



ambient group inc.

Indoor environmental quality surveys
Water treatment consulting
Asbestos & lead field services
Regulatory compliance programs
Air, water & soil analytical laboratories

NATIONAL HEADQUARTERS

55 WEST 39TH STREET
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NEW YORK, NY 10018
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December 13, 2001

Mr. Elliot Zuckerman
Cushman & Wakefield
a/a/f Mercantile Exchange
One North End Avenue
New York, New York 10282

Re: One North End Avenue
Ambient Project # 211338

Dear Mr. Zuckerman:

The following is a summary of the indoor environmental quality survey that Ambient Group, Inc. performed on December 5, 2001 at One North End Avenue. The survey included sampling for airborne metals (including silica scan), polynuclear aromatic hydrocarbons and airborne asbestos structures by TEM.

Four (4) air samples were collected from floors 3, 7, 10 and 15 and analyzed by transmission electron microscopy (TEM) for asbestos structures. The results of the analysis indicated that airborne asbestos levels at the time of testing were less than the analytical sensitivity of the instrument, which is well below the EPA standard of 70 structures/mm² as well as other recommended industry guidelines and/or regulations.

Four (4) air samples were collected from floors 3, 7, 10 and 15 and analyzed for metals in air (including silica). All measured metals revealed levels well below their respective OSHA PELs and NIOSH RELs. Levels of cristobalite and quartz detected in the silica scan were also below the NIOSH REL of 0.05 mg/m³.

Four (4) air samples were collected from floors 3, 7, 10 and 15 and analyzed for polynuclear aromatic hydrocarbons in air. Analysis of all four (4) samples collected revealed that the levels of the individual compounds were below the OSHA Permissible Exposure Limits and NIOSH REL guidelines.

Please refer to the attached laboratory data sheets for further details. Should you have any questions regarding this information, please feel free to call me.

Sincerely,
Signed for Ambient Group, Inc. by:

Neetha Triwari for
John J. Leitner
Vice President

JL/ml
Attachments

GLDEN COVE, NY
516 609-0009
211338

MIAMI, FL
305 860-0101

CHICAGO, IL
312 527-5526

CORONA, CA
909 272-4730

12/13/01 THU 19:00 [TX/RX NO 8798]

AMBIENT GROUP, INC.
10 MORRIS AVENUE
GLEN COVE, NY 11542
ELAP # 10865

METALS IN AIR LABORATORY DATA REPORT

PROJECT ID: 211338
CLIENT: CUSHMAN & WAKEFIELD, INC.
PROJECT ADDRESS: ONE NORTH END AVENUE
DESCRIPTION:

COLLECTED: 12/5/01
DATE REC'D: 12/7/01
ANALYZED: 12/7/01

10TH Floor: Balcony East Side Outside

LABORATORY ID	FIELD ID	ANALYTE	VOLUME (L)	ug/m ³
41123	6448-01	CADMIUM	750	<0.16
		CHROMIUM	750	0.73
		COPPER	750	2.60
		IRON	750	1.47
		LEAD	750	<1.37
		MANGANESE	750	<0.24
		NICKEL	750	<0.40
		ZINC	750	<1.45

Standard/Guideline:

OSHA PEL for Cadmium: 5ug/m³; OSHA PEL for Chromium: 1000ug/m³; OSHA PEL for Copper: 1000ug/m³;
OSHA PEL for Iron: 10000ug/m³; OSHA PEL for Lead: 50ug/m³; OSHA PEL for Manganese: 1000ug/m³; OSHA
PEL for Nickel: 1000ug/m³; OSHA PEL for Zinc: 5000ug/m³

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GLEN COVE, NY 11542
ELAP # 10865

METALS IN AIR LABORATORY DATA REPORT

PROJECT ID: 211338
CLIENT: CUSHMAN & WAKEFIELD, INC.
PROJECT ADDRESS: ONE NORTH END AVENUE
DESCRIPTION:
15th Floor, West Side Of Building

