

SAF-RC-001 Industrial Hygiene Sampling FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0483-01 SAF-RC-001

Rad only Chem only Rad & Chem

Complete Partial

300 Area 303G Bldg

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Report Identification Number: 06I-0483-01
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 / R303G0 J451
Payroll#: 73513

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
01 Feb 2006	J11393	06I03834	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J11395	06I03835	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J10Y72	06I03836	NMAM 7300M	G061601L	G WIPE
01 Feb 2006	J11396	06I03837	NMAM 7300M	G061601L	G WIPE

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

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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

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

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

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Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample	Cadmium µg/sample	Lead µg/sample
J11393	06I03834	08 Feb 2006	<0.01 U	<0.08 U	<2. U
J11395	06I03835	08 Feb 2006	<0.01 U	<0.08 U	<2. U
J10Y72	06I03836	08 Feb 2006	<0.01 U	<0.08 U	<2. U
J11396	06I03837	08 Feb 2006	<0.01 U	0.13	<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.

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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

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

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

W. D. Jones

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST												
Collector: W. D. Jones		Company Contact: Denise A. Pitts and Henry W. Ruby		Telephone No: 531-1229		Project Coordinator: John H. Kesper		Data Temperature: 5 day				
Payroll #: 78513		Sampling Location: 300 Area		SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R30360 J451		SAP No: RC-001						
Type of Sample: Wipe Samples		30369 Building		ANALYSIS METHOD (SPECIFIC): NIOSH 7300		Method of Shipment: FED EX						
Shipped To: Data Chem		Wipe Sample Media: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Preservation (i.e. cooling required, etc.):		Bill of Lading/Air Bill No: 8544 9435 4737						
Salt Lake City		Other: <input type="checkbox"/>		MATRIX: <input type="checkbox"/> AIR <input type="checkbox"/> WIFE <input type="checkbox"/> OTHER								
Be Co. Po		Special Handling and/or Storage: NA		SAMPLE ANALYSIS								
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (sq ft)	Comments	Aerosols	Lead	Asbestos	Polystyrene	Mold	Lead	Cd	Asbestos
J11393	WI	2-01-06	NA	Blank						X	X	
J11395	WI	2-01-06	NA	Blank						X	X	
J11396	WI	2-01-06	100cm ²	Mask-3036						X	X	
J11396	WI	2-01-06	100cm ²	Mask-3715						X	X	

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WCH-SH-302 (11/29/2005)



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Yetta D. Jones	Company Contact Denise A. Pitts and Henry W. Ruby	Telephone No. 531-1229	Project Coordinator Joan H. Kessner
Payroll #: 73513	Sampling Location 300 Area	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R303G0J451 ANALYSIS METHOD (SPECIFIC): NIOSH 7300	SAF No. RC-001
Type of Sample: Wipe Samples	303G Building		Method of Shipment FED EX
Shipped To: Data Chem Salt Lake City	Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____	Bill of Lading/Air Bill No. 8544 9435 4737	

Data Turnaround
3 day

POSSIBLE SAMPLE HAZARD/RISKS Be, Cd, Pb	Special Handling and/or Storage NA	MATRIX A - AIR WI - WIPE X - OTHER	Preservation (i.e., cooling required, etc.)	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									
J11393	WI	2-01-06	NA	Blank	4/21			X	na	X	X	2-01-06	
J11395	WI	2-01-06	NA	Blank				X	na	X	X		
J10472	WI	2-01-06	100cm ²	MASK-303G		2-01-06			X	na	X		X
J11396	WI	2-01-06	100cm ²	mask-3715					X	na	X		X
4/21													
2-01-06													

COPY

FIELD SAMPLE COPY

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

J11393

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
 Yeta D. Jones	02-01-06	3746 Building, Rm 16, locked cabinet	02-01-06
locked cabinet Bldg 3746 Rm #16			
Gabrielle Goldie Malhan	02-06-06 / 1500	RZ Steffler R.J. Steffler	2-6-06 / 1500
RZ Steffler R.J. Steffler	WCH 2-6-06 / 1600	Fed Ex	
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
Requested By/Store	DATE / TIME	Received By/Store	DATE / TIME
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY:

DATE:

PRINT/SIGN NAME