

0073614

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

COMPLETE COPY OF DATA PACKAGE TO:

Mike Stankovich

L1-01

KW 8/1/07
INITIAL/DATE

COMMENTS:

SDG 07-A-4082

SAF-RC-040

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location/Waste Site: 337 Building

RECEIVED
AUG 09 2007
EDMC



**DATA
CHEM**
LABORATORIES, INC.

7/27/07
Page 1 of 5



SUBMITTED TO:

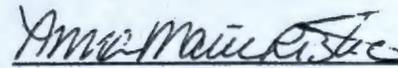
Joan Kessner
Washington Closure Hanford
2620 Fermi Avenue, MSIN H4-21
Richland, WA 99354

REFERENCE DATA:

Client Sample No.:	J15BY8 through J15BY7
P.O. No.:	Not Available
Sample Location:	337
Sample Type:	Bulk
Method Reference:	EPA-600/R-93/116
DCL Set ID No.:	07-A-4082
DCL Sample ID No.:	07-23102 through 07-23116
Sample Receipt Date:	7/26/07
Analysis Date:	7/27/07

We certify that the following samples were prepared and analyzed by Polarized Light Microscopy for asbestos and other fibrous constituents using EPA-600/R-93/116. The samples were acceptable upon receipt except where noted. The samples were examined under a stereomicroscope in a laboratory fume hood for general composition and phase separation. If needed, portions of the sample were removed and ground with a mortar and pestle before being mounted on a glass microscope slide. Mountings of representative portions of the material are prepared in one or more appropriate refractive index liquids (1.550, 1.605, 1.680) and examined by Polarized Light Microscopy*. Estimates of concentration are made on an area basis. The results of the analysis apply only to the materials analyzed and are summarized on the attached bulk asbestos analysis data sheets. DataChem Laboratories will dispose of all bulk samples after 60 days unless other arrangements are made.


Shawn Smythe
Analyst


Anna Marie Ristich
Reviewer

*Floor tiles, decorative paints, joint compounds, and cement materials require additional treatment in order to evaluate the concentration of small asbestos fibers bound in the material. Some samples may contain fibers that are not visible by PLM and can only be detected by electron microscopy techniques. Floor tiles are analyzed as homogeneous materials if insufficient mastic is present or if phases have been cross contaminated.

DataChem Laboratories NVLAP Lab ID: 101917. Laboratory accreditation by the National Institute of Standards and Technology does not in any way constitute approval or endorsement by NVLAP, NIST, or any agency of the federal government..

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7/27/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 337
Set ID: 07-A-4082

Client Sample ID:	J15BY8	J15BY9	J15C00	J15C01	J15C02
DCL Sample ID:	07-23102	07-23103	07-23104	07-23105	07-23106
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered	Layered	Layered	Homog.	Layered
	Inseparable	Inseparable	Inseparable		Inseparable
Color:	Grey/Yellow	Grey/Yellow	Grey/Yellow	Grey	Grey/Tan
Texture:	Fbrs/Flex	Fbrs/Flex	Fbrs/Flex	Fibrous	Fbrs/Resns
Description:	Material	Material	Material	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:					
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	ND	ND	ND	ND	ND
Other Materials					
% Cellulose:					>10 ≤ 20
% Fiberglass:	>50 ≤ 60	>50 ≤ 60	>50 ≤ 60		>3 ≤ 5
% Other Fibers:				>80 ≤ 90	>40 ≤ 50
% Resin/Binder:	>5 ≤ 10	>5 ≤ 10	>5 ≤ 10		>5 ≤ 10
% Non Fibrous:	>20 ≤ 30	>20 ≤ 30	>20 ≤ 30	>5 ≤ 10	>10 ≤ 20

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

7/27/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 337
Set ID: 07-A-4082

Client Sample ID:	J15BX8	J15BX9	J15BY0	J15BY1	J15BY1
DCL Sample ID:	07-23107	07-23108	07-23109	07-23110A	07-23110B
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:				Layered	Layered
Color:				Grey	Tan
Texture:				Compact	Resinous
Description:				Tile	Mastic
Analysis:				PLM	PLM
Asbestiform Minerals					
% Chrysotile:				>1 ≤ 3	
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:				>1 ≤ 3	ND
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:				>10 ≤ 20	>70 ≤ 80
% Non Fibrous:				>70 ≤ 80	>10 ≤ 20

ND = None Detected Trace = <1%

Special Prep Procedures: Sample numbers J15BX8, J15BX9 and J15BY0 were prepared by gravimetric reduction.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

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7/27/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 337
Set ID: 07-A-4082

