

0069461

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0784-01 SAF-RC-001

Rad only Chem only Rad & Chem

Complete Partial

300 Area 333 Bldg

RECEIVED
APR 28 2006
EDMC

Report Identification Number: 06I-0784-01
 Subcontract Number: 0000X-BO-G0058-B-Mod#4
 Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
 Laboratory Identification Number: DCHM
 SAF#: RC-001 /R33300 J451
 Payroll#: 0636267



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
16 Feb 2006	J11585	06I06489	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11586	06I06490	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11587	06I06491	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11588	06I06492	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11589	06I06493	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11594	06I06494	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11583	06I06495	NMAM 7300M	G061Q035	MCE
16 Feb 2006	J11584	06I06496	NMAM 7300M	G061Q035	MCE

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Name: Lisa M. Reid
 Title: Chemist
 Date: February 24, 2006

Report Identification Number: 06I-0784-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 /R33300 J451
Payroll#: 0636267

General Set Information: There are 8 samples in set 06I-0784-01, 6 samples in set 06I-0785-01 and 6 samples in set 06I-0787-02 which were analyzed for beryllium, lead and cadmium on MCE filter. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 10 mL of 1:1 (v/v) nitric acid. Samples were digested in a hot block set at 110°C for 40 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Limit of Quantitation (LOQ) of 0.02 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Limit of Quantitation (LOQ) of 0.08 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Limit of Quantitation (LOQ) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in the media blank sample above the Contract Required Detection Limit (CRDL).

Dilution(s): NA.

Laboratory Control Sample and Duplicate Analysis: Two Laboratory Control Samples (LCSs) and two Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS result was within the control limit of +/- 20%. The Relative Percent Differences (RPD) between the LCSs and the LCSDs were within the control limit of 20%.

Replicate Analysis: Two samples were replicated with this analysis run. The RPD between the sample and the replicate was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation

= $\frac{\text{Final Volume of Digestate (L)}}{\text{Sample}}$

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None.

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 Payroll#: 0636267

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium $\mu\text{g}/\text{sample}$		Beryllium $\mu\text{g}/\text{m}^3$		Air Volume L	
J11585	06I06489	23 Feb 2006	<0.02	U	<0.095	U	210.	
J11586	06I06490	23 Feb 2006	<0.02	U	<0.095	U	211.	
J11587	06I06491	23 Feb 2006	<0.02	U	<0.038	U	528.	
J11588	06I06492	23 Feb 2006	<0.02	U	<0.20	U	98.0	
J11589	06I06493	23 Feb 2006	<0.02	U	<0.19	U	108.	
J11594	06I06494	23 Feb 2006	<0.02	U	<0.18	U	113.	
J11583	06I06495	23 Feb 2006	<0.02	U	**		0.00	
J11584	06I06496	23 Feb 2006	<0.02	U	**		0.00	
Limit of Detection (LOD)			0.02					
Required Detection Limit (RDL)								

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Lead $\mu\text{g}/\text{sample}$		Lead $\mu\text{g}/\text{m}^3$		Cadmium $\mu\text{g}/\text{sample}$	
J11585	06I06489	23 Feb 2006	<2.	U	<9.5	U	<0.08	U
J11586	06I06490	23 Feb 2006	<2.	U	<9.5	U	<0.08	U
J11587	06I06491	23 Feb 2006	<2.	U	<3.8	U	<0.08	U
J11588	06I06492	23 Feb 2006	<2.	U	<20.	U	<0.08	U
J11589	06I06493	23 Feb 2006	<2.	U	<19.	U	<0.08	U
J11594	06I06494	23 Feb 2006	<2.	U	<18.	U	<0.08	U
J11583	06I06495	23 Feb 2006	<2.	U	**		<0.08	U
J11584	06I06496	23 Feb 2006	<2.	U	**		<0.08	U
Limit of Detection (LOD)			2.				0.08	
Required Detection Limit (RDL)								

