

**Aerosol Monitoring & Analysis, Inc.***Environmental Consultants*

January 6, 2009

Smithsonian Institution
Office of Safety, Health and Environmental Management
600 Maryland Avenue, SW, Suite 7106
MRC 514, P.O. Box 37012
Washington, D.C. 20013-7012

Attn: Ms. Rachel L. Gregory, Associate Director for Environmental Management

RE: Ambient air sample collection and analysis performed at the Smithsonian Institution (SI), National Air and Space Museum (NASM) located at 6th and Independence Avenue, SW, Washington, D.C.

AMA Job No. 09063

Dear Ms. Gregory:

On December 9 and 11, 2008, Aerosol Monitoring & Analysis, Inc. (AMA) representatives, Gary Urban and Korey Rubeling were on-site at the NASM to perform ambient air sample collection in various areas of the facility. The work was performed to determine the ambient fiber concentrations throughout the NASM, based on the presence of asbestos in settled dust samples indicated by Kynoch Environmental Management, Inc. (KEM), in their report dated November 25, 2008.

In order to determine if airborne asbestos hazards exists at NASM, AMA representatives collected a total of twenty-five (25) air samples plus (4) four blanks. The air samples were collected using standard industrial hygiene methods. Air was drawn through 25-millimeter (mm) diameter, 3 piece filter cassettes with 50-mm extension cowls made from non-conductive, carbon-filled polypropylene. The filter was made from 0.8 micrometer porosity, mixed cellulose ester (MCE), supported by a cellulose pad fitted into the base section of the cassettes. Battery operated low volume air sampling pumps were used for the majority of the samples (20), while high volume air sampling pumps with variable flow adjusters were utilized for the remaining samples (5). The air sampling pumps were calibrated prior to and following the air sampling with a rotometer, which was calibrated against a primary standard on December 8, 2008. Air samples were each collected for a period of at least 8 hours.

Sampling locations included public exhibit/open spaces and non-public storage, projection areas (exhibit support) on the 1st and 2nd floors as well as office, cubicle and corridor spaces on the 3rd floor. A minimum of one sample was collected from each area identified in the KEM report as having asbestos in settled dust present.

The air samples were analyzed by phase contrast microscopy (PCM) following the National Institute of Occupational Safety and Health (NIOSH) Method 7400 by AMA Analytical Services, Inc., an American Industrial Hygiene Association (AIHA) accredited laboratory (# 100470).

The results of the analysis of the 25 ambient air samples collected throughout the NASM facility identified fiber concentrations of less than or equal to (\leq) 0.005 fibers per cubic centimeter (f/cc) of air. For comparison purposes, the Occupational Safety and Health Administration (OSHA) has established a permissible exposure limit (PEL) of 0.1 f/cc as an 8 hour time weighted average for asbestos fibers. Furthermore, the re-occupancy levels for asbestos removal projects within SI, where PCM is utilized is <0.01 f/cc. See table 1.

Based on the results of the air samples collected by AMA, no airborne asbestos hazards were found at the time of the sample collection. In fact, the airborne levels referenced above (OSHA and SI) are based on either Federal or State regulatory levels, whereas, the surface dust levels have no regulatory standards to support the conclusions made within the KEM report regarding surface dust.

To further support this argument, the paper; R.J. Lee, D.R. Van Orden, I.M. Stewart, "**Dust and Airborne Concentrations - Is There a Correlation ?**", *Advances in Environmental Measurement Methods for Asbestos, ASTM STP 1342*, M. E. Beard Rook, Eds., American Society for Testing and Materials, West Conshohocken, PA, 2000, concludes that the presence of asbestos in airborne dust is independent of the presence of asbestos in surface dust.

In addition, the paper; E. J. Chatfield, "**Correlated Measurements of Airborne Asbestos-Containing Particles and Surface Dust**", *Advances in Environmental Measurement Methods for Asbestos, ASTM STP 1342*, M. E. Beard Rook, Eds., American Society for Testing and Materials, West Conshohocken, PA, 2000, by concludes that the surface dust measurements made by ASTM D5755 do not provide a valid scientific basis for prediction of airborne chrysotile concentrations.

Based on these two scientific papers, it is AMA's considered opinion that it would be difficult for KEM to defend their report conclusion that, "levels of asbestos in settled dust that exceed 100,000 s/cm² indicate that airborne exposures of asbestos at the time the material was being disturbed would have been well in excess of the OSHA Permissible Exposure Limit (PEL) for asbestos", as there is no valid air sampling data or site observations to support such a statement.

The conclusion statement made by KEM that, "There is a strong likelihood that the lack of engineering controls to prevent the spread of dust during demolition/dismantling activities has resulted in significant exposures to the general public that visit the museum.", does not consider the fact that no observations were made of such conditions, no air sampling data was utilized to support this argument, and that surface dust samples are not used to determine exposure or clearance for asbestos activities.

