PCM Analytics, Inc.
4512 Sheridan St.
Riverdale, MD 20737
301-209-2996

FAX COVER SHEET

FAX NUMBER TRANSMITTED TO: 202-708-6618

To: James Hodges, GSA Safety
CC: Interior Building Management, Interior Modernization Team
From: Brian K. Kasher
Client/Matter: Random TEM Air Sample Subset
Date: 11/3/02

DOCUMENTS	NUMBER OF PAGES*
TEM Analytical Results	8
Cover sheet	1

Attached you will find the Transmission Electron Microscopy (TEM) sample results for 30 randomly selected air samples within the Department of the Interior Building located at 1849 C Street, NW. Each of the 30 samples returned a result less than the building re-occupancy level for TEM analysis of seventy structures per millimeter squared (70 s/mm^2).

* COUNTING COVER SHEET. IF YOU DO NOT RECEIVE ALL PAGES, PLEASE TELEPHONE US IMMEDIATELY AT 301.209.2996

EMSL Analytical, Inc.

10768 Baltimore Avenue
Beltsville, MD 20705
Phone: (301) 937-5700 Fax: (301) 937-5701

Attn.: Brian Kasher
PCM Analytics
4512 Sheridan Street
Riverdale, MD 20737

Sunday, November 03, 2002

Ref Number: MD025725

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Project: Department of Interior Building Wide

Sample ID	Volume (liters)	Asbestos Type(s)	# STRUCTURES ≥ 0.5μ - < 5μ	# STRUCTURES ≥ 5μ	# STRUCTURES Non-Asbestos	Area Analyzed (mm²)	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
BG110103	1280.00	None Detected			0	0.0645	0.0047	<15.50	<0.0047
BG110104	1300.00	None Detected			0	0.0645	0.0046	<15.50	<0.0046
BG110109	1330.00	None Detected			0	0.0645	0.0045	<15.50	<0.0045
BG110119	1530.00	None Detected			0	0.0516	0.0049	<19.38	<0.0049
BG110127	1700.00	None Detected			0	0.0516	0.0044	<19.38	<0.0044
BG110145	1400.00	None Detected			0	0.0645	0.0043	<15.50	<0.0043

Russell Meyer
Analyst

Approved Signatory

Disclaimers: This laboratory is not responsible for data reported in structures/cc, which is dependent on volume collected by non-laboratory personnel. This laboratory is only responsible for data reported in structures/mm². This report may not be reproduced, except in full, without written approval by EMSL. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. This report relates only to the samples reported above. Quality control data (including 95% confidence limits and laboratory and analyst accuracy and precision) is available upon request.

Accredited for NVLAP PLM/TEM #200292, WV Lic # LT000053, VA Lic #3333-000266

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Project: Department of Interior Building Wide

Sample ID	Volume (liters)	Asbestos Type(s)	# STRUCTURES ≥ 0.5μ - < 5μ	# STRUCTURES ≥ 5μ	# STRUCTURES Non-Asbestos	Area Analyzed (mm²)	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
BG110152	1360.00	Chrysotile	2		0	0.0645	0.0044	31.01	0.0088
BG110157	1520.00	None Detected			0	0.0516	0.0049	<19.38	<0.0049
BG110161	1180.00	Chrysotile	2		0	0.0774	0.0042	25.84	0.0084
BG110177	1780.00	None Detected			0	0.0516	0.0042	<19.38	<0.0042
BG110184	1790.00	None Detected			0	0.0516	0.0042	<19.38	<0.0042
BG110192	2250.00	None Detected			0	0.0516	0.0033	<19.38	<0.0033

Russell Meyer
Analyst

Approved Signatory

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Project: Department of Interior Building Wide

Sample ID	Volume (liters)	Asbestos Type(s)	# STRUCTURES ≥ 0.5µ - < 5µ	# STRUCTURES ≥ 5µ	# STRUCTURES Non-Asbestos	Area Analyzed (mm²)	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
BG110195	1270.00	None Detected			0	0.0645	0.0047	<15.50	<0.0047
BG1101106	1380.00	None Detected			0	0.0645	0.0043	<15.50	<0.0043
BG1101125	1240.00	None Detected			0	0.0645	0.0048	<15.50	<0.0048
BG1101127	1390.00	None Detected			0	0.0645	0.0043	<15.50	<0.0043
BG1101133	1550.00	None Detected			0	0.0516	0.0048	<19.38	<0.0048
BG1101135	1520.00	None Detected			0	0.0516	0.0049	<19.38	<0.0049

Russell Moyer
Analyst

Approved Signatory

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Accredited for NVLAP, PLM/TEM #200361, WV Lic # LT00051, VA Lic #0313-000205

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Sunday, November 03, 2002

Ref Number: MD025725

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Project: Department of Interior Building Wide