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Cadmium $\mu\text{g}/\text{m}^3$	
J11585	06I06489	23 Feb 2006	<0.38	U
J11586	06I06490	23 Feb 2006	<0.38	U

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Cadmium $\mu\text{g}/\text{m}^3$	
J11587	06I06491	23 Feb 2006	<0.15	U
J11588	06I06492	23 Feb 2006	<0.82	U
J11589	06I06493	23 Feb 2006	<0.74	U
J11594	06I06494	23 Feb 2006	<0.71	U
J11583	06I06495	23 Feb 2006	**	
J11584	06I06496	23 Feb 2006	**	
Limit of Detection (LOD)				
Required Detection Limit (RDL)				

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.

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 Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
 Laboratory Identification Number: DCHM
 SAF: RC-001 /R33300 J451
 Payroll#: 0636267

Batch ID: G061Q035

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241741-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241741-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
BL-241741-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
QC-241741-1	LCS	Beryllium	µg/sample	11.0	NA	10.0	110.	NA
QC-241741-1	LCS	Lead	µg/sample	109.	NA	100.	109.	NA
QC-241741-1	LCS	Cadmium	µg/sample	33.3	NA	30.0	111.	NA
QD-241741-1	LCSD	Beryllium	µg/sample	11.1	11.0	10.0	111.	0.791
QD-241741-1	LCSD	Lead	µg/sample	109.	109.	100.	109.	0.505
QD-241741-1	LCSD	Cadmium	µg/sample	33.1	33.3	30.0	110.	0.602
BL-241741-2	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241741-2	MB	Lead	µg/sample	ND	NA	NA	NA	NA
BL-241741-2	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
QC-241741-2	LCS	Beryllium	µg/sample	10.6	NA	10.0	106.	NA
QC-241741-2	LCS	Lead	µg/sample	106.	NA	100.	106.	NA
QC-241741-2	LCS	Cadmium	µg/sample	32.3	NA	30.0	108.	NA
QD-241741-2	LCSD	Beryllium	µg/sample	10.9	10.6	10.0	109.	3.43
QD-241741-2	LCSD	Lead	µg/sample	108.	106.	100.	108.	2.50
QD-241741-2	LCSD	Cadmium	µg/sample	32.9	32.3	30.0	110.	1.76

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0



QC Summary Page

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MS, MSD Percent Rec. = $((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

LCS, LCSD Relative Percent Diff. = $((|\text{LCS} - \text{LCSD}|) / ((\text{LCS} + \text{LCSD})/2.0)) * 100.$

MS, MSD Relative Percent Diff. = $((|\text{MS} - \text{MSD}|) / ((\text{MS} + \text{MSD})/2.0)) * 100.$

LD Relative Percent Diff. = $((|\text{Parent} - \text{LD}|) / ((\text{Parent} + \text{LD})/2.0)) * 100$

061-0784-01

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST													
Collector: John Peoples		Company Contact: Denise A. Pitts and Henry W. Raley		Telephone No. 531-1729		Project Coordinator: Jean H. Kessner		Date Turnaround: 24hr					
Payroll #: 0636267		Sampling Location: 300 Area		SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R333005451		SAF No. RC-001							
Type of Sample: Be, Pb, Cd		383 building		ANALYSIS METHOD (SPECIFIC): NIOSH 3700		Method of Shipments: Federal Express							
Shipped To: Denver Chem		Wipe Sample Media: <input type="checkbox"/> Yes <input type="checkbox"/> No				Bill of Lading/Air Bill No. 8544 9435 4840							
Sault Valley		Other: <input type="checkbox"/>											
POSSIBLE SAMPLE HAZARDS/REMARKS		PRESERVATION (i.e., cooling required, etc.)											
Special Handling and/or Storage		MATRIX: A - AIR, W1 - WIPE, X - OTHER											
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (Liters or Area - sq')	SAMPLE ANALYSIS									
				Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne		
511585	A	02-16-06	240	Personal	X	X	X	No	No	No	No	X	No
511586			241	Personal	X	X	X	No	No	No	No	X	No
511587			528	Personal	X	X	X	No	No	No	No	X	No
511588			98	Personal	X	X	X	No	No	No	No	X	No
511589			108	Personal	X	X	X	No	No	No	No	X	No
511594			113	Personal	X	X	X	No	No	No	No	X	No
511583			NA	Blank	X	X	X	No	No	No	No	X	No
511584	A	02-16-06	NA	Blank	X	X	X	No	No	No	No	X	No
					X	X	X	No	No	No	No	X	No