Enclosed please find the air monitoring data sheets, which identify the locations of sampling, the pump flow rates, volume of air collected, chain of custody and the certificates of analysis. If you have any questions regarding this report please contact our office at (410) 684-3327.

Sincerely,



Gary L. Urban, CHMM
Vice President-Consulting Services

Table I
Phase Contrast Microscopy (PCM)
Air Sampling Data
Smithsonian
National Air and Space Museum
December 9 and 11, 2008

Sample ID	General Sample Location	Sample Duration (minutes)	Sample Results (f/cc)
December 9, 2008			
090631209-01	NASM, 203, Upper Level, SW Projection Room, non-public space	480	<0.005
090631209-02	NASM, 203, Upper Level, NW Projection Room, non-public space	480	<0.005
090631209-03	NASM, 203, Gallery, Main Level, public space	480	<0.005
090631209-04	NASM, 207, Gallery, Main Level, public space	480	<0.005
090631209-05	NASM, 207, Upper Level, SW Area, non-public space	481	0.005
090631209-06	NASM 207, Main Level, NW Storage Area, non-public space	480	<0.005
090631209-07	NASM 213, Gallery, Main Level, North, public space	481	<0.005
090631209-08	NASM 213, Upper Level, Above Theater, non-public space	482	<0.005
090631209-09	NASM 210, Gallery, Main Level, Apollo 17 Case, public space	482	<0.005
090631209-10	NASM 113, Gallery, Main Level, NE Area, public space	480	<0.005
090631209-11	NASM 113, Gallery, Main Level, SW Area, public space	480	<0.005
090631209-12	NASM 1st Floor, Main Hall East, outside 111 Gallery, public space	480	<0.005
090631209-13	NASM 1 st Floor, Main Hall Center, on 108 column (NE), public space	480	<0.005
090631209-14	NASM 1 st Floor, Main Hall West, outside 103 Gallery, public space	480	<0.005
090631209-15	Field Blank	N/A	0/100
090631209-16	Sealed (lab) Blank	N/A	0/100

Table I
Phase Contrast Microscopy (PCM)
Air Sampling Data
Smithsonian
National Air and Space Museum
December 9 and 11, 2008

Sample ID	General Sample Location	Sample Duration (minutes)	Sample Results (f/cc)
December 11, 2008			
090631211-01	NASM 3 rd Floor, NW Area-Library Area, 300c8A	480	<0.005
090631211-02	NASM 3 rd Floor, SW Area-Office Area, 3106D	480	<0.005
090631211-03	NASM 3 rd Floor, West Hall, Corridor 300C10	480	<0.005
090631211-04	NASM 3 rd Floor, West Center-North-Office Area, 3359A	480	<0.005
090631211-05	NASM 3 rd Floor, West Center-South-Office Area, 3333A	480	<0.005
090631211-06	NASM 3 rd Floor, Center Hall, Corridor 300C21	480	<0.005
090631211-07	NASM 3 rd Floor, East Center-North-Office Area, 3550a	480	<0.005
090631211-08	NASM 3 rd Floor, East Center-South-Office Area outside 3512	480	<0.005
090631211-09	NASM 3 rd Floor, East Hall, Corridor 300C34	480	<0.005
090631211-10	NASM 3 rd Floor, NE Area-Office Area, outside 3759	480	<0.005
090631211-11	NASM 3 rd Floor, SE Area-Office Area Hall, outside 3726 stairwell.	480	<0.005
090631211-12	Field Blank	N/A	0/100
090631211-13	Sealed (lab) Blank	N/A	0/100

AMA Analytical Services, Inc.

A Specialized Environmental Laboratory



Client: Aerosol Monitoring & Analysis, Inc
Address: PO Box 646, 1131 Astoria Road
 Rehovot, Maryland 21076

Job Name: SF-NASM
Job Location: NASM
Job Number: 09063
P.O. Number: Not Provided

Chain Of Custody: 103910
Date Submitted: 12/10/2008
Person Submitting: Gary Urban
Date Analyzed: 12/10/2008
Report Date: 12/10/2008