COLLECTED: 12/5/01
DATE REC'D: 12/7/01
ANALYZED: 12/7/01

LABORATORY ID	FIELD ID	ANALYTE	VOLUME (L)	ug/m ³
41124	6448-02	CADMIUM	795	<0.16
		CHROMIUM	795	0.75
		COPPER	795	2.14
		IRON	795	0.63
		LEAD	795	<1.38
		MANGANESE	795	<0.24
		NICKEL	795	<0.40
		ZINC	795	<1.46

Standard/Guideline:

OSHA PEL for Cadmium: 5ug/m3; OSHA PEL for Chromium: 1000ug/m3; OSHA PEL for Copper: 1000ug/m3;
OSHA PEL for Iron: 10000ug/m3; OSHA PEL for Lead: 50ug/m3; OSHA PEL for Manganese: 1000ug/m3; OSHA
PEL for Nickel: 1000ug/m3; OSHA PEL for Zinc: 5000ug/m3

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GLEN COVE, NY 11542
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METALS IN AIR LABORATORY DATA REPORT

PROJECT ID: 211338
CLIENT: CUSHMAN & WAKEFIELD, INC.
PROJECT ADDRESS: ONE NORTH END AVENUE
DESCRIPTION: 3rd Floor, Adj. To Stair "D"

COLLECTED: 12/5/01
DATE REC'D: 12/7/01
ANALYZED: 12/7/01

LABORATORY ID	FIELD ID	ANALYTE	VOLUME (L)	ug/m ³
41125	6448-3	CADMIUM	788	<0.12
		CHROMIUM	788	0.70
		COPPER	788	2.54
		IRON	788	0.76
		LEAD	788	<1.01
		MANGANESE	788	<0.18
		NICKEL	788	<0.30
		ZINC	788	<1.07

Standard/Guideline:

OSHA PEL for Cadmium: 5ug/m³; OSHA PEL for Chromium: 1000ug/m³; OSHA PEL for Copper: 1000ug/m³;
OSHA PEL for Iron: 10000ug/m³; OSHA PEL for Lead: 50ug/m³; OSHA PEL for Manganese: 1000ug/m³; OSHA
PEL for Nickel: 1000ug/m³; OSHA PEL for Zinc: 5000ug/m³

AMBIENT GROUP, INC.
10 MORRIS AVENUE
GLEN COVE, NY 11542
ELAP # 10865

METALS IN AIR LABORATORY DATA REPORT

PROJECT ID: 211338
CLIENT: CUSHMAN & WAKEFIELD, INC.
PROJECT ADDRESS: ONE NORTH END AVENUE
DESCRIPTION: 7th Floor; Adj. To Stair "C"

COLLECTED: 12/5/01
DATE REC'D: 12/7/01
ANALYZED: 12/7/01

LABORATORY ID	FIELD ID	ANALYTE	VOLUME (L)	ug/m ³
41126	6448-04	CADMIUM	630	<0.13
		CHROMIUM	630	0.79
		COPPER	630	1.51
		IRON	630	0.87
		LEAD	630	<1.06
		MANGANESE	630	<0.19
		NICKEL	630	<0.31
		ZINC	630	<1.13

Standard/Guideline:

OSHA PEL for Cadmium: 5ug/m3; OSHA PEL for Chromium: 1000ug/m3; OSHA PEL for Copper: 1000ug/m3;
OSHA PEL for Iron: 10000ug/m3; OSHA PEL for Lead: 50ug/m3; OSHA PEL for Manganese: 1000ug/m3; OSHA
PEL for Nickel: 1000ug/m3; OSHA PEL for Zinc: 5000ug/m3

Ambient Group, Inc.
55 West 39th St., 12 Fl.
New York, New York 10018

Client: Cushman & Wakefield/Mercantile Exchange
 One North End Avenue
 New York, New York 10282

Project ID # 211338
 Project Address: One North End Avenue
 Survey Date: December 5, 2001

RESULTS OF SILICA SCAN

Floor/Location	Concentrations Reported In mg/m^3		Standard/Guidelines
	Cristobalite	Quartz	
10th floor/outside balcony east side	<0.01	<0.01	NIOSH 0.05 mg/m^3
15th floor/West side of building	<0.009	<0.009	
3rd floor/adj. to stair "D"	<0.009	<0.009	
7th floor/adj. to stair "C"	<0.009	<0.009	

