

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 D1109617

SAF-RC-211

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location: 100-IU-2 600-300



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Cover



Report Identification Number: D1109617
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM *RC-211-018 4/14/11*
 SAF#: ~~RC-001~~ / RC-211-018
 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	J1H030	1109617001	NIOSH 9002	64653	Bulk
04/04/2011	J1H031	1109617002	NIOSH 9002	64653	Bulk
04/04/2011	J1H032	1109617003	NIOSH 9002	64653	Bulk

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



Report Identification Number: D1109617
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
Laboratory Identification Number: DCHM
SAF#: RC-001 / RC-211-018
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 (4th 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 (4th 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: D1109617
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM
 SAF#: RC-001 / RC-211-018
 Sample Receipt Date: 04/06/2011

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile %		Amosite %		Crocidolite %	
J1H030	1109617001	04/13/2011	<1	U	<1	U	<1	U
J1H031	1109617002	04/13/2011	<1	U	<1	U	<1	U
J1H032	1109617003	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 %	
J1H030	1109617001	04/13/2011	<1	U	<1	U
J1H031	1109617002	04/13/2011	<1	U	<1	U
J1H032	1109617003	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: D1109617
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM
 SAF: RC-001 / RC-211-018
 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

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



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2011-04-06-01



1 109617

Collector (JHEDA, AJ)		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-211-018	Page 1 of 1
Project Destination 100-FL-2 & 100-FL-6 Miscellaneous Restoration Sites Near 1		Company Contact Jan Russell (509) 540-6502		Price Code 8C	
Ice Chest No. 45-51 WCH-11-039		Sampling Location 100 FL 2 600-300		Data Turnaround 7 Days	
Shipped To For Analytical Purposes ALS-SLE		Field Logbook No. EL1651		Project Coordinator KESSNER, JH	
POSSIBLE SAMPLE HAZARDS/REMARKS None		Office Property No. NA		SAF No. RC-211	
Special Handling and/or Storage None		COA 001220Y000		Method of Shipment Hand Deliver	
No. of Containers		Preservation		Bill of Lading/Air Bill No. 7946 7946 1357 2220	
Volume		Type of Container		Hand Deliver	
Sample No.		No. of Containers		Date 4-5-11	
Matrix *		Volume		Date	
SAMPLE ANALYSIS					
J1H030	SOIL	4/4/11	1265	X	4
J1H031	SOIL	4/4/11	1235	X	5
J1H032	SOIL	4/4/11	1320	X	3
J1H033	SOIL				
J1H034	SOIL				

CHAIN OF POSSESSION

Relinquished By / Removed From	Date/Time	Received By / Stored In	Date/Time	Signature
Relinquished By: [Signature]	4/11/11 15:23	Received By: [Signature]	4/11/11 15:03	[Signature]
Relinquished By: [Signature]	4/11/11 14:00	Received By: [Signature]	4-4-11	[Signature]
Relinquished By: [Signature]	4-5-11	Received By: [Signature]	4-4-11	[Signature]
Relinquished By: [Signature]	4-5-11	Received By: [Signature]	4/11/11	[Signature]
Relinquished By: [Signature]	4/11/11	Received By: [Signature]	4/11/11	[Signature]

SPECIAL INSTRUCTIONS

REVIEWED
DATE 4-5-11