Page ___ of ___

WCH-SH-302 (08/29/2005)

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

51585

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	
Signature/Print Name / USE MILITARY TIME	DATE / TIME
<i>John Douglas</i>	02-16-06 / 1630
<i>Locked cabinet bldg 3746 Bldg #6</i>	
<i>Locked Cabinet in Room 16 Building 3746</i>	02-16-06 / 1630
<i>Garth Nash - Bobbie Mathon</i>	02-22-06 / 1430
<i>with</i>	
<i>Rz Steffler R. Steffler</i>	2-22-06 / 1600
<i>Fed Ex</i>	
<i>Julie Warraton</i>	2/23/06 1000
<i>Mel's 31W</i>	
<i>PAULINE</i>	
<i>JP</i>	
<i>JP</i>	
<i>SP</i>	
<i>SP</i>	
<i>JP</i>	
<i>Julie Warraton</i>	2/23/06 1000

REVIEWED BY:

DATE:

PRINT SIGN NAME

WCH-SH-202 (08/29/2005)

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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: <i>John Peoples</i>	Company Contact Denise A. Pitts and Henry W. Ruby	Telephone No. 531-1229	Project Coordinator Joan H. Kessner	Data Turnaround
Payroll #: <i>0636267</i>	Sampling Location <i>300 Area 333 building</i>	SPECIAL INSTRUCTIONS All relevant COAs must be provided: <i>R333005451</i>		SAF No. RC-001
Type of Sample: <i>Be, Pb, Cd</i>	Wipe Sample Media: Ghost <input type="checkbox"/> Yes <input type="checkbox"/> No Other _____	ANALYSIS METHOD (SPECIFIC): <i>Niosh 3700</i>		Method of Shipment <i>Federal Express</i>
Shipped To: <i>Dexter Chem South Lake</i>			Bill of Lading/Air Bill No. <i>8544 9435 4840</i>	

POSSIBLE SAMPLE HAZARD/REMARKS	MATRIX A - AIR WI - WIPE X - OTHER	Preservation (i.e., cooling required, etc.)	No							
Special Handling and/or Storage										

SAMPLE ANALYSIS					Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (cm ²)	Comments								
J11585	A	02-16-06	210	Personal		X	X					X
J11586			211	Personal		X	X					X
J11587			528	Personal		X	X					X
J11588			98	Personal		X	X					X
J11589			108	Personal		X	X					X
J11594			113	Personal		X	X					X
J11583			NA	Blank		X	X					X
J11584	A	02-16-06	NA	Blank		X	X					X

FIELD SAMPLE COPY

COPY

JP
02-16-06

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

51585

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
<i>John Decker</i>	02-16-06 / 1630	<i>locked cabinet in Rear Le Building 3746</i>	02-16-06 / 1630
<i>locked cabinet bldg 3746</i>	DATE / TIME		
<i>Gate 7366 Gate Marker</i>	02-02-06 / 1430	<i>R2 Staffin R2 Staffin</i>	2-22-06 / 1430
	DATE / TIME		
<i>R2 Staffin R2 Staffin</i>	2-22-06 / 1600	<i>Fed Ex</i>	
	DATE / TIME		
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
Requested By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY:

PRINT/SIGN NAME

DATE: