NYC 9/11 Public Portal Document

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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: NYC-BOE PS 150M Project#: 14584-0824

Received: 5/26/02 6:00:00 PM
ATC Group #: 7880
Analysis Date: 5/26/02

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
01 *7880 -1*	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
02 *7880 -2*	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
03 *7880 -3*	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
04 *7880 -4*	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
05 *7880 -5*	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
06 *7880 -6*	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
07 *7880 -7*	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	

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

CITY_21MC100_002873085

NYC-WTC_000377673

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1920
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	1	**Grid Opening Size:**	0.01124
Client Sample #:	01	**Area Examined:**	0.04496 mm²
GRID BOX:	117E	**Magnification:**	20,000
GRID ID:	91103	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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 (Nonadb Elements)
1	E01	NSD											
2	C1	—											
3	E3	—											
4	C3	—											

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):**	1920
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	2	**Grid Opening Size:**	0.01124
Client Sample #:	02	**Area Examined:**	0.04496 mm²
GRID BOX:	1172	**Magnification:**	20,000
GRID ID:	1000	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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	
1000 1	R3	NEG											
2	Y3	—											
3	C1	—											
1000 4	S1	—											

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):**	1920
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	3	**Grid Opening Size:**	0.01124
Client Sample #:	03	**Area Examined:**	0.04496 mm²
GRID BOX:	1172	**Magnification:**	20,000
GRID ID:	1044J	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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	K1	NSO											
2	R1	— " —											
3	S2	— " —											
4	J2	— " —											

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):**	1920
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	4	**Grid Opening Size:**	0.01124
Client Sample #:	04	**Area Examined:**	0.04496 mm²
GRID BOX:	HE	**Magnification:**	20,000
GRID ID:	LN	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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	J3	NSD											
2	Q3	—C											
3	K1	—C											
4	R1	—C											

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):**	1928
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	5	**Grid Opening Size:**	0.01124
Client Sample #:	05	**Area Examined:**	0.04496 mm²
GRID BOX:	112 C	**Magnification:**	20,000
GRID ID:	10R	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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 (Nonadb Elements)
10	1 C7	NSD											
—	2 A4	—											
	3 C4	—											
1R	4 A4	—											

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_000377678

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1928
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	6	**Grid Opening Size:**	0.01124
Client Sample #:	06	**Area Examined:**	0.04496 mm²
GRID BOX:	1172	**Magnification:**	20,000
GRID ID:	15 2K	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

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 (Nonadb Elements)
	1 B3	NSD											
15	2 M3	—											
—	3 P1	—											
2K	4 U1	—											

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):**	1936
Lab Group #:	7880	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	7	**Grid Opening Size:**	0.01124
Client Sample #:	07	**Area Examined:**	0.04496 mm²
GRID BOX:	1172	**Magnification:**	20,000
GRID ID:	2040	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	5/26/02

Analysis Performed By: [signature]
MARK PEYSAKHOV

GO. No	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)
1	N7	NSD											
2	V1	—											
3	Q2	—											
4	X2	—											

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					

CITY_21MC100_002873092

NYC-WTC_000377681

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ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

Page 1 of

TURNAROUND TIME

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

PROJECT INFORMATION

7880 7/10 91527-91536

1. Client:	2. Project Name	3. Project #	4. Project Monitor:	4c. Rotameter Number:
NYC-BOE	PS 150M 2a. Project Address: 334 Greenwich Str, NY, NY 10013	14584-0824	4a. Air Sampler: Tim Amstislavskiy	SD-132

5. Date:	6. ~~Abatement~~ Location:	7. ☐ PCM (0.8 micron MCE)	8. ☒ TEM (0.45 micron MCE)	9. Type:	
	ENTIRE	Cassette/Filter Manufacture: ____ Lot #: ____	Cassette/Filter Manufacture: MAT Lot #: 0120 4916	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
B-1, B-2				Field Blank									
B-3				Field Blank Sealed Blank									
01				outside Building.	620	1020	240	8	8	8	1920		
02				Lobby	625	1025	240	8	8	8	1920		
03				outside Building	1020	1420	240	8	8	8	1920		
04				Lobby	1025	1425	240	8	8	8	1920		
05				multipurpose room	1028	1429	241	8	8	8	1928		
06				Edward's room	1033	1434	241	8	8	8	1928		
07				Counseling office	1037	1439	242	8	8	8	1936		

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I	M	5.26.2	18:00
II			
III			

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

22. Lab Name: TEM	23. Date:	24. Time:
a. Analyzed By:	6/27	1100
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:
Y. Efstathiou	Yianni's Efstathiou Beeper/Phone #'s (646) 772-1155	

CITY_21MC100_002873093