

**SAF-RC-211  
100-IU-2 & 100-IU-6 Miscellaneous  
Restoration Sites Near 100-F –  
Soil In-Process  
FINAL DATA PACKAGE**

**COMPLETE COPY OF DATA PACKAGE TO:**

Kathy Wendt

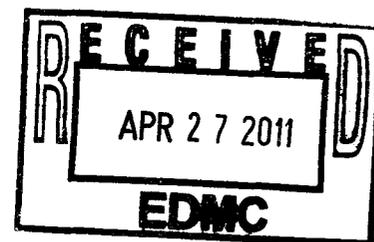
H4-21

KW 4/21/11  
INITIAL/DATE

**COMMENTS:**

**SDG D1109616**

**SAF-RC-211**



Rad only

Chem only

Rad & Chem

Complete

Partial

**Sample Location: 100-IU-2 600-312**



Report Identification Number: D1109616  
 Subcontract Number: S003827A00  
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way  
 Laboratory Identification Number: DCHM *RC 211*  
 SAF#: ~~RC-001~~ / RC-211-031  
 Sample Receipt Date: 04/06/2011

**Sample Information**

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
04/04/2011	J1H137	1109616001	NIOSH 9002	64653	Bulk

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Name: Peter P. Steen  
 Title: Chemist  
 Date: April 13, 2011



Report Identification Number: D1109616  
Subcontract Number: S003827A00  
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way  
Laboratory Identification Number: DCHM  
SAF#: RC-001 / RC-211-031  
Sample Receipt Date: 04/06/2011

**General Workorder Information:** There is one sample in workorder 1109607, one sample in workorder 1109609, one sample in workorder 1109612, one sample in workorder 1109613, one sample in workorder 1109615, one sample in workorder 1109616, three samples in workorder 1109617, and three samples in workorder 1109743 which were analyzed for asbestos in bulk material. No problems were encountered with the receipt of these samples.

**Method Summary:** All samples were examined for homogeneity. Non-homogeneous samples were ground to ensure homogeneity. Distinct layers were analyzed separately. The samples were prepared and examined for asbestos fibers utilizing the procedures outlined in NIOSH method 9002 (4<sup>th</sup> edition). A polarizing light microscope equipped with a 10x and a 16x eyepiece was used for the analysis. The area percentage of asbestos was estimated microscopically by a visual estimation of the fibers with a length-to-width aspect ratio of 3:1 or greater. If present, asbestos identities were confirmed with the appropriate refractive index oils applying dispersion staining techniques.

**Sample Preparation:** All samples were prepared in accordance with NIOSH method 9002 (4<sup>th</sup> edition).

**Initial and Continuing Calibration Verification Analysis:** N/A

**Initial and Continuing Calibration Blank Analysis:** N/A

**Method Blank Analysis:** N/A

**Dilution(s):** N/A.

**Laboratory Control Sample and Duplicate Analysis:** One Laboratory Control Sample (LCS) was prepared and analyzed with the sample batch. The results were within the control limit of +/- one reporting range.

**Replicate Analysis:** Two samples were replicated with this analysis batch.

**Flagging Codes:** None

**Nonconformance/Corrective Action Report (NC/CAR):** N/A

**Sample Calculation:** Sample results are reported by a visual estimation of the area percentage of asbestos. If necessary, a gravimetric ashing procedure may be used to remove certain non-asbestos material



from the sample; a percentage calculation is used to correct for the removal of the non-asbestos material.

**Miscellaneous Comments:**

- 1109607001: Blackish, granular soil.
- 1109609001: Brown, granular soil.
- 1109612001: Tan, granular soil.
- 1109613001: White, powdery/fibrous material.
- 1109615001: Gray, granular soil.
- 1109616001: Gray, granular soil.
- 1109617001: Brown, granular soil.
- 1109617002: Brown, granular soil.
- 1109617003: Brown, granular soil.
- 1109743001: Brown, granular soil.
- 1109743002: Brown, granular soil.
- 1109743003: Brown, granular soil.



