

0067668

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 05I-4103-01 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 303 Bldgs

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NOV 16 2005
EDMC



Cover Page



Report Identification Number: 05I-4103-01
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 / R300XX J451
Payroll#: 73399

Sample Information

Table with 6 columns: Sample Date, Customer Sample Number, Laboratory Sample Number, Method, Analytical Batch Identification, Sample Matrix. Contains 4 rows of sample data.

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: October 10, 2005



Case Narrative Page

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General Set Information: There are four samples in set 05I-4103-01. The samples were analyzed for beryllium 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 (with a thermometer reading of 96°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 recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of $\pm 10\%$.

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 0.01 ug/sample.

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

Dilution(s): None of the samples were diluted.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS result was within the control limit of $\pm 20\%$. The Relative Percent Difference (RPD) between the LCS and the LCSD was within the control limit of 20%.

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

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Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium $\mu\text{g}/\text{sample}$		Beryllium $\mu\text{g}/\text{m}^3$	Air Volume L	
J105M1	05I39236	06 Oct 2005	<0.01	U	<0.048		207.
J105W1	05I39237	06 Oct 2005	<0.01	U	<0.050		201.
J105N4	05I39238	06 Oct 2005	<0.01	U	**		0.
J105N3	05I39239	06 Oct 2005	<0.01	U	**		0.
Limit of Detection (LOD)			0.01				
Required Detection Limit (RDL)							

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

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Batch ID: G059500X

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-236926-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
QC-236926-1	LCS	Beryllium	µg/sample	10.5	NA	10.0	105.	NA
QD-236926-1	LCSD	Beryllium	µg/sample	10.3	10.5	10.0	103.	1.29

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

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

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

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

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

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

051-4102



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										
Collector: Denal Wolf		Company Contact Denise A. Pitts and Henry W. Ruby			Telephone No. 531-1229		Project Coordinator Joan H. Keesner		Data Turnaround 24 hrs.	
Payroll #: 73399		Sampling Location 300 Area/303 Buildings			SPECIAL INSTRUCTIONS All relevant COAs must be provided: R300XX J451			SAF No. RC-001		
Type of Sample: Beryllium		Wipe Sample Media: Ghost <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other _____			ANALYSIS METHOD (SPECIFIC): Niosh 7300 (Be)			Method of Shipment Federal Express		
Shipped To: DataChem Salt Lake City, UT		POSSIBLE SAMPLE HAZARD/REMARKS Be			Preservation (i.e., cooling required, etc.)		No	No	No	No
Special Handling and/or Storage N/A		MATRIX A - AIR WI - WIPE X - OTHER				No	No	No	No	No
SAMPLE ANALYSIS				Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold		
SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area (sq ft)	Comments						
J105M1	A	10/4/05	207	Personal			X			051 39236
J105W1	A	10/4/05	201	Personal			X			37
J105N4	A	10/4/05	N/A	Blank			X			38
J105N3	A	10/4/05	N/A	Blank			X			39

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

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DataChem Laboratories, Inc.
960 West Levoy Drive
Salt Lake City, Utah 84123-2547

Phone: (801) 266-7700
FAX: (801) 268-9992

Web Page: www.datachem.com
E-mail: lab@datachem.com

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

J105M1

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Relinquished By/Serial:	DATE / TIME	Received By/Serial:	DATE / TIME
<i>Donal Wolf</i> Donal Wolf	10/4/05 1515	3746 Bldg, R-16, Locked Cabinet	10/4/05 1515
<i>Chris Scully</i> / Chris Scully	10-5-05 1445	D A ST JOHN	
D A ST JOHN		<i>Donal Wolf</i>	10/5/05 1445
<i>Donal Wolf</i>	10/5/05 1515	FED EX	
Fed Ex		<i>Meredith Leonard</i>	10/5/05 1900
<i>Meredith Leonard</i>	10/5/05 1900		
LABORATORY SECTION	Received By	Title	DATE / TIME
	<i>Meredith Leonard</i>		10/5/05 1900

REVIEWED BY: _____ DATE: _____
PRINT/SIGN NAME