100470
NY ELAP
 10920

Attention: Gary Urban

Page 1 of 2

Summary of Phase Contrast Microscopy

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Milliliter Spurred	Fibers Per Cubic Centimeter	Analyst ID	Sample Type	Comments
09147781	090631209-01	960	< 7.0	< 0.005	CK	NIP	
09147782	090631209-02	960	< 7.0	< 0.005	CK	NIP	
09147783	090631209-03	960	< 7.0	< 0.005	CK	NIP	
09147784	090631209-04	960	< 7.0	< 0.005	CK	NIP	
09147785	090631209-05	962	12.1	0.005	CK	NIP	
09147786	090631209-06	960	< 7.0	< 0.005	CK	NIP	
09147787	090631209-07	962	< 7.0	< 0.005	CK	NIP	
09147788	090631209-08	964	< 7.0	< 0.005	CK	NIP	
09147789	090631209-09	964	< 7.0	< 0.005	CK	NIP	
09147790	090631209-10	960	< 7.0	< 0.005	CK	NIP	
09147791	090631209-11	1440	< 7.0	< 0.005	CK	NIP	
09147792	090631209-12	1440	< 7.0	< 0.005	CK	NIP	
09147793	090631209-13	1440	7.6	< 0.005	CK	NIP	
09147794	090631209-14	1440	< 7.0	< 0.005	CK	NIP	
09147795	090631209-15	0	< 7.0	*****	CK	BLX	0 Effect (\$) per 100 fields

Received Time Dec. 10. 9:17PM

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a normal procedure for client, therapeutic, and those laboratories, this report is identified and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, methods, and collection protocols are based upon the information provided by the person submitting them and, unless collected by personnel of these laboratories, we expressly disclaim any knowledge and liability for the accuracy or completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NYLAP accreditation applies only to published light microscopy of bulk samples and not to microscopic electron microscopy of AIHA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NYLAP, NIST, or any agency of the Federal Government. All rights reserved.

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No. 2107 P. 1/6

2008 9:00PM

AMA Analytical Services, Inc.

A Specialized Environmental Laboratory



Client: Aerosol Monitoring & Analysis, Inc
 Address: PO Box 646, 1331 Astor Road
 Hanover, Maryland 21076

Job Name: SI-NASDM
 Job Location: NASM
 Job Number: 09063
 P.O. Number: Not Provided

Chain Of Custody: 18910
 Date Submitted: 12/10/2008
 Person Submitting: Gary Urban
 Date Analyzed: 12/10/2008
 Report Date: 12/10/2008

Attention: Gary Urban

Page 1 of 2

Summary of Phase Contrast Microscopy

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Milliliter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
0914796	090631209-16	0	< 7.0 *	*****	CK	BLK	0 Fibers(s) per 100 fields

* The Reporting Limit for AMA Laboratory is 7.0 fibers per square millimeter of filter. The reporting limit for the air concentration of fibers (Bec) is dependent on the sampled air volume. Fibers counts were determined by the methods described in NIOSH Analytical Method 7400, Fibers (Revision 3, Issue 2, 8/15/94). All personnel samples were analyzed following the OSHA Reference Method.

Sample results shown here have been corrected for any field blank(s) submitted with this sample set.
 Note: All samples were received in good condition unless otherwise noted.
 Uncertainty for fibrous material in the range of 7-25 the CV is 0.305, 26-64 CV=0.264, 64-127 CV=0.302, >127 CV=0.344

[Signature]
 Analyst: Crystal Kallam

Received Time Dec. 10, 9:17PM

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of any other product. As a standard procedure in clean, dry, and these Laboratories, this report is absolute and accepted for the exclusive use of the client in whom it is addressed and upon the condition that this not be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, methods, and collection protocols are based upon the information provided by the persons submitting them and unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of the information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polynuclear aromatic hydrocarbon (PAH) samples and not to other types of samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. All rights reserved.
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An AIHA (0100470), NVLAP (101143-0), and NY ELAP (H10920) Accredited Laboratory

