

0069428

**SAF-RC-001**  
**Industrial Hygiene Sampling**  
**FINAL DATA**

**NO DISTRIBUTION REQUIRED**

**COMMENTS:**

SDG 06I-0560-01 SAF-RC-001

Rad only  Chem only  Rad & Chem

X Complete  Partial

**300 Area 303M Bldg**

**RECEIVED**  
APR 28 2006

**EDMC**



Cover Page

Report Identification Number: 06I-0560-01
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

Table with 6 columns: Sample Date, Customer Sample Number, Laboratory Sample Number, Method, Analytical Batch Identification, Sample Matrix. Contains 3 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: Joanna C. Sanchez
Title: Chemist
Date: February 13, 2006



## Case Narrative Page

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**General Set Information:** There are 4 samples in set 06I-0553-01, 4 samples in set 06I-0554-01 and 3 samples in set 06I-0560-01 which 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 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 +/- 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):** 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 LCSs results were within the control limit of +/- 20%. The Relative Percent Differences (RPD) between the LCSs and the LCSDs was within the control limit of 20%.



## Case Narrative Page

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**Replicate Analysis:** Two 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:

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

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

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	
J11634	06I04559	10 Feb 2006	<0.01	U	**		**	
J11635	06I04560	10 Feb 2006	<0.01	U	**		**	
J11636	06I04561	10 Feb 2006	<0.01	U	<0.015	U	676.	
Limit of Detection (LOD)			0.01					
Required Detection Limit (RDL)								

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



## QC Summary Page

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 Laboratory Identification Number: DCHM  
 SAF: RC-001 / R303MO J451  
 Payroll#: 73338

Batch ID: G061900Y

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241205-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
QC-241205-1	LCS	Beryllium	µg/sample	10.7	NA	10.0	107.	NA
QD-241205-1	LCSD	Beryllium	µg/sample	11.1	10.7	10.0	111.	3.97

MB - Method Blank  
 LCS - Laboratory Control Sample  
 LCSD - Laboratory Control Sample Duplicate  
 MS - Matrix Spike  
 MSD - Matrix Spike Duplicate  
 LD - Laboratory Duplicate

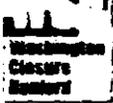
NA - Not Applicable  
 ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. =  $(\text{Result} / \text{Target}) * 100.0$   
 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. =  $( (|\text{Parent} - \text{LD}|) / ((\text{Parent} + \text{LD})/2.0) ) * 100$







### 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
Payroll #: 73338	Sampling Location 300 Area / 303M	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R303M03451 ANALYSIS METHOD (SPECIFIC):	SAF No. RC-001
Type of Sample: Be Air	Wipe Sample Media: Ghost <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Other _____		Method of Shipment Federal Express
Shipped To: Data chem Salt Lake			Bill of Lading/Air Bill No.  8544 9435 4760

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

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 <sup>2</sup>	Comments								
J11634	A	2-7-06	N/A	Blank			X					
J11635	A	2-7-06	N/A	Blank			X					
J11636	A	2-7-06	676	Personal			X					

COPY

FIELD SAMPLE COPY

