

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

**COMPLETE COPY OF DATA PACKAGE TO:**

No Distribution Required

KW 12/29/10  
INITIAL/DATE

**COMMENTS:**

**SDG DC1012333-A      SAF-RC-040**

Rad only

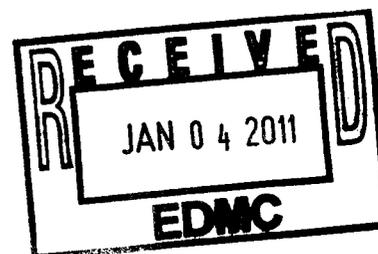
Chem only

Rad & Chem

Complete

Partial

Sample Location/Waste Site: 400 Area – 4702 - Annex





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

Test Report  
Page 1 of 3  
12/17/10

**REFERENCE DATA**

**Asbestos in Bulk Building Material**

Sample Type:	Bulk
Method Reference:	EPA/600/R-93/116
Client Sample Nos.:	J1GDL7-A through J1CMR9-A <i>Rev 12/28/10</i>
Sample Location:	4702 - Bldg 14; 400 Area, 4702 - Annex
PO No.:	Not Available
ALS Work Order No.:	<i>LC</i> 1012333-A
ALS Sample Nos.:	1012333-01 through 1012333-03
Sample Receipt Date:	12/15/2010
Preparation Date:	12/16/2010
Analysis Date:	12/17/2010

We certify that the samples indicated on the following data sheet(s) were analyzed by Transmission Electron Microscopy (TEM) using the method, EPA/600/R-93/116, for determining the amount and type of asbestos present in bulk building materials. After an initial examination by stereomicroscope and/or polarized light microscopy, representative portions of the samples were ground with a mortar and pestle, suspended in acetone or other solvents, then mounted on a TEM grid for analysis. Analysis was performed on a Philips CM-12 TEM with EDAX Genesis System. Selected area electron diffraction (SAED) patterns and EDXA spectra were used to determine fiber species. Estimates of asbestos concentration are made on an area basis. Representative EDXA spectra of asbestos types detected are included. Results apply only to portions of samples analyzed and are tabulated on the following data sheet(s). ALS Laboratory Group Environmental Division (Cincinnati) will dispose of 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:** 4702 - Bldg 14; 400 Area, 4702 - Annex

**ANALYSIS DATA**

Calibration Date:	12/1/2010	Magnification:	9,680 X
EDXA Resolution:	152.69 eV	Calibration Constant:	1 cm = 1.03 μm
Accelerating Voltage:	100 keV	Camera Constant:	31.97 mm-Å

**SAMPLE ID**

*RWS 12/20/10*

Client Sample No.:	*J1CDL7	J1CDP1	J1CMR9 -A
ALS Sample No.:	1012333-01	1012333-02	1012333-03

**MACROSCOPIC EXAMINATION**

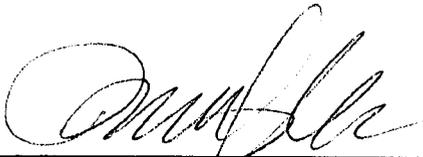
Accepted/Rejected	Accepted	Accepted
Homogeneity	Homog.	Homog.
Color	White	White
Texture	Powdery	Powdery
Description	Dust	Dust

**ASBESTIFORM MINERALS**

% Chrysotile	Trace	Trace
% Amosite	ND	ND
% Crocidolite	ND	ND
% Tremolite - Actinolite	ND	ND
% Anthophyllite	ND	ND
<b>% TOTAL ASBESTOS</b>	<b>Trace</b>	<b>Trace</b>

NOTES: ND = None Detected      TRACE = <1%

\*Sample J1CDL7-A required gravimetric reduction and results are listed on the final page of this report.

  
 Pamela Johnson  
 Analyst

  
 Anna Marie Ristic  
 Section Manager

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1012933  
 DWS 12/13/10 3 of 3  
 DWS 12/13/10 9 of 9-10  
 WHP

**Washington Closure Hanford** RC-1344 Page 2 of 2  
 Project Code 9K Data Turnaround 7 Days  
 Project Coordinator KESSNER, JH  
 SAF No. RC-134  
 Method of Shipment - Hand Delivered - DWS 12/13/10 FEL EX  
 Bill of Lading/Air Bill No. - NA - DWS 12/13/10 JOK090473  
 COA RD4MXX2F00  
 Offsite Property No. - NA - PWS 12/13/10  
 Company Contact: Bill Rodgers, Telephone No. 206.251.7439  
 Sampling Location: 400 Area, 4702 - Amuxc  
 Field Logbook No. EL-1646-01  
 Shipped To: DWS 12/13/10 FEL EX BOX  
 Shipped To: DWS 12/13/10 ALS-C-1  
 1965 544 7190  
 JOK090473

POSSIBLE SAMPLE HAZARDS/REMARKS  
 None Asbestos  
 FEB 12-14-10  
 Special Handling and/or Storage  
 None

Sample No.	Matrix *	Sample Date	Sample Time	Preservation	Type of Container	No. of Container(s)	Volume	None	GFP	1	5g
JICMR9 - A	OTHER SOLID	11-8-10	0835								
JICMFO	OTHER SOLID	"	0837								
JICM11	OTHER SOLID	"	0840								
JICM12	OTHER SOLID	"	0844								
JICM13	OTHER SOLID	"	0849								

Matrix \*  
 S-Sol  
 SE-Sediment  
 SO-Soil  
 SL-Sludge  
 W-Water  
 O-Oil  
 A-Air  
 DS-Dust  
 DL-Dredge  
 T-Tissue  
 L-Liquid  
 V-Vegetation  
 X-Other

**SAMPLE ANALYSIS**

Signature/Print Names  
 Received By/Stored In Date/Time  
 JIMONS GILMAN 11-8-10/115 W.H. Rodgers W.H. Rodgers 11-8-10  
 Received By/Removed From Date/Time  
 W.H. Rodgers W.H. Rodgers 11-9-10  
 Received By/Removed From Date/Time  
 J.E. Beckel J.E. Beckel 12-14-10  
 Received By/Removed From Date/Time  
 J.E. Beckel J.E. Beckel 12-14-10  
 Received By/Removed From Date/Time  
 J.E. Beckel J.E. Beckel 12-14-10  
 Received By/Removed From Date/Time  
 J.E. Beckel J.E. Beckel 12-14-10

**SPECIAL INSTRUCTIONS**  
 REVIEWED BY: [Signature] DATE: 12/14/10  
 REVIEWED BY: [Signature] DATE: 11-8-10  
 SAMPLE JICMR9-A Transshipped from Test America - Richmond to ALS-CV for TEM analysis

**LABORATORY SECTION** Received By: [Signature] Date/Time: [Blank]  
**FINAL SAMPLE DISPOSITION** Disposal Method: [Blank] Date/Time: [Blank]