4475 Forbes Blvd. - Lanham, MD, 20706 - (301) 459-2640 - Toll Free (800) 346-0961 - Fax (301) 459-2643



AIR MONITORING DATA SHEET

PROJECT: <u>SI-NASM</u> ADDRESS: <u>4th Independence Ave, SW</u> CONTRACTOR: <u>N/A</u> DATE: <u>12/9/08</u> ACTIVITY: <u>Ambient Air Monit</u> AMA JOB #: <u>09063</u>	SAMPLE NO. 09063 12-09 01	SAMPLE DATE 12/9/08	SAMPLE LOCATION NASM 205 upper level SW Projection Run 8' W of E wall, 6' N of S wall, 5' from floor
	09063 12-09 02	12/9/08	NASM 203 upper level NW Projection Run 2' E of W wall, 4' S of N wall 5' from floor
SAMPLED FOR: METHOD CASSETTE FILTER <input checked="" type="checkbox"/> Asbestos <input type="checkbox"/> 7400 <input type="checkbox"/> 11M <input checked="" type="checkbox"/> 7500 <input type="checkbox"/> 3700 <input checked="" type="checkbox"/> MCE <input type="checkbox"/> PO <input type="checkbox"/> Airborne Dust <input type="checkbox"/> Gas <input type="checkbox"/> Vapor <input type="checkbox"/> Other <input type="checkbox"/> Analytical Method <input type="checkbox"/> Ambient Temp.	09063 12-09 03	12/9/08	NASM Gallery 203 Main floor 20' N of S wall, 20' E of W wall 6' from floor on top of curve
	09063 12-09 04	12/9/08	NASM Gallery 207 Main floor 13' E of W wall 30' S of N wall 5' from floor level on ramp/lane
Protection Worn During Sampling: <input type="checkbox"/> Full Body Coveralls <input type="checkbox"/> Respirator-Air Purifying <u>N/A</u> <input type="checkbox"/> Respirator-Power Air Purifying <input type="checkbox"/> Respirator-Supplied Air	09063 12-09 05	12/9/08	NASM 207 SW corner 2nd level 10' E of W wall, 4' N of S wall on projection in loft
PERSONAL AIR SAMPLING Employee Sampled Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function Description of Activity:	09063 12-09 06	12/9/08	NASM 207 NW corner storage, 6' E of W wall, 2' S of N wall, 6' from floor on shelf.
Signature of Employee:	09063 12-09 07	12/9/08	NASM Gallery 213 8' E of W wall, 38' W of E wall on Reading data Case, 5' from floor

FIELD SAMPLE NO.	TEST PERIOD			FLOW RATE SETTING		INSTRUMENT SERIAL NO.	SAMPLE TYPE				SAMPLE LOCATION		
	START	STOP	TOTAL (MIN.)	START (LITERS/MIN.)	STOP (LITERS/MIN.)		AMBIENT	AREA	PERSONAL	FINAL	IN WORK AREA	OUTSIDE WORK AREA	VOLUME
090631209													
01	1802	0202	480	2.0	2.0	08-13	✓						960
02	1805	0205	480	2.0	2.0	08-14	✓						960
03	1856	0156	480	2.0	2.0	08-11	✓						960
04	1810	0210	480	2.0	2.0	08-12	✓						960
05	1817	0218	481	2.0	2.0	08-15	✓						962
06	1816	0216	480	2.0	2.0	08-14	✓						960
07	1826	0227	481	2.0	2.0	08-18	✓						962

COMMENTS
 EE(0.9um MCE) Cat CS250 80
 Lot T 8206808212
 EMS VFB 55-194588-00-5015
 (Resonator)
 calibrated 12/9/08

Inspector: Gy Urh
[Signature]
 Date: 12/9 12/10/08



AIR MONITORING DATA SHEET

PROJECT: <u>SI - NASM</u> ADDRESS: <u>17th Independence Ave, S.W.</u> CONTRACTOR: <u>N/A</u> DATE: <u>12/9/08</u> ACTIVITY: <u>Ambient Air Monit.</u> AMA JOB #: <u>09063</u>	SAMPLE NO. SAMPLE DATE SAMPLE LOCATION	09063 1209 08 12/9/08 NASM 213, Second level above theater, 18' W of E wall, 16' N of S wall, on Wood Rail vD 09063 1209 09 12/9/08 NASM 210 Gallery 34' E of W wall, 50' N of S wall for Rail Apollo 17 Core, 4' from floor. 09063 1209 10 12/9/08 NASM 113, NE corner 16' W of E wall, 8' S of W wall, on spacecraft assemble Core, 4' from floor 09063 1209 11 12/9/08 NASM 113 SW corner 16' N of S. Entrance, 20' E of W wall 4' from floor 09063 1209 12 12/9/08 NASM 1st Floor, Main Hall East/South 50' W of E wall on S wall of Main Hall by elevator outside 111, 5' from floor 09063 1209 13 12/9/08 NASM 1st Floor Main Hall 10' E column, 20' W of E wall at NE corner, 4' from floor level 09063 1209 14 12/9/08 NASM 1st Floor Main Hall outside 103 on SE corner of entrance to 103, 5' from floor
--	--	--

SAMPLED FOR:	METHOD	CASSETTE	FILTER
<input checked="" type="checkbox"/> Asbestos <input type="checkbox"/> Airborne Dust <input type="checkbox"/> Gas <input type="checkbox"/> Vapor <input type="checkbox"/> Other <input type="checkbox"/> Analytical Method	<input type="checkbox"/> 7400 <input type="checkbox"/> 11M <input checked="" type="checkbox"/> 25mm <input type="checkbox"/> 37mm	<input type="checkbox"/> MCE <input type="checkbox"/> PC	<input type="checkbox"/> MCE <input type="checkbox"/> PC

Protection Worn During Sampling:

