

SAF-RC-087
618-7 Burial Ground - Soil
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Rick Kerkow	L6-06	<u>KW 5/8/08</u> Initials/Date
Kathy Wendt	H4-21	<u>KW 5/8/08</u> Initials/Date

COMMENTS:

SDG 08I-0648-01

SAF-RC-087

Rad only

Chem only

Rad & Chem

Complete

Partial

WASTE SITE: 618-7 Burial Ground/Vermiculite Drum

RECEIVED
MAY 19 2008

EDMC



Report Identification Number: 08I-0648-01
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker / Robert Brounstein / Garrett Knutson / Brain Fauver
Laboratory Identification Number: DCHM
SAF#: RC-087 / RG61872600
Sample Receipt Date: 06-MAY-08



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
30 Apr 2008	J16V89	08I03793	NIOSH 9002	G084500C	BULK

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Name: Peter P. Steen
Title: Chemist
Date: May 07, 2008



Case Narrative

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Report Identification Number: 08I-0648-01
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Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Robert
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Sample Receipt Date #: 06-MAY-08

General Set Information: There was one sample in set 08I-0648-01 which was 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: One sample was replicated with this analysis run.

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:

08I03793: Brown, micaceous vermiculite.

The asbestiform mineral in this vermiculite sample was identified as actinolite/tremolite using NIOSH 9002. This method is designed for the identification of asbestos fibers in bulk materials; it does not discriminate against non-regulated asbestiform minerals known to be associated with some vermiculite sources. Because vermiculite was identified as present in this sample, there is a possibility that the asbestiform mineral found is winchite or richterite. While not regulated by federal asbestos standards, these minerals are thought to be associated with the same diseases known to be caused by asbestos.



Results

Report Identification Number: 08I-0648-01
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 Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Robert Brounstein / Garrett Knutson / Brain Fauver
 Laboratory Identification Number: DCHM
 SAF#: RC-087 / RG61872600
 Sample Receipt Date #: 06-MAY-08

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile % Asbestos	Amosite % Asbestos	Crocidolite % Asbestos
J16V89	08I03793	07 May 2008	ND U	ND U	ND U
Limit of Detection (LOD)			<1	<1	<1
Required Detection Limit (RDL)					

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Actinolite/Tremolite % Asbestos	Anthophyllite % Asbestos
J16V89	08I03793	07 May 2008	ND U	ND U
Limit of Detection (LOD)			<1	<1
Required Detection Limit (RDL)				

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary

Report Identification Number: 08I-0648-01

Subcontract Number: S003827A00

Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Robert Brounstein / Garrett Knutson / Brain Fauver

Laboratory Identification Number: DCHM

SAF: RC-087 / RG61872600

Sample Receipt Date #: 06-MAY-08

Batch ID: G084500C

QC Sample ID	QC Type	Analyte	Units	Result	Type	Average		
QC 100114	Bulk	Asbestiform Fibers	%	10-<20	Chrysotile			
QC 100114	Bulk	Asbestiform Fibers	%	10-<20	Chrysotile	10-<20		
QC 100114	Bulk	Asbestiform Fibers	%	ND	Amosite			
QC 100114	Bulk	Asbestiform Fibers	%	ND	Amosite	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

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

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

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

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

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

