



Submitted To: Joan Kessner
Washington Closure Hanford
2620 Fermi Avenue, MSIN H4-21
Richland WA 99354

Test Report
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10/20/09

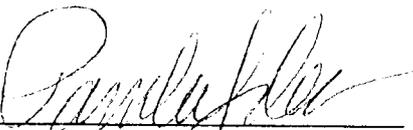
REFERENCE DATA

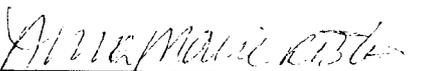
Sample Type:	Asbestos by TEM with Gravimetric Reduction
Method Reference:	Nonfriable Bulk Material with Organic Binder
Client Sample Nos.:	EPA/600/R-93/116, Chatfield Method
Sample Location:	J19774
PO No.:	183-H Clear-well
ALS Work Order No.:	NA
ALS Sample Nos.:	0910241 - filed in DOE 09074009 - Kessner lab
Sample Receipt Date:	0910241-01
Preparation Date:	10/12/2009
Analysis Date:	10/13/2009
	10/20/2009

We certify that the samples indicated on the following data sheet(s) were analyzed by Transmission Electron Microscopy (TEM) for asbestos using the method, EPA/600/R-93/116, Chatfield Method, for determining the amount and type of asbestos present in bulk building materials.

After an initial examination by stereomicroscope to determine homogeneity, friability, matrix material and other characteristics, we prepared the samples using gravimetric reduction. Coarse, non-asbestos materials that cannot be pulverized, such as pebbles or metal foils, were separated from the portion analyzed. Other non-asbestos material was removed by ashing in a muffle furnace and/or dissolution in decalcifying solution. Sample weights were tracked through each step in the reduction.

Analysis was performed on a Philips CM-12 TEM and EDAX Genesis System using energy dispersive X-ray analysis (EDXA) spectra and selected area electron diffraction (SAED) patterns to determine fiber species. Asbestos percentages are based on a visual estimate of the asbestos percent by area in the final residue and are listed on the following data sheet(s). Results apply only to portions of samples analyzed. ALS Laboratory Group Environmental Division (Cincinnati) will dispose of all bulk samples after 60 days unless other arrangements are made.


Pamela Johnson
Analyst


Anna Marie Ristich
Section Manager

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CLIENT: Washington Closure Hanford
SAMPLE LOCATION: 183-H Clear-well

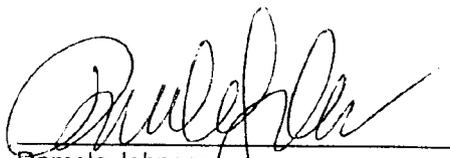
ANALYSIS DATA

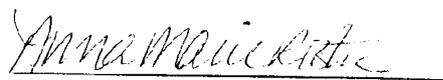
Calibration Date: 10/16/2009 Magnification: 10,400 X
EDXA Resolution: 161.05 eV Calibration Constant: 1 cm = 0.96 μ m
Accelerating Voltage: 100 keV Camera Constant: 31.97 mm-Å

SAMPLE IDENTIFICATION	
Client Sample No.:	J19774
ALS Sample No.:	0910241-01
SAMPLE DESCRIPTION	
Homogeneity:	Homogeneous
Color:	Black
Texture:	Resinous
Description:	Material
SAMPLE PREP	
Starting Weight (g):	1.1474
Residue Weight (g):	0.0969
Weight Percent Residue:	8.45
PERCENT ASBESTOS DETECTED IN RESIDUE	
Chrysotile:	0
Amosite:	0
Crocidolite:	0
Actinolite-Tremolite:	0
Anthophyllite:	0
TOTAL IN RESIDUE	ND
ASBESTOS PERCENT IN SAMPLE	
	ND

ND = None Detected

TRACE = <1%


Pamela Johnson
Analyst


Anna Marie Ristich
Section Manager

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STUDY/SAMPLE ANALYSIS REQUEST

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Collector **D. WOOLEY** Telephone No. **9274002** RC-006-222 Price Code **9K** Data Turnaround **7 Days**

Project Designation **100-N Area D4, Other Solid - Quick Turn** Project Coordinator **KESSNER, JH**

Ice Chest No. **Federal Box** Sampling Location **183-H CLEVER BELL** SAF No. **RC 006**

Shipped To **DATA CHEM - SALT LAKE** Field Logbook No. **EL-1627-3** Method of Shipment **FedEx**

Offsite Property No. **A09013H** COA **RDMXX2F00** Bill of Lading/Air Bill No. **See OSPC**

POSSIBLE SAMPLE HAZARDS/REMARKS
 1. **MSDS**
 2. **Asbestos**
 3. **Rad**

Special Handling and/or Storage

6910241

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	Preservation	Type of Container	No. of Container(s)	Volume	None	G.P	Other	Analysis
J19774	OTHER SOLID	9/28/09	0940							X	RCF
J19775	OTHER SOLID										RCF
J19776	OTHER SOLID										RCF
J19777	OTHER SOLID										RCF
J19778	OTHER SOLID										RCF

CHAIN OF POSSESSION

Relinquished By	Relinquished From	Date/Time	Received By	Received In	Date/Time
D. Wooley	1800	9/28/09	Samuel Johnson	RCF	9/28/09
Samuel Johnson	1015	9/28/09	K. Kishida	RCF	9/28/09
D. Miller	9/30/09	9/30/09	Robertson	RCF	9/30/09
Robertson	0850	9/30/09	FedEx	RCF	9/30/09
FedEx	1010	10/10/09	July Wataha	RCF	10/10/09
July Wataha	1010	10/10/09	AS	RCF	10/10/09

SPECIAL INSTRUCTIONS

- IF PLM \leq 5% CONTACT JUAN KESSNER FOR TEM OPTIONS. 9/28/09

- Run RCF SAILING SCREEN FIRST 9/28/09

REVIEWED BY *[Signature]* DATE **9-30-09**

Sampler or available to remove samples from controlled storage. If proper removal of samples from storage location taking custody of samples if shipment to lab.

Disposed By _____ Date Time _____