NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.
ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS

February 19, 2002

N.Y.C. Board of Education
28-11 Queens Plaza North
Long Island City, NY 11101

19125-0246

Attn: Mr. Bernard Orlan

Re: Report of TEM Analysis

Dear Mr. Orlan:

Following are the results of transmission electron microscopy (TEM) analysis of air samples from our Group No. 6733:

Project Name: New Stuyvesant H.S., 345 Chambers Street, NY, NY
Location: Exterior and Interior of Building and Roof
Samples received: 02/18/02

These results will confirm and document the data transmitted today to Mr. Andreas Andreou, Project Manager, of our office. The analyses were performed in strict conformance with the methodology of the AHERA Final Rule (40 CFR Part 763, Appendix A to Subpart E, October 30, 1987) for clearance of abatement sites.

The results of the sample analyses are as indicated on the attached document.

Copies of the bench sheets are also included as stipulated by AHERA. MMI TEM cassettes, Lot No. 00262916, were used. Results reported as Struct/cc are a function of air volume collected in the field and are, as such, not verifiable by this laboratory. This report may be reproduced only in its entirety and not without prior permission of this laboratory. If post-abatement inside samples pass, the response action may be considered to have been completed. The analyses were supervised by Dr. Michael A. Gorycki, Director of Electron Microscopy.

We are pleased to note that our TEM lab has received full accreditation from NVLAP, as is currently required for recognized analysis of TEM air samples for AHERA projects, and also approval under the NY State DOH ELAP program. These analyses were performed by ATC d/b/a ATC Associates Inc. Please contact me regarding any questions relating to these materials.

Very truly yours,

Michael A. Gorycki, Ph.D.
Director of Electron Microscopy

CONFIDENTIAL, CITY_21MC100_003466042

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261908

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: New Stuyvesant H. S. , 345 Chambers St., NY , NY
Exterior and Interior of Building and Roof

Received: 2/18/02 4:30:00 PM
ATC Group #: 6733
Analysis Date: 2/22/02

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*
1 6733 -1	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
2 6733 -2	1920.00	0.0450	0	None Detected	0	0	0.0045	<22.24	<0.0045	
3 6733 -3	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
4 6733 -4	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
5 6733 -5	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
6 6733 -6	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
7 6733 -7	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
8 6733 -8	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	

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_003466043

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261909

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

Received: 2/18/02 4:30:00 PM
ATC Group #: 6733
Analysis Date: 2/22/02

Project: New Stuyvesant H. S. , 345 Chambers St., NY , NY
Exterior and Interior of Building and Roof

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*
9 6733 -9	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
10 6733 -10	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
11 6733 -11	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
12 6733 -12	1928.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
13 6733 -13	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
14 6733 -14	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
15 6733 -15	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
16 6733 -16	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
17 6733 -17	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
18 6733 -18	1936.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	

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

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

Received: 2/18/02 4:30:00 PM
ATC Group #: 6733
Analysis Date: 2/22/02

Project: New Stuyvesant H. S. , 345 Chambers St., NY , NY
Exterior and Interior of Building and Roof

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 6733 -19	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
20 6733 -20	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	
21 6733 -21	1944.00	0.0450	0	None Detected	0	0	0.0044	<22.24	<0.0044	

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

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1920
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	1	**Grid Opening Size:**	0.01124
Client Sample #:	1	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	1A 2A	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
1A	1 IZ	NSO											
	2 QZ	4											
/	3 PZ	4											
2A	4 SZ	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):**	1920
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	2	**Grid Opening Size:**	0.01124
Client Sample #:	2	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	3444	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
3A 1	I4	NSD											
2	J6	4											
3	J2	4											
4A 4	Q2	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 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1928
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	3	**Grid Opening Size:**	0.01124
Client Sample #:	3	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	5A/1B	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
5A	1 Q 2	NSD											
	2 J 2	4											
	3 X 2	4											
	4 Q 2	4											
1B													

