

069357

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0646-01 SAF-RC-001

Rad only Chem only Rad & Chem

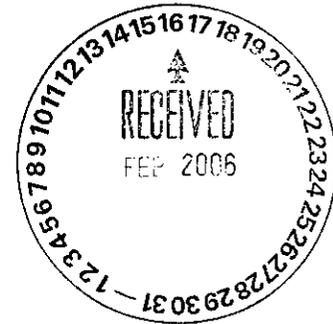
Complete Partial

300 Area 303M Bldg

RECEIVED
APR 24 2006
EDMC



Cover Page



Report Identification Number: 06I-0646-01
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 / R303MO J451
Payroll#: 73338

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
13 Feb 2006	J11523	06I05130	NMAM 7300M	G061G01X	MCE
13 Feb 2006	J11524	06I05131	NMAM 7300M	G061G01X	MCE
13 Feb 2006	J11525	06I05132	NMAM 7300M	G061G01X	MCE

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: Lisa M. Reid
Title: Chemist
Date: February 16, 2006



Case Narrative Page

Page 2 of 7

Report Identification Number: 06I-0646-01
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 / R303MO J451
Payroll#: 73338

General Set Information: There are 3 samples in set 06I-0646-01, 7 samples in set 05I-0648-01, 6 samples in set 06I-0649-02 and 6 samples in set 06I-0622-01 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 1. 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 LCS and the LCSD was 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.



Report Page

Report Identification Number: 06I-0646-01
 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 / R303MO J451
 Payroll#: 73338

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium $\mu\text{g}/\text{sample}$	Beryllium $\mu\text{g}/\text{m}^3$	Air Volume L
J11523	06I05130	15 Feb 2006	<0.02 U	**	0.00
J11524	06I05131	15 Feb 2006	<0.02 U	**	0.00
J11525	06I05132	15 Feb 2006	<0.02 U	<0.029 U	695.
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 $\mu\text{g}/\text{sample}$
J11523	06I05130	15 Feb 2006	<1. U	**	<0.08 U
J11524	06I05131	15 Feb 2006	<1. U	**	<0.08 U
J11525	06I05132	15 Feb 2006	<1. U	<1.4 U	<0.08 U
Limit of Detection (LOD)			1.		0.08
Required Detection Limit (RDL)					

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Cadmium $\mu\text{g}/\text{m}^3$
J11523	06I05130	15 Feb 2006	**
J11524	06I05131	15 Feb 2006	**
J11525	06I05132	15 Feb 2006	<0.12 U
Limit of Detection (LOD)			
Required Detection Limit (RDL)			

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



QC Summary Page

Report Identification Number: 06I-0646-01
 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 / R303MO J451
 Payroll#: 73338

Batch ID: G061G01X

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241337-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241337-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
BL-241337-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
QC-241337-1	LCS	Beryllium	µg/sample	10.6	NA	10.0	106.	NA
QC-241337-1	LCS	Lead	µg/sample	111.	NA	100.	111.	NA
QC-241337-1	LCS	Cadmium	µg/sample	33.3	NA	30.0	111.	NA
QD-241337-1	LCSD	Beryllium	µg/sample	10.6	10.6	10.0	106.	0.0313
QD-241337-1	LCSD	Lead	µg/sample	112.	111.	100.	112.	0.277
QD-241337-1	LCSD	Cadmium	µg/sample	33.4	33.3	30.0	111.	0.164

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:

211523

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	
RECEIVED BY/INITIALS	DATE/TIME
SIGN / PRINT NAMES / USE MILITARY TIME	DATE/TIME
<p>Received By/Initials: <i>Chris Schilling</i></p> <p>Received By/Initials: <i>Lab Cabinet Bldg 3746 Rm #16</i></p> <p>Received By/Initials: <i>Goldie Nathan</i></p> <p>Received By/Initials: <i>Rz Steffler</i></p> <p>Received By/Initials: <i>Fed Ex</i></p> <p>Received By/Initials: <i>Matthew Tompkins</i></p>	<p>DATE/TIME: 2-17-06 1600</p> <p>DATE/TIME: 02-14-06 1445</p> <p>DATE/TIME: 2-17-06 1600</p> <p>DATE/TIME: 2-15-06 1030</p> <p>DATE/TIME: 2-15-06 1030</p>
<p>Received By/Initials: <i>Lab Cabinet Rm 16 3746 Bldg</i></p> <p>Received By/Initials: <i>Rz Steffler</i></p> <p>Received By/Initials: <i>Fed Ex</i></p> <p>Received By/Initials: <i>Matthew Tompkins</i></p>	<p>DATE/TIME: 2-17-06 1600</p> <p>DATE/TIME: 2-14-06 1445</p> <p>DATE/TIME: 2-15-06 1030</p> <p>DATE/TIME: 2-15-06 1030</p>
<p>Received By/Initials:</p> <p>Received By/Initials:</p> <p>Received By/Initials:</p> <p>Received By/Initials:</p>	<p>DATE/TIME:</p> <p>DATE/TIME:</p> <p>DATE/TIME:</p> <p>DATE/TIME:</p>
<p>LABORATORY SECTION</p> <p>Received By</p>	<p>DATE/TIME</p>

REVIEWED BY: *Matthew Tompkins* DATE: 2-15-06
PRINTSIGN NAME

Page 2 of 2

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



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: <i>Chris Schilling</i>	Company Contact Denise A. Pitts and Henry W. Ruby	Telephone No. 531-1229	Project Coordinator Joan H. Kessner	Data Turnaround
Payroll #: <i>73338</i>	Sampling Location <i>300 Area / 303M Bldg</i>	SPECIAL INSTRUCTIONS All relevant COAs must be provided: <i>R303M03451</i>		SAF No. RC-001
Type of Sample: <i>Be Pb Cd</i>	Wipe Sample Media: Ghost <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Other <i>2-13-06</i>	ANALYSIS METHOD (SPECIFIC): <i>NIOSH 7300 Be Pb Cd</i>		Method of Shipment <i>Federal Express</i>
Shipped To: <i>Panta Chem Salt Lake</i>		Bill of Lading/Air Bill No. <i>8544 9435 4792</i>		

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

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 <u> </u> cm ²	Comments								
<i>J11523</i>	<i>A</i>	<i>2-13-06</i>	<i>N/A</i>	<i>Blank</i>	<i>X</i>	<i>X</i>						<i>X</i>
<i>J11524</i>	<i>A</i>	<i>2-13-06</i>	<i>N/A</i>	<i>Blank</i>	<i>X</i>	<i>X</i>						<i>X</i>
<i>J11525</i>	<i>A</i>	<i>2-13-06</i>	<i>695</i>	<i>Personal</i>	<i>X</i>	<i>X</i>						<i>X</i>

COPY

FIELD SAMPLE COPY

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

011523

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Released By/Sign	DATE / TIME	Received By/Sign	DATE / TIME
 Chris Schilling	2-17-06 1600	Locked Cabinet Rm 14 3746 Bldg	2-17-06 1600
Locked cabinet Bldg 3746 Rm 14			
Goble Mathan	02-14-06 / 1445	RZ Steffler R.Z. Steffler	2-14-06 / 1445
	WCH		
RZ Steffler R.Z. Steffler	2-14-06 / 1600	Fed Ex	
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____
PRINT/SIGN NAME