



Report Identification Number: D8343021
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker / Garrett Knutson / Brian Fauver
Laboratory Identification Number: DCHM
SAF#: RC-006/ RD4MXX2F00
Sample Receipt Date: 12/04/2008



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
12/02/2008	J17YX9	8343021001	NIOSH 9002	23240	Bulk

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: Peter P. Steen
Title: Chemist
Date: December 17, 2008



Case Narrative

Page 2 of 6

Report Identification Number: D8343021
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Garrett Knutson / Brian Fauver
Laboratory Identification Number: DCHM
SAF#: RC-006/ RD4MXX2F00
Sample Receipt Date: 12/04/2008

General Workorder Information: There is one sample in workorder 8343021 which was 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: One sample was 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:

8343021001: Brown, micaceous vermiculite insulation.

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: D8343021
 Subcontract Number: S003827A00
 Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Garrett Knutson / Brian Fauver
 Laboratory Identification Number: DCHM
 SAF#: RC-006/ RD4MXX2F00
 Sample Receipt Date: 12/04/2008

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile %	Amosite %	Crocidolite %
J17YX9	8343021001	12/17/2008	<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 %
J17YX9	8343021001	12/17/2008	1.1	<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: D8343021
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Ilene Strong / William Brasker/ Garrett Knutson / Brian Fauver
Laboratory Identification Number: DCHM
SAF: RC-001 / RD4MXX2F00
Sample Receipt Date: 12/04/2008

Batch ID: 23240

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
QC107360	LCS	Amosite	%	ND	NA	ND	-	-
QC107360	LCSD	Amosite	%	ND	NA	ND	-	-
QC107360	LCS	Chrysotile	%	10	NA	25	-	-
QC107360	LCSD	Chrysotile	%	20	NA	25	-	-

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

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

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



2008-12-08-8343021-01

Washi		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-006-185	Page 1 of 1
Collector Pizzarella	8343021	Company Contact Tom Edmundson	Telephone No. 947-5192	Project Coordinator KESSNER, JH	Price Code 9K	Data Turnaround 7 Days	
Project Designation 100-N Ancillary Facilities & 190-DR Other Solid Sampling I		Sampling Location 1112-N Wall Cavity		SAF No. RC-006	8343021		
Ice Chest No. GWS-034		Field Logbook No. EL-1516-13	COA RD4MXX2F00	Method of Shipment Fed Ex			
Shipped To DataChem Laboratories - Salt Lake City POSSIBLE SAMPLE HAZARDS/REMARKS Potential Asbestos Containing Materials / Non-Rad		Offsite Property No. A090009		Bill of Lading/Air Bill No. See OSPC			
Special Handling and/or Storage NA		Preservation	None				
		Type of Container	Gal				
		No. of Container(s)	1				
		Volume	500ml	TRE 12-2-08			
SAMPLE ANALYSIS		Asbestos-DUJK-EPA					
Sample No.	Matrix *	Sample Date	Sample Time				
J17YX9	OTHER SOLID	12-2-08	10:00	✓			
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS			Matrix *
Relinquished By/Removed From Sof P. Zamboni	Date/Time 12-2-08 10:15	Received By/Stored In T.R. Edmundson	Date/Time 12-2-08 10:15	<p>12/2/08</p> <p>COPY</p>			S-Soil
Relinquished By/Removed From T.R. Edmundson	Date/Time 12-2-08 10:50	Received By/Stored In MSTANOVICH	Date/Time 12/2/08 10:50				SE-Sediment
Relinquished By/Removed From MSTANOVICH	Date/Time 12/2/08 1400	Received By/Stored In 1060/2C	Date/Time 12/2/08 1400				SP-Sludge
Relinquished By/Removed From UPHE GONZALEZ	Date/Time 12/3/08 1045	Received By/Stored In UPHE GONZALEZ	Date/Time 12/3/08				W - Water
Relinquished By/Removed From UPHE GONZALEZ	Date/Time 12/3/08 1055	Received By/Stored In FED EX	Date/Time				O-Oil
Relinquished By/Removed From FED EX	Date/Time 12/4/08 1010	Received By/Stored In	Date/Time 12/4/08 1010				A-Air
LABORATORY SECTION	Received By	Title		Date/Time 12/4/08 1010			IS-Drum Solids
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time			TX-Drum Liquids

WCH-EE-011