

SAF-RC-001 Industrial Hygiene Sampling FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0486-01 SAF-RC-001

Rad only Chem only Rad & Chem

X Complete Partial

300 Area 304 Bldg

RECEIVED
APR 24 2006

EDMC



Cover Page

Report Identification Number: 06I-0486-01
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 / R30400 J451
Payroll#: 73513



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
31 Jan 2006	J11306	06I03846	NMAM 7300M	G061601L	G WIPE
31 Jan 2006	J11309	06I03847	NMAM 7300M	G061601L	G WIPE
31 Jan 2006	J11305	06I03848	NMAM 7300M	G061601L	G WIPE
31 Jan 2006	J11307	06I03849	NMAM 7300M	G061601L	G WIPE

I certify that this electronic image and all hardcopies produced from this image accurately represent the data and are in compliance with the contract specific requirements, both technically and for completeness, other than the conditions detailed above or in the sample data package narrative. Release, by submission through email, the data contained in this electronic image and the computer-readable EDD (as applicable), has been authorized by the laboratory Manager or the Manager's designee.

Name: Joanna C. Sanchez
Title: Chemist
Date: February 10, 2006



Case Narrative Page

Page 2 of 7

Report Identification Number: 06I-0486-01
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 / R30400 J451
Payroll#: 73513

General Set Information: There are 4 samples in set 06I-0482-01, 4 samples in set 06I-0483-01, 4 samples in set 06I-0484-01, 4 samples in set 06I-0485-01, 4 samples in set 06I-0486-01, 4 samples in set 06I-0487-01, 11 samples in set 06I-0513-01 and 22 samples in set 06I-0514-01 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. 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 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 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 Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) 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 Contract Required Detection Limits (CRDL) of 2. ug/sample.

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

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: Three Laboratory Control Samples (LCSs) and three Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCSs and the LCSDs were within the control limit of 20%.

Replicate Analysis: Six samples in this batch were replicated. The RPD between the samples and the replicates 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:

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

Where:

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

B = Concentration factor from sample preparation

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

Sample

C = Dilution performed at time of analysis

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

Miscellaneous Comments: None



Report Page

Report Identification Number: 06I-0486-01
 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 / R30400 J451
 Payroll#: 73513

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J11306	06I03846	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
J11309	06I03847	08 Feb 2006	<0.01	U	8.1		3.5	
J11305	06I03848	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
J11307	06I03849	08 Feb 2006	<0.01	U	<0.08	U	<2.	U
Limit of Detection (LOD)			0.01		0.08		2.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.
 J - Parameter between LOD and RDL.



QC Summary Page

Report Identification Number: 06I-0486-01
 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 / R30400 J451
 Payroll#: 73513

Batch ID: G061601L

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241024-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241024-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-241024-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-241024-1	LCS	Beryllium	µg/sample	11.3	NA	10.0	113.	NA
QC-241024-1	LCS	Cadmium	µg/sample	33.5	NA	30.0	112.	NA
QC-241024-1	LCS	Lead	µg/sample	108.	NA	100.	108.	NA
QD-241024-1	LCSD	Beryllium	µg/sample	11.2	11.3	10.0	112.	0.312
QD-241024-1	LCSD	Cadmium	µg/sample	33.2	33.5	30.0	111.	0.699
QD-241024-1	LCSD	Lead	µg/sample	106.	108.	100.	106.	1.81

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

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

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

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

711306

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	
SIGN/PRINT NAMES / USE MILITARY TIME	DATE/TIME
<p>Received By: <i>[Signature]</i></p> <p>37th Building Rm 14 locked cabinet 1-31-06 1500</p>	<p>DATE/TIME: 1-31-06 1500</p>
<p>Received By: <i>RZ Steffler R.J. Steffler</i></p> <p>2-6-06 1500</p>	<p>DATE/TIME: 2-6-06 1500</p>
<p>Received By: <i>Fed Ex</i></p>	<p>DATE/TIME: <i>Fed Ex</i></p>
<p>Received By: <i>Michael Edwards</i></p>	<p>DATE/TIME: <i>7:00 PM</i></p>
<p>Received By: <i>[Signature]</i></p>	<p>DATE/TIME: <i>[Signature]</i></p>
<p>LABORATORY SECTION</p>	<p>DATE/TIME</p>
<p>Received By: <i>Michael Edwards</i></p>	<p>DATE/TIME: <i>7:00 PM</i></p>

REVIEWED BY: _____ DATE: _____

Page 2 of 2

WCH-SH-202 (06/29/2005)



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: <i>Yetta D. Jones</i>	Company Contact <i>Denise A. Pitts and Henry W. Ruby</i>	Telephone No. <i>531-1229</i>	Project Coordinator <i>Joan H. Kessner</i>	Data Turnaround
Payroll #: <i>73513</i>	Sampling Location <i>300 Area</i>	SPECIAL INSTRUCTIONS All relevant COAs must be provided: <i>R30400 J451</i> ANALYSIS METHOD (SPECIFIC): <i>NIOSH 7300</i>	SAF No. <i>RC-001</i>	<i>3 day</i>
Type of Sample: <i>WIPES</i>	<i>304 Building</i>		Method of Shipment <i>FED EX</i>	
Shipped To: <i>Data Chem Salt Lake City</i>	Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____	Bill of Lading/Air Bill No. <i>8544 9435 4737</i>		

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

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								
<i>J11306</i>	<i>w1</i>	<i>1-31-06</i>	<i>NA</i>	<i>Large Area belt</i>	<i>Ydj</i>			<i>X</i>	<i>na</i>	<i>X</i>	<i>X</i>	
<i>J11309</i>	<i>w1</i>	<i>1-31-06</i>	<i>NA</i>	<i>Large Area tools</i>				<i>X</i>	<i>na</i>	<i>X</i>	<i>X</i>	<i>1-31-06</i>
<i>J11305</i>	<i>w1</i>	<i>1-31-06</i>	<i>NA</i>	<i>Blank</i>		<i>1-31-06</i>			<i>X</i>	<i>na</i>	<i>X</i>	<i>X</i>
<i>J11307</i>	<i>w1</i>	<i>1-31-06</i>	<i>NA</i>	<i>Blank</i>				<i>X</i>	<i>na</i>	<i>X</i>	<i>X</i>	
				<i>Ydj</i>								
				<i>1-31-06</i>								

COPY

FIELD SAMPLE COPY

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

J11306

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
<i>[Signature]</i> Yelad Jones	1-31-06 1500	374b Building Rm 14, locked cabinet	1-31-06 1500
locked cabinet 3746 bldg Rm #14			
<i>[Signature]</i> Goldie Mathan	02-06-06 / 1500	RZ Steffler <i>[Signature]</i> R.Z. Steffler	2-6-06 / 1500
	WCH		
RZ Steffler <i>[Signature]</i> R.Z. Steffler	2-6-06 / 1600	Fed Ex	
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
Relinquished By/Stored:	DATE / TIME:	Received By/Stored:	DATE / TIME:
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME