

0069737

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06-T-1250 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 333 Bldg

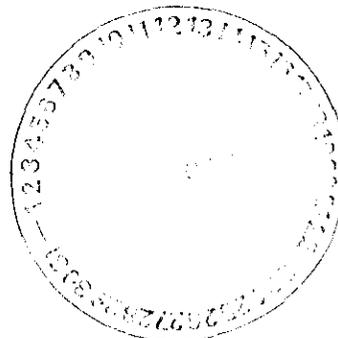
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JUN 01 2006
EDMC



4/10/06
Page 1 of 3

SUBMITTED TO:

Denise Pitts
Washington Closure Hanford
3070 George Washington Way, MSIN L1-07
Richland, WA 99354



REFERENCE DATA:

Client Sample No.:	J11DW7 through J11DY6
P.O. No.:	Not Available
Sample Location:	300 Area / 333 Bldg.
Sample Type:	MCE Air Filters
Method Reference:	Airborne Asbestos by TEM NIOSH 7402
DCL Set ID No.:	06-T-1250
DCL Sample ID No.:	06-07569 through 06-07574
Date Received:	3/24/2006
Preparation Date:	3/28/2006
	Analysis Date: 4/10/2006

The samples indicated on the following data sheet(s) were analyzed by Transmission Electron Microscopy (TEM) for airborne asbestos and other fibers using the NIOSH Method 7402 protocol. The TEM grid mounts were scanned at low magnification (135 X) for general loading and integrity of the carbon film. Suitable openings were then analyzed for fibers at a higher magnification (5,600 X). Individual fiber measurements, selected area electron diffraction (SAED) patterns, and energy dispersive X-ray analysis (EDXA) spectra were obtained at approximately 10,000 X. Analysis was performed on a Philips CM-12 TEM with EDAX Model PV9800 providing energy dispersive X-ray analysis (EDXA) capabilities.

Results apply only to portions of samples analyzed and are tabulated on the following data sheet(s). Representative EDXA spectra and selected area electron diffraction (SAED) measurements of asbestos types detected are included and are referenced to the fiber identification numbers listed on the count sheets. The analytical sensitivity (AS) for this method has been determined to be one confirmed asbestos fiber in the total number of grid openings analyzed. Concentrations in fibers/mL are based on air volumes or times and flow rates provided by the client.

Alex Bell
Analyst

Anna Marie Ristich
Section Manager

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NOVATO, CALIFORNIA 94945
800 280-8071, FAX 415 893-9469

DataChem Laboratories TEM NIOSH 7402 Test Report

DCL Sample Set ID: 06-T-1250
Client: Washington Closure Hanford
Sample Location: 300 Area / 333 Bldg.

SAMPLING DATA

Filter Type: MCE, 0.8 μm
Collection Area: 385 mm^2

ANALYSIS DATA

Magnification: 9,300 X
Calibration Constant: 1 cm = 1.07 μm
EDXA Resolution: 165.7 eV
Accelerating Voltage: 100 keV
Camera Constant: 29.6 mm-Å

SAMPLE IDENTIFICATION			
Client ID:	**J11FC7	J11DY5	J11DY6
DCL ID:	06-07572	06-07573	06-07574
Volume (L):	76.00	NA	NA
No. Openings Analyzed:	7	40	40
Avg. Grid Opening Area:	0.0099	0.0099	0.0099
AS: Fibers/ mm^2 :	14.43	2.53	2.53
AS: Fibers/mL:	0.0731	NA	NA
Asbestos Fibers			
Chrysotile:	3	0	0
Amosite:	22.5	0	0
Crocidolite:	0	0	0
Actinolite-Tremolite:	0	0	0
Anthophyllite:	0	0	0
Total Asbestos			
Count:	26	0	0
Fibers/ mm^2 :	367.97	<LOD	<LOD
Fibers/mL:	1.8640	NA	NA
Total Non-Asbestos Fibers			
Count:	0	0	0
Fibers/ mm^2 :	<LOD	<LOD	<LOD
Fibers/mL:	<LOD	NA	NA
Types:			

ND = None Detected

AS = Analytical Sensitivity

****Comments:** Analysis terminated with opening containing 25th asbestos structure per client request

Alex Bell
Analyst



Anna Marie Ristich
Section Manager

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DataChem Laboratories TEM NIOSH 7402 Test Report

DCL Sample Set ID: 06-T-1250
Client: Washington Closure Hanford
Sample Location: 300 Area / 333 Bldg.

SAMPLING DATA

Filter Type: MCE, 0.8 µm
Collection Area: 385 mm²

ANALYSIS DATA

Magnification: 9,300 X
Calibration Constant: 1 cm = 1.07 µm
EDXA Resolution: 165.7 eV
Accelerating Voltage: 100 keV
Camera Constant: 29.6 mm-Å

SAMPLE IDENTIFICATION			
Client ID:	**J11DW7	*J11FC6	**J11DW8
DCL ID:	06-07569	06-07570	06-07571
Volume (L):	378.00		370.00
No. Openings Analyzed:	40	NOT	7
Avg. Grid Opening Area:	0.0099	ANALYZED	0.0099
AS: Fibers/mm ² :	2.53		14.43
AS: Fibers/mL:	0.0026		0.0150
Asbestos Fibers			
Chrysotile:	1		2
Amosite:	17.5		27
Crocidolite:	0		0
Actinolite-Tremolite:	0		0
Anthophyllite:	0		0
Total Asbestos			
Count:	19		29
Fibers/mm ² :	46.72		418.47
Fibers/mL:	0.0476		0.4354
Total Non-Asbestos Fibers			
Count:	0		1
Fibers/mm ² :	<LOD		14.43
Fibers/mL:	<LOD		0.0150
Types:			Mg-Al-Ca-Si

ND = None Detected

AS = Analytical Sensitivity

**NOTE: Sample J11FC6 was not prepped or analyzed due to collapsed filter in cassette.*

***Comments: Analysis terminated with opening containing 25th asbestos structure per client request*

Alex Bell
Analyst



Anna Marie Ristich
Section Manager

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Enter on line below the first Sample Number from Page One:

J11DW7

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Received By/Sign: <i>Carla Hughes/Carla Hughes</i>	DATE / TIME: <i>3-22-06/1630</i>	Received By/Sign: <i>Locked CABINET 300 Area, 3746 Bldg, Rm. 16</i>	DATE / TIME: <i>3-22-06/1630</i>
Received By/Sign: <i>[Signature]</i> <i>Yetta D. JONES</i>	DATE / TIME: <i>3-23-06 1415</i>	Received By/Sign: <i>T.R. Edmondson J.R. Edmondson</i>	DATE / TIME: <i>3-23-06 1415</i>
Received By/Sign: <i>T.R. Edmondson</i> <i>WCH</i>	DATE / TIME: <i>3-23-06 1500</i>	Received By/Sign: <i>FED EX</i>	DATE / TIME:
Received By/Sign: <i>Fed EX</i>	DATE / TIME:	Received By/Sign: <i>[Signature]</i>	DATE / TIME: <i>3/24/06 09:50</i>
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
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Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Received By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
LABORATORY SECTION	Received By: <i>[Signature]</i>	Title: <i>RSO</i>	DATE / TIME: <i>3/24/06 09:50</i>

REVIEWED BY:

DATE:

PRINT/SIGN NAME