Full Body Coveralls

Respirator-Air Purifying N/A

Respirator-Power Air Purifying

Respirator-Supplied Air

PERSONAL AIR SAMPLING

Employee Sampled _____

Social Security No. _____

Smoker: Yes No N/A

Job Function _____

Description of Activity: _____

Signature of Employee: _____

FIELD SAMPLE NO.	TEST PERIOD		TOTAL (MIN.)	FLOW RATE SETTING		INSTRUMENT SERIAL NO.	SAMPLE TYPE				SAMPLE LOCATION			
	START	STOP		START	STOP		AMBIENT	AREA	PERSONAL	FINAL	IN WORK AREA	OUTSIDE WORK AREA	VOLUME	
090631209														
08	1827	0229	482	2.0	2.0	08-17	✓							964
09	1832	0234	482	2.0	2.0	08-19	✓							964
10	1841	0241	480	2.0	2.0	08-20	✓							960
11	1841	0241	480	3.0	3.0	HV08-09	✓							1440
12	1845	0245	480	3.0	3.0	HV08-10	✓							1440
13	1854	0254	480	3.0	3.0	HV08-12	✓							1440
14	1900	0300	480	3.0	3.0	HV08-05	✓							1440

COMMENTS

EE(0.8um MCE) Cat
CS25080
Lot T8208808212
CMS VFB 55-1945 88-00-501J
CROSMETER
Calibrated 12/8/08

Inspector: Gary Johnson
 Date: 12/9-12/10/08



AIR MONITORING DATA SHEET

PROJECT: <u>SI - NASM</u> ADDRESS: <u>6th Independence Ave, SW</u> CONTRACTOR: <u>N/A</u> DATE: <u>12/9/08</u> ACTIVITY: <u>Ambient Air Monit</u> AMA JOB#: <u>09063</u>	SAMPLE NO. <u>09063</u> <u>12-09</u> <u>15</u>	SAMPLE DATE <u>12/9/08</u>	SAMPLE LOCATION <u>FIELD BLANK</u>
SAMPLED FOR: <input checked="" type="checkbox"/> Asbestos <input type="checkbox"/> 7400 <input type="checkbox"/> TEM <input checked="" type="checkbox"/> 25mm <input type="checkbox"/> 37mm <input checked="" type="checkbox"/> MCE <input type="checkbox"/> POC <input type="checkbox"/> Airborne Dust <input type="checkbox"/> Gas <input type="checkbox"/> Vapor <input type="checkbox"/> Other <input type="checkbox"/> Analytical Method <input type="checkbox"/> Ambient Temp.	SAMPLE NO. <u>09063</u> <u>12.09</u> <u>16</u>	SAMPLE DATE <u>12/9/08</u>	SAMPLE LOCATION <u>SEALED BLANK</u>
Protection Worn During Sampling: <input type="checkbox"/> Full Body Coveralls <input type="checkbox"/> Respirator-Air Purifying <input type="checkbox"/> Respirator-Power Air Purifying <input type="checkbox"/> Respirator-Supplied Air	PERSONAL AIR SAMPLING Employee Sampled Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function Description of Activity:		
Signature of Employee:			

FIELD SAMPLE NO.	TEST PERIOD		TOTAL (MIN.)	FLOW RATE SETTING		INSTRUMENT SERIAL NO.	SAMPLE TYPE				SAMPLE LOCATION		
	START	STOP		START	STOP		AMBIENT	AREA	PERSONAL	FINAL	IN WORK AREA	OUTSIDE WORK AREA	VOLUME
090631209													
15	N/A	N/A					✓	X					
16	N/A	N/A					✓	X					

COMMENTS
 EE (0.8um MCE)
 Cat. CSA50-80
 Lot T 820 8808212
 EMS UFA 55-194588-00-5015
 Re-calibrated
 12/9/08

Inspector: G. Uria
 (Print)
[Signature]
 (Signature)
 Date: 12/9 - 12/10/08



ASMA Analytical Services, Inc.

Focused on Results
AIRA (#100470) NVLAP (#101143-0) NY ELAP (#10920)
4475 Forbes Blvd. • Lanham, MD 20786
(301) 459-2640 • (800) 346-8961 • Fax (301) 459-2643
www.asmaab.com

CHAIN OF CUSTODY

(Please Refer To This Number For Inquiries) 183910

Mailing/Billing Information:

1. Client Name: ASMA KANOVA
2. Address 1: PO BOX 646
3. Address 2: HANOVER, MD
4. Address 3:
5. Phone #: 410 684 3327 Fax #: 410 684 3184

Submittal Information:

1. Job Name: SI-NASM
2. Job Location: NASM
3. Job #: 09063
4. Contact Person: Gary Urban
5. Submitted by: GUY

REPORT TO:
Include OOC/Field Data Sheets with Report
Email: Guy U @ asma.com or ting.com
Fax: 410 684 3384
Verbal: Guy

Reporting Information (Results will be provided as soon as technically feasible):