All levels reported are below their associated standards and guidelines.

ambient labs inc. 159 West 25th Street New York, NY 10001 ELAP #10865

REPORT OF AIR SAMPLE ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY

Project ID : **0211338**
Client Name : **Cushman & Wakefield, Inc**
Project Name : **One North End Avenue** Field ID : **6445-1**

Sample ID : **AEM990 11884** Date Received : **12/9/01**
Sample Description : **10th Floor, East Side, outside**

Filter Composition : Porosity : **0.45** micron Filt Lot # :
Filter Diameter : **25** mm Effective Filter Area : **385** mm² Air Volume : **1575** ltr
Total Filter Area Analyzed : **0.0540** mm²

Grid Openings : **6** Avg Grid Opening Area : **0.0090** mm² Grid Lot # : **4083**
Analytical Sensitivity : **0.0045** asbestos struct/cm³

Number of Asbestos Structures :

Chrysotile : **0**
Amphibole : **0**

Number of Structure Types :

LENGTH	FIBER	CLUSTER	MATRIX	BUNDLE
0.5 μ m < L < 5 μ m				
L > 5 μ m				

A: TOTAL CHRYSOTILE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
B: TOTAL AMPHIBOLE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
C: TOTAL ASBESTOS STRUCTURE (A+B) CONCENTRATION : LT ANYL SENS structure/cm³

TOTAL ASBESTOS CONCENTRATION :	IN AIR	LT ANYL SENS	structure/cm ³
	ON FILTER	LT ANYL SENS	structure/mm ²

Micrograph ID # for Reported Structures:

Reported for Ambient Labs Inc. by :

INNA NURIK
Environmental Analyst

Analysis Date : **12/9/01**

* Overloaded, NA - Analyzed

ambient labs inc. 159 West 25th Street New York, NY 10001 ELAP #10865

REPORT OF AIR SAMPLE ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY

Project ID : **0211338**
Client Name : **Cushman & Wakefield, Inc**
Project Name : **One North End Avenue** Field ID : **6445-2**

Sample ID : **AEM990 11885** Date Received : **12/9/01**
Sample Description : **15th Floor, West Side of Building**

Filter Composition : Porosity : **0.45** micron Filt Lot # :
Filter Diameter : **25** mm Effective Filter Area : **385** mm² Air Volume : **1749** ltr
Total Filter Area Analyzed : **0.0450** mm²

Grid Openings : **5** Avg Grid Opening Area : **0.0090** mm² Grid Lot # : **4083**
Analytical Sensitivity : **0.0049** asbestos struct/cm³

Number of Asbestos Structures :

Chrysotile : **0**
Amphibole : **0**

Number of Structure Types :

LENGTH	FIBER	CLUSTER	MATRIX	BUNDLE
0.5 μ m < L < 5 μ m				
L > 5 μ m				

A: TOTAL CHRYSOTILE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
B: TOTAL AMPHIBOLE STUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
C: TOTAL ASBESTOS STUCTURE (A+B) CONCENTRATION : LT ANYL SENS structure/cm³

TOTAL ASBESTOS CONCENTRATION :	IN AIR	LT ANYL SENS	structure/cm ³
	ON FILTER	LT ANYL SENS	structure/mm ²

Micrograph ID # for Reported Structures:

Reported for Ambient Labs Inc. by :

INNA NURIK
Environmental Analyst

Analysis Date : **12/9/01**

* Overloaded, NA - Analyzed

ambient labs inc. 159 West 25th Street New York, NY 10001 ELAP #10865

REPORT OF AIR SAMPLE ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY

Project ID : **0211338**
 Client Name : **Cushman & Wakefield, Inc**
 Project Name : **One North End Avenue** Field ID : **6445-3**

Sample ID : **AEM990 11886** Date Received : **12/9/01**
 Sample Description : **3rd Floor / Stair 'D'**

Filter Composition : Porosity : **0.45** micron Filt Lot # :
 Filter Diameter : **25** mm Effective Filter Area : **385** mm² Air Volume : **1733** ltr
 Total Filter Area Analyzed : **0.0450** mm²