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_000261914

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1928
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	4	**Grid Opening Size:**	0.01124
Client Sample #:	4	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	2838	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
2B 1 Q-2	NSD											
2 J2	〃											
3 I2	〃											
4 J2	〃											
3B												

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_000261915

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1928
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	5	**Grid Opening Size:**	0.01124
Client Sample #:	5	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	4B5B	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	
4B 1	Q3	NeA											
2	J2	4											
3	J2	4											
4	Q2	4											
5B													

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):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	6	**Grid Opening Size:**	0.01124
Client Sample #:	6	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	HC2C	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	
1C	1 J2	NSD											
	2 Q2	4											
/	3 P2	4											
2C	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 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	7	**Grid Opening Size:**	0.01124
Client Sample #:	7	**Area Examined:**	0.04496 mm²
GRID BOX:	X35	**Magnification:**	20,000
GRID ID:	3C 4C	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
3C 1	E8	NSD											
2	√2	1											
3	Q2	4											
4	J2	11											
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 = Sirgle 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_003466052

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261918

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	8	**Grid Opening Size:**	0.01124
Client Sample #:	8	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	5C12	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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 (Nonacb Elements)
5C 1	N2	NSD											
2	P2	4											
3	I2	4											
4	P2	4											
12													

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_003466053
SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261919

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	9	**Grid Opening Size:**	0.01124
Client Sample #:	9	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	2D3D	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	9											
3	Q2	9											
4	J2	4											

2D / 3D

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):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	10	**Grid Opening Size:**	0.01124
Client Sample #:	10	**Area Examined:**	0.04496 mm²
GRID BOX:	856	**Magnification:**	20,000
GRID ID:	4052	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

Analysis Performed By: RP
ROMAN 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)
4D 1	V2	1880										—	
2	P2	4											
3	S2	4											
4	Q2	4											
5D													

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_003466055

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261921

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	11	**Grid Opening Size:**	0.01124
Client Sample #:	11	**Area Examined:**	0.04496 mm²
GRID BOX:	R35	**Magnification:**	20,000
GRID ID:	1E2E	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

Analysis Performed By: RP
ROMAN 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)
1E 1 J4	NSD											
2 P1	4											
3 I2	4											
4 P2	4											
2E												

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_003466056
SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000261922

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1928
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	12	**Grid Opening Size:**	0.01124
Client Sample #:	12	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	3E4E	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	
3E 1	V2	NSD											
2	P2	4											
3	P2	9											
4	I2	16											
4E													

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):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	13	**Grid Opening Size:**	0.01124
Client Sample #:	13	**Area Examined:**	0.04496 mm²
GRID BOX:	83	**Magnification:**	20,000
GRID ID:	5E/F	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
5E 1	V2	NSD											
2	S4	4											
3	X2	4											
4	V2	4											
1F													

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_000261924

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	14	**Grid Opening Size:**	0.01124
Client Sample #:	14	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	2F3F	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
2F	1 P2	NSD											
	2 I2	4											
	3 X2	4											
	4 Q2	1											
3F													

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):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	15	**Grid Opening Size:**	0.01124
Client Sample #:	15	**Area Examined:**	0.04496 mm²
GRID BOX:	335	**Magnification:**	20,000
GRID ID:	4F5F	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
4F 1	P2	NSD											
2	F2	4											
3	Q2	4											
4	J2	4											
5F													

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):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	16	**Grid Opening Size:**	0.01124
Client Sample #:	16	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	1626	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	PZ	NSD											
2	IZ	4											
3	PZ	4											
4	IZ	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 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	17	**Grid Opening Size:**	0.01124
Client Sample #:	17	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	3046	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
36 1	I8	NSD											
2	P6	4											
3	Q2	4											
4	P2	1											
46													

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):**	1936
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	18	**Grid Opening Size:**	0.01124
Client Sample #:	18	**Area Examined:**	0.04496 mm²
GRID BOX:	835	**Magnification:**	20,000
GRID ID:	5G1H	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

Analysis Performed By: RD
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)
5G 1	J2	NSD											
2	Q2	4											
3	P2	4											
4	I2	4											
1H													