NORMAL BUSINESS HOURS
3 Day
5 Day
Date Rec: 12/11/08
Results Required By: Noon
Every Attempt Will Be Made to Accommodate

AFTER HOURS (must be pre-scheduled)
Immediate
Time Rec: 8 AM
Comments:

Asbestos Analysis

PCML Air - Please Indicate Filter Type:
PC NIOSH 7400
PC NIOSH 7402
Other (specify)
PC MCE Porosity
PC MCE Porosity
Other (specify)

ITEM Bulk

ELAP 198.4 Classified
NY State PLM/TEM
Residual Ash
Quat. (press/abs) Vacuum/Dust
Quat. (s/area) Vacuum D5755-85
Quat. (s/area) Dust D6480-99
Quat. (press/abs)
ELAP 198.2/EPA 100.2
EPA 100.1

Lead Analysis

Pain Chip
Dust Wipe (wipe type)
Air
Soil/Solid
TCLP
Drinking Water
Waste Water
Dust Wipe: Furnace (wipe type)

PLM Bulk

EPA 600 - Visual Estimate
EPA Pestic Count
NY State Frangible 198.1
Grav. Reduction ELAP 198.6
Other (specify)

TEM Bulk

ELAP 198.4 Classified
NY State PLM/TEM
Residual Ash
Quat. (press/abs) Vacuum/Dust
Quat. (s/area) Vacuum D5755-85
Quat. (s/area) Dust D6480-99
Quat. (press/abs)
ELAP 198.2/EPA 100.2
EPA 100.1

All samples received in good condition unless otherwise noted. (TEM Water samples)

Table with columns: CLIENT ID NUMBER, SAMPLE LOCATION, DATE, VOLUME (LITERS), WIDE AREA, ANALYSIS (PCM, PLM, LBAD, MOLD, AIR, BULK, DUST, WATER, OTHER), MATRIX, LAB, DATE/TIME, CONTACT, BY.

LABORATORY STAFF ONLY: (CUSTODY)

1. Date/Time RCVD: 12/10/08 @ 130
2. Date/Time Analyzed: 12/10/08
3. Results Reported To: Gary Urban
4. Comments:

By (Print): Crystal Williams
By (Print): M. Sampson
Date: 12/10/08

Sign: [Signature]

Initials: [Initials]

Dec. 10. 2008 9:00PM

Received Time Dec. 10. 9:17 AM



CERTIFICATE OF ANALYSIS



NY ELAP
18920

Client: Aerosol Monitoring & Analysis, Inc.
Address: PO Box 646, 1331 Ashton Road
Hanover, Maryland 21076

Job Name: SLNASH
Job Location: NASHM
Job Number: 09063
P.O. Number: Not Provided

Client Of Custody: 183911
Date Submitted: 12/12/2008
Person Submitting: Gary Urban/Korey Rublein
Date Analyzed: 12/12/2008

Attention: Gary Urban

Summary of Phase Contrast Microscopy

AMA Sample Number	Client Sample Number	Volume Sampled (liters)	Fibers Per Millionmeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
0915343	090631211-01	960	< 7.0 *	< 0.005 *	CK	N/P	
0915344	090631211-02	960	< 7.0 *	< 0.005 *	CK	N/P	
0915345	090631211-03	1440	< 7.0 *	< 0.005 *	CK	N/P	
0915346	090631211-04	960	< 7.0 *	< 0.005 *	CK	N/P	
0915347	090631211-05	960	< 7.0 *	< 0.005 *	CK	N/P	
0915348	090631211-06	960	< 7.0 *	< 0.005 *	CK	N/P	
0915349	090631211-07	960	< 7.0 *	< 0.005 *	CK	N/P	
0915350	090631211-08	960	< 7.0 *	< 0.005 *	CK	N/P	
0915351	090631211-09	960	< 7.0 *	< 0.005 *	CK	N/P	
0915352	090631211-10	960	< 7.0 *	< 0.005 *	CK	N/P	
0915353	090631211-11	960	< 7.0 *	< 0.005 *	CK	N/P	
0915354	090631211-12	0	< 7.0 *	*****	CK	BLK	0 fibers(s) per 100 fields
0915355	090631211-13	0	< 7.0 *	*****	CK	BLK	0 fibers(s) per 100 fields

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AMA Analytical Services, Inc.

A Specialized Environmental Laboratory



Client: Accessal Monitoring & Analysis, Inc. Job Name: SI NARM Chain Of Custody: 183911
 Address: PO Box 646, 1331 Ashton Road Job Location: NARM Date Submitted: 12/12/2008
 Hanover, Maryland 21076 Job Number: 09663 Job Number: Not Provided Person Submitting: Gary Urban/Korey Rabelin
 P.O. Number: Not Provided Report Date: 12/12/2008

100470
NY ELAP
 10928

Attention: Gary Urban
 Page 2 of 2

Summary of Phase Contrast Microscopy

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments

* The Reporting Limit for AMA Laboratory is 7.0 fibers per square millimeter of filter. The reporting limit for the air concentration of fibers (f/cc) is dependent on the sampled air volume. Fibers counts were determined by the methods described in NIOSH Analytical Method 7400, 'Fibers' (Revision 3, Issue 2, 8/15/94). All personnel samples were analyzed following the OSHA Reference Method.