# Results

Report Identification Number: D1109616  
 Subcontract Number: S003827A00  
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way  
 Laboratory Identification Number: DCHM  
 SAF#: RC-001 / RC-211-031  
 Sample Receipt Date: 04/06/2011

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile %		Amosite %		Crocidolite %	
J1H137	1109616001	04/13/2011	<1	U	<1	U	<1	U
Required Detection Limit (RDL)			1		1		1	

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Actinolite/Tr emolite %		Anthophyllit e %	
J1H137	1109616001	04/13/2011	<1	U	<1	U
Required Detection Limit (RDL)			1		1	

U - Parameter not detected above LOD  
 J - Parameter between LOD and RDL  
 \*\* - Not provided or unable to calculate  
 NA - Not Applicable



# QC Summary

Report Identification Number: D1109616  
 Subcontract Number: S003827A00  
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way  
 Laboratory Identification Number: DCHM  
 SAF: RC-001 / RC-211-031  
 Sample Receipt Date: 04/06/2011

Batch ID: 64653

QC Sample ID	QC Type	Analyte	Units	Result	Target
QC107804	LCS	Amosite	%per sample	50%	65%
QC107804	LCSD	Amosite	%per sample	60%	65%
QC107804	LCS	Chrysotile	%per sample	5%	10%
QC107804	LCSD	Chrysotile	%per sample	10%	10%

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

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

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

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

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

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



2011-04-06-01

 1109616 1109616		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST RC-211-031 Page 1 of 1	
Director OHE/DA AJ	Company Contact Jen Russell (801) 380-8093	Telephone No. (801) 380-8093	Project Coordinator KESSNER, JH
Project Designation 100-10-2 & 100-10-6 Miscellaneous Restoration Sites Near 1	Sampling Location 100 IU 2 600-312	SAF No. RC-211	Price Code 8C
Lot Chart No. WCH-11-039	Field Logbook No. EL-1651	Method of Shipment FedEx	Data Turnaround 7 Days
Shipped To ALS Laboratories - Salt Lake City POSSIBLE SAMPLE HAZARDS/REMARKS	Offsite Property No. NA	Bill of Lading/Air Bill No. 7946 1357 2220	
None	Preservation None		
None	Type of Container P		
None	No. of Container(s) 1		
None	Volume 250g		
None	Absorbent Ref. ST09H 962		
SAMPLE ANALYSIS			
Sample No. JH137	Matrix SOIL	Sample Date 4/14/11	Sample Time 0845
			X
CHAIN OF POSSESSION			
Relinquished By: Received By: Stored In J. Russell Date: 4/11/11 Time: 10:30	Received By: Stored In J. Russell Date: 4/11/11 Time: 10:30	Date: 4/11/11 Time: 10:30	Date: 4/11/11 Time: 10:30
Relinquished By: Received By: Stored In J. E. Bell Date: 4-5-11 Time:	Received By: Stored In FED EX Date: 4-5-11 Time:	Date: 4-5-11 Time:	Date: 4-5-11 Time:
Relinquished By: Received By: Stored In J. E. Bell Date: 4/11/11 Time:	Received By: Stored In J. E. Bell Date: 4/11/11 Time:	Date: 4/11/11 Time:	Date: 4/11/11 Time:
Relinquished By: Received By: Stored In J. E. Bell Date: 4/11/11 Time:	Received By: Stored In J. E. Bell Date: 4/11/11 Time:	Date: 4/11/11 Time:	Date: 4/11/11 Time:
SPECIAL INSTRUCTIONS			
REVIEWED BY JRE DATE 4-5-11			
LABORATORY SECTION Received By:	Date:	Title:	Date:
FINAL SAMPLE DISPOSITION Proposed Method:	Date:	Disposed By:	Date: