:	7434	**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:	1062	**Magnification:**	20,000
GRID ID:	3FEK	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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 RE	NSD											
2 K9	"											
3 JP	"											
4 Q9	"											

3F / 4C

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 #:	7434	**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:	1042	**Magnification:**	20,000
GRID ID:	4 [illegible]	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: [signature]
MARK PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=0.5 µ <5µ	>=5µ	ID of Structure N or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonadb Elements)
1	H1	NSD											
2	N1	~											
3	D1	~											
4	E1	~											

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 #:	7434	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:	10FC	Magnification:	20,000
GRID ID:	EQS	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: MARK 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)
EQ	1 21	NSD											
	2 U1	— C											
	3 W1	—											
ES	4 F1	—											

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 #:	7434	**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:	1022	**Magnification:**	20,000
GRID ID:	SCR	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK 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	RG	NSD											
2	RG	"											
3	LG	"											
4	SG	"											

SC — SW

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 #:	7434	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:	[illegible]	Magnification:	20,000
GRID ID:	[illegible]	Accelerating Voltage:	100 KeV
# Grid Openings:	4	Analysis Date:	4/16/02

Analysis Performed By: [signature]
MARK PEYSAKHOV

GO. No	GO. Coord	Structure No	Structure Type F	B	C	M	Length >=05 µ <5µ	>=5µ	ID of Structure √ or √ Chrys	Amphibole	Nonasb	Ambig/ND	EDS (Nonasb Elements)
1	22	NSD											
2	VZ	"											
3	QQ	"											
4	XQ	"											

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_000257601

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1816
Lab Group #:	7434	**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:	1002	**Magnification:**	20,000
GRID ID:	5766	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	4/16/02

Analysis Performed By: MARK PEYSAKHOV

GO		Structure No	Structure Type				Length		ID of Structure N or √				EDS (Nonasb Elements)
No	Coord		F	B	C	M	>=05 µ <5µ	>=5µ	Chrys	Amphibole	Nonasb	Ambig/ND	
1	P1	NSD											
2	U1	"											
3	R8	"											
4	X8	"											

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_003460177

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000257602