Grid Openings : **5** Avg Grid Opening Area : **0.0090** mm² Grid Lot # : **4083**
 Analytical Sensitivity : **0.0049** asbestos struct/cm³

Number of Asbestos Structures :

Chrysotile : **0**
 Amphibole : **0**

Number of Structure Types :

LENGTH	FIBER	CLUSTER	MATRIX	BUNDLE
0.5 μ m < L < 5 μ m				
L > 5 μ m				

A: TOTAL CHRYSOTILE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
 B: TOTAL AMPHIBOLE STUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
 C: TOTAL ASBESTOS STUCTURE (A+B) CONCENTRATION : LT ANYL SENS structure/cm³

TOTAL ASBESTOS CONCENTRATION :

IN AIR	LT ANYL SENS	structure/cm ³
ON FILTER	LT ANYL SENS	structure/mm ²

Micrograph ID # for Reported Structures:

Reported for Ambient Labs Inc. by :

INNA NURIK
 Environmental Analyst

* Overloaded, NA - Analyzed

Analysis Date : **12/9/01**

ambient labs inc. 159 West 25th Street New York, NY 10001 ELAP #10865

REPORT OF AIR SAMPLE ANALYSIS BY TRANSMISSION ELECTRON MICROSCOPY

Project ID : **O211338**
Client Name : **Cushman & Wakefield, Inc**
Project Name : **One North End Avenue** Field ID : **6445-4**

Sample ID : **AEM990 11887** Date Received : **12/9/01**
Sample Description : **7th Floor / Stair 'C'**

Filter Composition : Porosity : **0.45** micron Filtr Lot # :
Filter Diameter : **25** mm Effective Filter Area : **385** mm² Air Volume : **1890** ltr
Total Filter Area Analyzed : **0.0450** mm²

Grid Openings : **5** Avg Grid Opening Area : **0.0090** mm² Grid Lot # : **4083**
Analytical Sensitivity : **0.0045** asbestos struct/cm³

Number of Asbestos Structures :

Chrysotile : **0**
Amphibole : **0**

Number of Structure Types :

LENGTH	FIBER	CLUSTER	MATRIX	BUNDLE
0.5 μ m < L < 5 μ m				
L > 5 μ m				

A: TOTAL CHRYSOTILE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
B: TOTAL AMPHIBOLE STRUCTURE CONCENTRATION : LT ANYL SENS structure/cm³
C: TOTAL ASBESTOS STRUCTURE (A+B) CONCENTRATION : LT ANYL SENS structure/cm³

TOTAL ASBESTOS CONCENTRATION :	IN AIR	LT ANYL SENS	structure/cm ³
	ON FILTER	LT ANYL SENS	structure/mm ²

Micrograph ID # for Reported Structures:

Reported for Ambient Labs Inc. by :

INNA NURIK
Environmental Analyst

Analysis Date : **12/9/01**

* Overloaded, NA - Analyzed

Ambient Group, Inc.
55 West 39th Street, 12th floor
New York, New York 10018

Client: Cushman & Wakefield
a/a/f Mercantile Exchange
One North End Avenue
New York, New York 101282

Project #: 211338
Project Address: One North End Avenue
Survey Date: 12/05/01

POLYNUCLEAR AROMATIC HYDROCARBON

Sample #	Location	Analyte	Concentration ($\mu\text{g}/\text{m}^3$)	Standards/Guidelines
211338-01	10 th floor, eastside, outside	Acenaphthene	<8.3	NIOSH REL 100 $\mu\text{g}/\text{m}^3$ OSHA PEL 200 $\mu\text{g}/\text{m}^3$
		Acenaphthylene	<8.3	
		Anthracene	<1.7	
		Benzo (a) anthracene	<1.7	
		Benzo (a) pyrene	<1.7	
		Benzo (b) fluoranthene	<1.7	
		Benzo (ghi) perylene	<1.7	
		Benzo (k) fluoranthene	<1.7	
		Chrysene	<1.7	
		Dibenz (a,h) anthracene	<1.7	
		Fluoranthene	<8.3	
		Flourene	<8.3	
		Indeno (1,2,3-cd) pyrene	<1.7	
		Napthalene	<8.3	
		Phenanthrene	<1.7	
		Pyrene	<1.7	

