

SAF-RC-040
300 Area D4 Waste Characterization
Sampling - Other Solid
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

No Distribution Required

KW 5/19/11
INITIAL/DATE

COMMENTS:

SDG D1110950 SAF-RC-040

Rad only

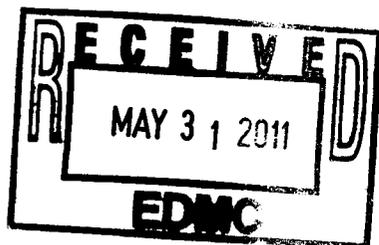
Chem only

Rad & Chem

Complete

Partial

Sample Location/Waste Site: Building 320





Cover

Report Identification Number: D1110950
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM RC-040 RW
 SAF#: ~~RC-001~~ / RC-040-574
 Sample Receipt Date: 04/19/2011



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
03/28/2011	J1FKP8	1110950001	NIOSH 9002	66017	Bulk
03/28/2011	J1FKP9	1110950002	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR0	1110950003	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR1	1110950004	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR2	1110950005	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR3	1110950006	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR4	1110950007	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR5	1110950008	NIOSH 9002	66017	Bulk
03/28/2011	J1FKR6	1110950009	NIOSH 9002	66017	Bulk

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



Case Narrative

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Report Identification Number: D1110950
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
Laboratory Identification Number: DCHM
SAF#: RC-001 / RC-040-574
Sample Receipt Date: 04/19/2011

General Workorder Information: There are five samples in workorder 1110916, nine samples in workorder 1110950, and six samples in workorder 1111142 which were analyzed for asbestos in bulk material. No problems were encountered with the receipt of this sample.

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



Case Narrative

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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:

- 1110916001: White/silver, fibrous/papery material.
- 1110916002: White/silver, fibrous/papery material.
- 1110916003: Brown/silver, fibrous/papery material.
- 1110916004: Brown/silver, fibrous/papery material.
- 1110916005: Brown, fibrous paper material.
- 1110950001: Black, tarry roofing material.
- 1110950002: Black, tarry roofing material.
- 1110950003: Black, tarry/fibrous roofing material.
- 1110950004: Black, tarry roofing material.
- 1110950005: Black, tarry roofing material.
- 1110950006: Black, tarry roofing material.
- 1110950007: Black, tarry/fibrous roofing material.
- 1110950008: Black/brown, tarry/fibrous roofing material.
- 1110950009: Brown, fibrous insulation material.
- 1111142001: Brown, fibrous paper material.
- 1111142002: Gray/tan, fibrous/compacted insulation material.
- 1111142003: Black/white, tarry/foamy insulation material.
- 1111142004: White, foamy insulation material.
- 1111142005: Gray/silver, compacted/fibrous material.
- 1111142006: Gray/silver, fibrous/papery material.





Results

Report Identification Number: D1110950
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM
 SAF#: RC-001 / RC-040-574
 Sample Receipt Date: 04/19/2011

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile %		Amosite %		Crocidolite %	
J1FKP8	1110950001	05/10/2011	<1	U	<1	U	<1	U
J1FKP9	1110950002	05/10/2011	<1	U	<1	U	<1	U
J1FKR0	1110950003	05/10/2011	<1	U	<1	U	<1	U
J1FKR1	1110950004	05/10/2011	<1	U	<1	U	<1	U
J1FKR2	1110950005	05/10/2011	<1	U	<1	U	<1	U
J1FKR3	1110950006	05/10/2011	<1	U	<1	U	<1	U
J1FKR4	1110950007	05/10/2011	<1	U	<1	U	<1	U
J1FKR5	1110950008	05/10/2011	<1	U	<1	U	<1	U
J1FKR6	1110950009	05/10/2011	<1	U	<1	U	<1	U
Limit of Detection (LOD)			NA		NA		NA	
Required Detection Limit (RDL)			1		1		1	

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Actinolite/Tremolite %		Anthophyllite %	
J1FKP8	1110950001	05/10/2011	<1	U	<1	U
J1FKP9	1110950002	05/10/2011	<1	U	<1	U
J1FKR0	1110950003	05/10/2011	<1	U	<1	U
J1FKR1	1110950004	05/10/2011	<1	U	<1	U
J1FKR2	1110950005	05/10/2011	<1	U	<1	U
J1FKR3	1110950006	05/10/2011	<1	U	<1	U
J1FKR4	1110950007	05/10/2011	<1	U	<1	U
J1FKR5	1110950008	05/10/2011	<1	U	<1	U
J1FKR6	1110950009	05/10/2011	<1	U	<1	U
Limit of Detection (LOD)			NA		NA	
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: D1110950
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Ken Way
 Laboratory Identification Number: DCHM
 SAF: RC-001 / RC-040-574
 Sample Receipt Date: 04/19/2011

Batch ID: 66017

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
QC107943	LCS	Amosite	%	ND	-	ND	-	-
QC107943	LCS	Amosite	%	ND	-	ND	-	-
QC107943	LCS	Chrysotile	%	ND	-	ND	-	-
QC107943	LCS	Chrysotile	%	ND	-	ND	-	-

- 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

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

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

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

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

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