Sample results shown here have been corrected for any field blank(s) submitted with this sample set.


Note: All samples were received in good condition unless otherwise noted.

Uncertainty for fibers/m³ in the range of 7-25 f/cc CV is 0.305, 26-64 CV=0.264, 64-127 CV=0.302, >127 CV=0.344

G. Urban
 Analyst: Corey Kellam

This report applies only to the sample or samples investigated and does not necessarily indicate the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is so limited and accepted for the exclusive use of the client to whom it is addressed and upon the condition that this not be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection methods are based upon the information provided by the person submitting them and unless otherwise requested by the client. NYELAP accreditation applies only to laboratory light microscopy of bulk samples and not to transmission electron microscopy of AHERA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NYELAP, NIOSH, or any agency of the Federal Government. All rights reserved.

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AIR MONITORING DATA SHEET


PROJECT: <u>SI-NASM</u> ADDRESS: <u>6th Independence Ave, S.W</u> CONTRACTOR: <u>N/A</u> DATE: <u>12/11/08</u> ACTIVITY: <u>Ambient Air Monit</u> AMA JOB #: <u>09063</u>	SAMPLE NO. 09063 1211 01	SAMPLE DATE 12/11/08	SAMPLE LOCATION NASM 3rd Floor, NW Corner 300C8A ~28' S. of 3174 ~5.5' up from floor ~19' E. of W. wall (LIBRARY CIRCULATION ROOM)
SAMPLER FOR: METHOD CASSETTE FILTER <input checked="" type="checkbox"/> Asbestos <input type="checkbox"/> 7409 <input type="checkbox"/> 1170M <input type="checkbox"/> 25mm <input type="checkbox"/> 37mm <input type="checkbox"/> USE <input type="checkbox"/> PG <input type="checkbox"/> Airborne Dust <input type="checkbox"/> Gas <input type="checkbox"/> Vapor <input type="checkbox"/> Other <input type="checkbox"/> Analytical Method <input type="checkbox"/> Ambient Temp.	09063 1211 02	12/11/08	NASM 3rd Floor, SW CORNER ~2' W. OF CORNER 3106D ~5.5' up from floor ~28' S. OF 3101 ENTRANCE (OFFICE AREA)
Protection Worn During Sampling: <input type="checkbox"/> Full Body Coveralls <input type="checkbox"/> Respirator-Air Purifying <input type="checkbox"/> Respirator-Power Air Purifying <input type="checkbox"/> Respirator-Supplied Air	09063 1211 03	12/11/08	NASM 3rd Floor W. Hall OUTSIDE 3204 ~20' W. OF E. WALL (CORRIDOR) ~7' N. OF S. WALL ~3.5' up from floor
PERSONAL AIR SAMPLING Employee Sampled _____ Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function _____ Description of Activity: _____ Signature of Employee: _____	09063 1211 04	12/11/08	NASM 3rd Floor CORNER 3359A ~4' W. OF 3355 ENTRANCE ~2.5' up from floor ~8' S. OF 3356 ENTRANCE (HALL DOOR)
PERSONAL AIR SAMPLING Employee Sampled _____ Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function _____ Description of Activity: _____ Signature of Employee: _____	09063 1211 05	12/11/08	NASM 3rd Floor CORNER 3359A ~2' E. OF W. WALL ~8' N. OF S. WALL ~5.5' up from floor (OFFICE AREA)
PERSONAL AIR SAMPLING Employee Sampled _____ Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function _____ Description of Activity: _____ Signature of Employee: _____	09063 1211 06	12/11/08	NASM 3rd Floor 300C21 CORRIDOR ~9' E. OF W. WALL ~10' S. OF N. WALL (CORRIDOR CORNER) ~5.5' up from floor
PERSONAL AIR SAMPLING Employee Sampled _____ Social Security No. _____ Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Job Function _____ Description of Activity: _____ Signature of Employee: _____	09063 1211 07	12/11/08	NASM 3rd Floor ~10' E. OF 3549 ENTRANCE (OFFICE AREA) ~11' S. OF 3552 ~5.5' up from floor