REL - Recommended Exposure Limit

PEL - Permissible Exposure Limit (8-hour time weighted average)

NA - Not Applicable

Ambient Group, Inc.
55 West 39th Street, 12th floor
New York, New York 10018

Client: Cushman & Wakefield
a/a/f Mercantile Exchange
One North End Avenue
New York, New York 101282

Project #: 211338
Project Address: One North End Avenue
Survey Date: 12/05/01

POLYNUCLEAR AROMATIC HYDROCARBON

Sample #	Location	Analyte	Concentration ($\mu\text{g}/\text{m}^3$)	Standards/Guidelines
211338-02	15 th floor, west side of building	Acenaphthene Acenaphthylene Anthracene Benz (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene	<7.9 <7.9 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <7.9 <7.9 <1.6 <7.9 <1.6	NIOSH REL 100 $\mu\text{g}/\text{m}^3$ OSHA PEL 200 $\mu\text{g}/\text{m}^3$

REL - Recommended Exposure Limit

PEL - Permissible Exposure Limit (8-hour time weighted average)

NA - Not Applicable

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 New York, New York 10018

Client: Cushman & Wakefield
a/a/f Mercantile Exchange
One North End Avenue
New York, New York 101282

Project #: 211338
Project Address: One North End Avenue
Survey Date: 12/05/01

POLYNUCLEAR AROMATIC HYDROCARBON

Sample #	Location	Analyte	Concentration ($\mu\text{g}/\text{m}^3$)	Standards/Guidelines
211338-03	3 rd floor/stair "D"	Acenaphthene Acenaphthylene Anthracene Benz (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (ghi) perylene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene	<7.9 <7.9 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <1.6 <7.9 <7.9 <1.6 <7.9 <1.6	NIOSH REL 100 $\mu\text{g}/\text{m}^3$ OSHA PEL 200 $\mu\text{g}/\text{m}^3$

REL - Recommended Exposure Limit
 PEL - Permissible Exposure Limit (8-hour time weighted average)
 NA - Not Applicable

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55 West 39th Street, 12th floor
New York, New York 10018

Client: Cushman & Wakefield
a/a/f Mercantile Exchange
One North End Avenue
New York, New York 101282

Project #: 211338
Project Address: One North End Avenue
Survey Date: 12/05/01

POLYNUCLEAR AROMATIC HYDROCARBON

Sample #	Location	Analyte	Concentration ($\mu\text{g}/\text{m}^3$)	Standards/Guidelines
211338-04	7 th floor/Stair "C"	Acenaphthene	<7.9	NIOSH REL 100 $\mu\text{g}/\text{m}^3$ OSHA PEL 200 $\mu\text{g}/\text{m}^3$
		Acenaphthylene	<7.9	
		Anthracene	<1.6	
		Benzo (a) anthracene	<1.6	
		Benzo (a) pyrene	<1.6	
		Benzo (b) fluoranthene	<1.6	
		Benzo (ghi) perylene	<1.6	
		Benzo (k) fluoranthene	<1.6	
		Chrysene	<1.6	
		Dibenz (a,h) anthracene	<1.6	
		Fluoranthene	<7.9	
		Flourene	<7.9	
		Indeno (1,2,3-cd) pyrene	<1.6	
		Napthalene	<7.9	
		Phenanthrene	<1.6	
		Pyrene	<1.6	

REL - Recommended Exposure Limit

PEL - Permissible Exposure Limit (8-hour time weighted average)

NA - Not Applicable

ambient group, inc.

55 West 39th Street, 12th Floor
New York, NY 10018

Facsimile Cover Sheet

To: Mr. Elliot Zuckerman
Company: Cushman & Wakefield
Fax: (212) 301-4665
From: John Leitner
Company: Ambient Group, Inc. ext. 243
Phone: (212) 944-4615
Fax: (212) 944-4618

Date: December 13, 2001
Pages including this cover
page: 15

Comments: Results of
IAQ testing performed on
12/05/01 at One North
End Avenue.