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):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	19	**Grid Opening Size:**	0.01124
Client Sample #:	19	**Area Examined:**	0.04496 mm²
GRID BOX:	235	**Magnification:**	20,000
GRID ID:	2H 3H	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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	
2H 1	RS	NSD											
2	IS	4											
1 3	JS	4											
4	QS	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 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	20	**Grid Opening Size:**	0.01124
Client Sample #:	20	**Area Examined:**	0.04496 mm²
GRID BOX:	R 35	**Magnification:**	20,000
GRID ID:	4454	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
4H 1	P2	NSD											
2	I2	4											
3	Q2	4											
5H 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					

NYC 9/11 Public Portal Document

TEM Asbestos (air) Count Sheet

Client Name:	NYC BOE	**Volume (liters):**	1944
Lab Group #:	6733	**Filter Type / Filter Area:**	MCE 385 mm²
Lab Sample #:	21	**Grid Opening Size:**	0.01124
Client Sample #:	21	**Area Examined:**	0.04496 mm²
GRID BOX:	X 35	**Magnification:**	20,000
GRID ID:	1502	**Accelerating Voltage:**	100 KeV
# Grid Openings:	4	**Analysis Date:**	2/19/02

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)
1J	1 I2	NSD											
	2 Q2	4											
	3 Q2	4											
	4 P2	4											
2J													

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_000261933

NYC 9/11 Public Portal Document

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

CONFIDENTIAL,

CITY_21MC100_003466067

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

6733 21/24 74549-74572

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	NEW STUYVESANT HS (M477) / 345 CHAMBERS STREET, NY, NY 10007	19125-0246	HERANT ANTONYAN	HP-88

5. Date	6. Abatement Location	7. PCM (0.8 micron MCE)	8. TEM (0.45 micron MCE)	9. Type
02/18/02	Exterior & Interior of bldg. & Roof	Cassette/Filter Manufacture: ____ Lot #: ____	☒ Cassette/Filter Manufacture: MMI Lot #: 00262916	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
22				Field Blank									
23				Field Blank									
1				5th floor Cafeteria	6:30	10:30	240	8	8	8	1920		
2				3rd floor Aux Gym	6:33	10:33	240	8	8	8	1920		
3				1st floor Pool area	6:36	10:37	241	8	8	8	1928		
4				Inside the Auditorium	6:39	10:40	241	8	8	8	1928		
5				Outside the building North side	6:42	10:43	241	8	8	8	1928		
6				Outside the building East side	6:45	10:47	242	8	8	8	1936		

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I H Antoyan		02/18/02	
II	JP	2/18/02	16:30
III			

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

22. Lab Name: ATC-TEM	23. Date:	24. Time:
a. Analyzed By: IRay	3/19/02	7:00
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: ANDREAS ANDREOU

27. Result To: ~~ANDREAS C. ANDREOU~~
Beeper/Phone #'s (646) 772-1153

28. Comments:

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

NY-1 (1/00)

NYC-WTC_000261934

NYC 9/11 Public Portal Document

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008 CONFIDENTIAL, CITY_21MC100_003466068

ATC ASSOCIATES INC.

AIR MONITORING DATA AND CHAIN OF CUSTODY FORM

6733

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	NEW STUYVESANT HS (M477) / 345 CHAMBERS STREET, NY, NY 10007	19125-0246	HERANT ANTONYAN	HP-88

5. Date	6. Abatement Location	7. ☐ PCM (0.8 micron MCE)	8. ☒ TEM (0.45 micron MCE)	9. Type
02/18/02	Exterior & Interior of bldg. & Roof	Cassette/Filter Manufacture ____ Lot # ____	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
24				Field Blank Sealed blank Field Blank									
7				Outside the building South side	6:48	10:50	242	8	8	8	1936		
8				1st floor lobby	6:51	10:53	242	8	8	8	1936		
9				2nd floor lobby	6:52	10:55	243	8	8	8	1944		
10				Outside the building 11th floor Roof	6:56	10:59	243	8	8	8	1944		
11				Outside the building North side	10:43	14:45	242	8	8	8	1936		
12				Outside the building East side	10:47	14:48	241	8	8	8	1928		