FIELD SAMPLE NO.	TEST PERIOD			FLOW RATE SETTING		INSTRUMENT SERIAL NO.	SAMPLE TYPE				SAMPLE LOCATION		
	START	STOP	TOTAL (MIN.)	START (LITERS/MIN.)	STOP (LITERS/MIN.)		AMBIENT	AREA	PERSONAL	FINAL	IN WORK AREA	OUTSIDE WORK AREA	VOLUME
09063/1211													
01	0157	0157	490	2.0	2.0	08-14	✓						960
02	1800	0200	480	2.0	2.0	08-13	✓						960
03	1804	0204	490	3.0	3.0	HV0805	✓						1440
04	1808	0208	480	2.0	2.0	08-19	✓						960
05	1809	0209	480	2.0	2.0	08-20	✓						960
06	1811	0211	480	2.0	2.0	08-15	✓						960
07	1815	0215	480	2.0	2.0	08-11	✓						960

COMMENTS: EE (O. BUN MCE) CAT CS250-80
 Lot 82088 08212
 EMS VFB 55-194588-00 - S015
 Roto Calib 12/8/08

Inspector: KOREY BURGESS
 Date: 12/11/08

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AIR MONITORING DATA SHEET

<p>PROJECT: <u>SI-NASM</u> ADDRESS: <u>6th Independence Ave, S.W.</u> CONTRACTOR: <u>N/A</u> DATE: <u>12.11.08</u> ACTIVITY: <u>Ambient Air Monitor</u> AMA JOB #: <u>09063</u></p>	<p>SAMPLE NO. 09063 1211</p>	<p>SAMPLE DATE 12/11/08</p>	<p>SAMPLE LOCATION NASM 3rd Floor ~4' N. OF 3512 ~2' UP FROM FLOOR ~24' W. OF 3515 ENTRANCE (DEPARTMENT'S CORRIDOR)</p>
<p>SAMPLED FOR: METHOD CASSETTE FILTER <input checked="" type="checkbox"/> Asbestos <input type="checkbox"/> 7400 <input type="checkbox"/> 104 <input type="checkbox"/> 25mm <input type="checkbox"/> 37mm <input type="checkbox"/> 40SE <input type="checkbox"/> 40 <input type="checkbox"/> Airborne Dust <input type="checkbox"/> Gas <input type="checkbox"/> Vapor <input type="checkbox"/> Other <input type="checkbox"/> Analytical Method <input type="checkbox"/> Ambient Temp.</p>	<p>09063 1211</p>	<p>12/11/08</p>	<p>NASM 3rd Floor ~15' S. OF 300M1 ENTRANCE (E. CORRIDOR) ~30' E. OF W. WALL ~4' UP FROM FLOOR</p>
<p>Protection Worn During Sampling: <input type="checkbox"/> Full Body Coveralls <input type="checkbox"/> Respirator-Air Purifying <input type="checkbox"/> Respirator-Power Air Purifying <input type="checkbox"/> Respirator-Supplied Air</p>	<p>09063 1211</p>	<p>12/11/08</p>	<p>NASM 3rd Floor, NE CORRIDOR ~4' S. OF 3751 ENTRANCE ~5.5' UP FROM FLOOR ~17' E. OF 3756 ENTRANCE (OFFICE AREA CORRIDOR)</p>
<p>PERSONAL AIR SAMPLING Employee Sampled _____ Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO Job Function _____ Description of Activity: _____ Signature of Employee: _____</p>	<p>09063 1211</p>	<p>12/11/08</p>	<p>FIELD BLANK</p>
<p>Employee Sampled _____ Social Security No. <u>N/A</u> Smoker: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NO Job Function _____ Description of Activity: _____ Signature of Employee: _____</p>	<p>09063 1211</p>	<p>12/11/08</p>	<p>SEALED BLANK</p>
AND NO OTHERS			

FIELD SAMPLE NO.	TEST PERIOD			FLOW RATE SETTING		INSTRUMENT SERIAL NO.	SAMPLE TYPE				SAMPLE LOCATION		
	START	STOP	TOTAL (MIN.)	START	STOP (LITERS/MIN.)		AMBIENT	AREA	PERSONAL	FINAL	IN WORK AREA	OUTSIDE WORK AREA	VOLUME
090631211	081818	0218	480	2.0	2.0	08-17	<input checked="" type="checkbox"/>						960
	091821	0221	480	2.0	2.0	08-18	<input checked="" type="checkbox"/>						960
	101824	0224	480	2.0	2.0	08-12	<input checked="" type="checkbox"/>						960
	111826	0226	480	2.0	2.0	08-16	<input checked="" type="checkbox"/>						960
	12	FIELD	BLANK										
	13	SEALED	BLANK										
AND NO OTHERS													

COMMENTS: EE (0.8 um MCE) CAT CS 250-80
 LOT 8208808212
 EMSVFB 55-194588-00-5015
 Note CALSO 12/8/08

Inspector: Korey Patterson
 Date: 12/11/08

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