Sample ID	Volume (liters)	Asbestos Type(s)	# STRUCTURES ≥ 0.5µ - < 5µ	# STRUCTURES ≥ 5µ	# STRUCTURES Non-Asbestos	Area Analyzed (mm²)	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
BG1101138	1320.00	None Detected			0	0.0645	0.0045	<15.50	<0.0045
BG1101145	1500.00	None Detected			0	0.0516	0.0050	<19.38	<0.0050
BG1101147	1550.00	None Detected			0	0.0516	0.0048	<19.38	<0.0048
BG1101154	1350.00	None Detected			0	0.0645	0.0044	<15.50	<0.0044
BG1101160	1400.00	None Detected			0	0.0645	0.0043	<15.50	<0.0043
BG1101170	1440.00	None Detected			0	0.0645	0.0041	<15.50	<0.0041

Russell Meyer
Analyst

Approved Signatory

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) Performed by EPA 40 CFR Part 763 Final Rule (AHERA)

Project: Department of Interior Building Wide

Sample ID	Volume (liters)	Asbestos Type(s)	# STRUCTURES ≥ 0.5μ - < 5μ	# STRUCTURES ≥ 5μ	# STRUCTURES Non-Asbestos	Area Analyzed (mm²)	Analytical Sensitivity (S/cc)	Asbestos Concentration (S/mm²)	Asbestos Concentration (S/cc)
BG1101181	1480.00	None Detected			0	0.0645	0.0040	<15.50	<0.0040
BG1101202	1950.00	None Detected			0	0.0516	0.0038	<19.38	<0.0038
BG1101205	1700.00	None Detected			0	0.0516	0.0044	<19.38	<0.0044
BG1101206	1700.00	None Detected			0	0.0516	0.0044	<19.38	<0.0044
BG1101140	1800.00	None Detected			0	0.0516	0.0041	<19.38	<0.0041
BG1101172	1025.00	None Detected			0	0.0774	0.0049	<12.92	<0.0049

Russell Meyer
Analyst

Approved Signatory

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Accredited for NVLAP, PLM/TEM #200293, NVLAP Lic. #1 TX00063, VA Lic. #3333-000205

PCM Analytics, Inc.

Working for Healthy Environments

(301)209-2996 (301) 209-2997 (FAX)

LABORATORY SAMPLE CHAIN-OF-CUSTODY

PROJECT NAME: Department Of Interior LOCATION: Building Nine

COLLECTED BY: Brian Kasher Date: 11/02/02

RECEIVED BY: Date:

TURN AROUND	MATRIX	ASBESTOS	LEAD	OTHER
( ) Same Day	(X) Air	( ) PLM (EPA600)	( ) Air – NIOSH 7082	( ) Mold
(X) 6 Hours	( ) Bulk	( ) Point Count	( ) Wipe – SW846-7420	( ) Bacteria
( ) 24 Hour	( ) Paint Chips	( ) PCM (NIOSH 7400)	( ) Soil – SW846-7420	( ) Polychlorinated biphenyls
( ) 48 Hour	( ) Soil	(X) TEM AHERA	( ) Chips – SW846-7420	( ) Dust
( ) 72 Hour	( ) Waste	( )	( ) Waste TCLP – SW846-1311/7420	( ) Organic Hydrocarbons
( ) 10 Days	( ) Wipe	( ) Other:	( ) Drinking Water – EPA239.2	( ) Other:

Date	Sample Number	Time on-Time off	Flow Rate	Total Volume	Sample Identification	Comment
	BG110103	9:11-11:19	10	1280	1415	
	BG110104	9:14-11:24	10	1300	1327	
	BG110109	7:52-10:05	10	1330	4246	
	BG110119	4:42-7:15	10	1530	P1009	
	BG110127	5:11-8:01	10	1700	4443	
	BG110145	11:45-2:05	10	1400	4558	
	BG110152	9:10-12:28	10	1360	B_245	
	BG110157	11:27-1:59	10	1520	6623	
	BG110161	11:40-1:38	10	1180	4513	
	BG110177	11:50-2:49	10	1790	3355	
	BG110184	12:24-3:23	10	1790	6442	
	BG110192	2:38-6:23	10	2250	1452	
	BG110195	2:52-4:58	10	1270	3442	
	BG1101108	3:45-6:03	10	1380	7254	

Received at Laboratory by: DATE: 11-3-02 0730

4512 Sheridan Street, Riverdale, Maryland 20737

initials+month/day+sample number

PCM Analytics, Inc.