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I H. Antonyan		02/18/02	
II	JD	2/18/02	16:30
III			

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

22. Lab Name: ATC-TEM	23. Date:	24. Time:
a. Analyzed By: RRly	3/1/02	7:00
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: ANDREAS ANDREOU

27. Result To: ~~ANDREAS C. ANDREOU~~
Beeper/Phone #'s (646) 772-1153

28. Comments:

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

NYC-WTC_000261935

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

CONFIDENTIAL,

CITY_21MC100_003466069

NYC 9/11 Public Portal Document

ATC ASSOCIATES INC.

6733

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

1. Client:	2. Project Name:	3. Project #:	4. Project Monitor:	4c. Rotameter Number:
NYC-BOE	NEW STUYVESANT HS (M477)	19125-0216		HP-88
	2a. Project Address: 345 CHAMBERS STREET, NY, NY 10007		4a. Air Sampler: HERANT ANTONYAN	

5. Date:	6. Abatement Location:	7. ☐ PCM (0.8 micron MCE)	8. ☒ TEM (0.45 micron MCE)	9. Type:
2/18/02	Exterior & Interior of bldg. & Roof	Cassette/Filter Manufacture: Lot #:	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									
13				Outside the building South side	10:50	14:52	242	8	8	8	1936		
14				1st floor lobby area	10:53	14:56	243	8	8	8	1944		
15				2nd floor lobby area	10:55	14:58	243	8	8	8	1944		
16				Outside the building 11th floor Roof.	10:59	15:02	243	8	8	8	1944		
17				10th floor Hallway	11:05	15:07	242	8	8	8	1936		
18				10th floor Room 1001 East	11:08	15:10	242	8	8	8	1936		

CHAIN OF CUSTODY

18. Relinquished By:	19. Received By:	20. Date:	21. Time:
I. H. Antonyan		02/18/02	
II	JD	2/18/02	16:30

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

22. Lab Name: ATC-TEM	23. Date:	24. Time:
a. Analyzed By: RRly	2/19/02	7:00
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: ANDREAS ANDREOU

27. Result To: ~~ANDREAS C. ANDREOU~~
Beeper/Phone #'s (646) 772-1153

28. Comments:

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

NYC-WTC_000261936

NYC 9/11 Public Portal Document

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

CITY_21MC100_0034660 70

ATC ASSOCIATES INC.

6733

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

1. Client	2. Project Name / 2a. Project Address	3. Project #	4. Project Monitor / 4a. Air Sampler	4c. Rotameter Number
NYC-BOE	NEW STUYVESANT HS (M477) / 345 CHAMBERS STREET, NY, NY 10007	19125-0216	4a. HERANT ANTONYAN	HP-88

5. Date	6. Abatement Location	7. ☐ PCM (0.8 micron MCE)	8. ☒ TEM (0.45 micron MCE)	9. Type
02/18/02	Exterior & Interior of bldg. & Roof	Cassette/Filter Manufacture: ____ Lot #: ____	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									
19				2nd floor Room 250N.	11:11	15:14	243	8	8	8	1944		
20				1st floor Hallway	11:14	15:17	243	8	8	8	1944		
21				1st floor Room 125S.	11:17	15:20	243	8	8	8	1944		

CHAIN OF CUSTODY

18. Relinquished By	19. Received By	20. Date	21. Time
I H. Antonyan	JB	02/18/02	
II		2/18/02	16:30

26. ATC Project Manager	27. Result To / Beeper/Phone #'s	28. Comments
ANDREAS ANDREOU	ANDREAS C. ANDREOU (646) 772-1153	

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

22. Lab Name: ATC-TEM	23. Date	24. Time
a. Analyzed By: ARly	2/19/02	7:00
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

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

NY-1 (1/00)