Working for Healthy Environments

(301)209-2996 (301) 209-2997 (FAX)

LABORATORY SAMPLE CHAIN-OF-CUSTODY

PROJECT NAME: Department Of Interior LOCATION: Building 18

COLLECTED BY: Brian Kasher Date: 11/02/02

RECEIVED BY: Date:

TURN AROUND	MATRIX	ASBESTOS	LEAD	OTHER
( ) Same Day	(X) Air	( ) PLM (EPA600)	( ) Air – NIOSH 7082	( ) Mold
(X) 6 Hours	( ) Bulk	( ) Point Count	( ) Wipe – SW846-7420	( ) Bacteria
( ) 24 Hour	( ) Paint Chips	( ) PCM (NIOSH 7400)	( ) Soil – SW846-7420	( ) Polychlorinated biphenyls
( ) 48 Hour	( ) Soil	(X) TEM AHERA	( ) Chips – SW846-7420	( ) Dust
( ) 72 Hour	( ) Waste	( )	( ) Waste TCLP – SW846-1311/7420	( ) Organic Hydrocarbons
( ) 10 Days	( ) Wipe	( ) Other:	( ) Drinking Water - EPA239.2	( ) Other:

Date	Sample Number	Time on/ Time Off	Flow Rate	Total Volume	Sample Identification	Comment
	Bg1101125	6:48-8:52	10	1240	6557	
	Bg1101127	6:01-8:20	10	1390	4343	
	Bg1101133	7:11-9:46	10	1550	5319	
	Bg1101135	7:08-9:40	10	1520	5444	
	Bg1101138	6:58-8:20	10	1320	5600	
	Bg1101145	2:00-4:30	10	1500	1070A	
	Bg1101147	2:05-4:40	10	1550	1400 Main Coorridor	
	Bg1101154	2:31-4:46	10	1350	2061	
	Bg1101160	2:50-5:10	10	1400	3058	
	Bg1101170	10:50-1:14	10	1440	4040C	
	Bg1101181	11:14-1:42	10	1480	3127	
	Bg1101202	11:50-3:05	10	1950	Library Stack 6	
	Bg1101205	3:05-5:55	10	1700	Museum	
	Bg1101206	3:06 – 5:56	10	1700	Museum	

Received at Laboratory by: DATE: 11-3-02 0730

4512 Sheridan Street, Riverdale, Maryland 20737

Initials+month/day+sample number

EMSL ANALYTICAL CHAIN OF CUSTODY ASBESTOS

EMSL Representative:
Your Company Name: PCM Analytics, Inc.
Street:
Box #:
City/State: Zip:
Verbal Results to:
Telephone #:
Project Name/Number: Interim Random TEM Upgrade

EMSL-Bill to:
Street:
Box #:
City/State: Zip:
Fax Results to:
Fax #:
Purchase Order #

MATRIX

- [x] Air
- [ ] Floor Tile
- [ ] Soil
- [ ] Wipe
- [ ] Bulk
- [ ] Drinking Water
- [ ] Dust
- [ ] Wastewater

TURNAROUND TIME

- [x] 6 Hours
- [ ] 3 Days
- [ ] 3 Hour**
- [ ] 5 Days
- [ ] 24 Hours
- [ ] 6-10 Days
- [ ] 48 Hours
- [ ] Same Day***

**Must call Lab for approval

*** 10:00AM delivery results by Mid-night or earlier

PCM
- [ ] NIOSH 7400
- [ ] OSHA
- [ ] Other:

PLM BULK (regular bulk)
- [ ] EPA 600
- [ ] NOB
- [ ] Point Count
- [ ] Other:

TEM BULK
- [ ] Drop Mount (Qualitative)
- [ ] Chatfield
- [ ] Chatfield / SEM QC
- [ ] Conventional (Quantitative)
- [ ] EMSL Method
- [ ] NOB
- [ ] NOB / SEM QC
- [ ] Micro Vac - Quantitative
- [ ] Micro Vac - Qualitative

TEM WATER
- [ ] Wastewater
- [ ] Drinking Water EPA 100.1
- [ ] Water - NY Wastewater
- [ ] Water-NY Drinking Water

TEM AIR
- [ ] AHERA
- [ ] NIOSH 7402
- [ ] Level I
- [ ] Level II

SEM
- [ ] Qualitative
- [ ] Quantitative

TEM WIPE
- [ ] Quantitative
- [ ] Qualitative

XRD
- [ ] Asbestos
- [ ] Silica

- [ ] OTHER
- [ ] COMMENTS

Client Sample # (s): Random Subset - TEM Upgrade
Total Samples: 30 + 3 Blank
Relinquished: Date: 11-3-02 Time: 7:15 Am
Received: Date: 11-3-02 Time: 0730
Received: Date: Time:

SAMPLE DATE	SAMPLE NUMBER	LOCATION	VOLUME (FAB)
		See Attached PCM Forms For Additional Samples	
	BG110140	6614	1800
	BG110172	Outside Air @ Loading Dock	1025
	Blank 1		
	Blank 2		
	Blank 3		