Client Sample ID:	J15BY2	J15BY3	J15BY4	J15BY5	J15BY6
DCL Sample ID:	07-23111	07-23112	07-23113	07-23114	07-23115
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Layered Inseparable	Layered Inseparable
Color:	Grey	Grey	Grey	Grey	Grey/Yellow
Texture:	Crmby/Fbrs	Fibrous	Fibrous	Fbrs/Flex	Fbrs/Flex
Description:	Material	Insulation	Material	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:					
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	ND	ND	ND	ND	ND
Other Materials					
% Cellulose:					
% Fiberglass:		>90 ≤ 100	>90 ≤ 100	>50 ≤ 60	>50 ≤ 60
% Other Fibers:	>10 ≤ 20				
% Resin/Binder:				>5 ≤ 10	>5 ≤ 10
% Non Fibrous:	>70 ≤ 80		>1 ≤ 3	>20 ≤ 30	>20 ≤ 30

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting, ... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

7/27/07

**DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 337
Set ID: 07-A-4082

Client Sample ID: J15BY7
DCL Sample ID: 07-23116

Macroscopic Examination

Accepted/Rejected: Accepted
Homogeneity: Layered
Inseparable
Color: Grey
Texture: Fbrs/Flex
Description: Material
Analysis: PLM

Asbestiform Minerals

% Chrysotile:
% Amosite:
% Crocidolite:
% Tremolite - Actinolite:
% Anthophyllite:
% Total Asbestos: ND

Other Materials

% Cellulose:
% Fiberglass: >50 ≤ 60
% Other Fibers:

% Resin/Binder: >5 ≤ 10
% Non Fibrous: >20 ≤ 30

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Shawn Smythe
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.



SUBMITTED TO:

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

REFERENCE DATA:

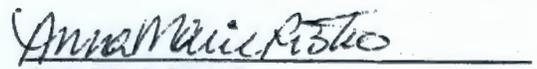
Client Sample No.: J15BX8 through J15BY0
P.O. No.: Not Available
Sample Location: 337
Sample Type: Bulk
Method Reference: EPA/600/R-93/116, ELAP 198.1 (modified),
PLM Analysis with Gravimetric Reduction

DCL Set ID No.: 07-A-4082
DCL Sample ID No.: 07-23107 through 07-23109
Sample Receipt Date: 7/26/07
Preparation Date: 7/27/07 through 7/30/07
Analysis Date: 7/30/07

We certify that the samples indicated on the following data sheet(s) were prepared by gravimetric reduction and analyzed by Polarized Light Microscopy (PLM) for asbestos using a modification of the method, EPA/600/R-93/116, ELAP 198.1, Chatfield Method, for determining the amount and type of asbestos present in bulk building materials. The samples were acceptable upon receipt except where noted.

The samples were examined under a stereomicroscope for general composition and phase separation. 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 hydrochloric acid. Sample weights were tracked through each step in the reduction. Mountings of representative portions of the final residue were prepared in one or more refractive index liquids (1.550, 1.605, 1.680) and examined by Polarized Light Microscopy*. Estimates of concentration are made on an area basis. The results of the analysis apply only to the materials analyzed and are summarized on the attached PLM Asbestos Analysis Data Sheets.


Shawn Smythe
Analyst


Anna Marie Ristich
Reviewer

* Some samples may contain fibers that are not visible by PLM and can only be discovered by electron microscopy techniques. Floor tiles are analyzed as homogeneous materials if insufficient mastic is present or if phases have been cross contaminated.

DataChem Laboratories NVLAP Lab ID: 101917. Laboratory accreditation by the National Institute of Standards and Technology does not in any way constitute approval or endorsement by NVLAP, NIST, or any agency of the federal government.

Samples will be disposed of after 60 days unless instructed otherwise.

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**DataChem Laboratories Analytical Report
PLM Bulk Asbestos Analysis using Gravimetric Reduction**

Client: Washington Closure Hanford
Location: 337
Set ID: 07-A-4082

SAMPLE IDENTIFICATION			
Client ID:	J15BX8	J15BX9	J15BY0
DCL ID:	07-23107	07-23108	07-23109
SAMPLE DESCRIPTION			
Homogeneity:	Layered Inseparable	Layered Inseparable	Layered Inseparable
Color:	Black/Grey	Black/Grey	Black/Grey
Texture:	Resinous/Granular	Resinous/Granular	Resinous/Granular
Description:	Roofing	Roofing	Roofing
SAMPLE PREP			
Starting Weight (g):	1.3466	1.7562	0.9119
Residue Weight (g):	0.4637	0.8460	0.7321
Weight Percent Residue:	34.43	48.17	80.28
PERCENT ASBESTOS DETECTED IN RESIDUE			
Chrysotile:	ND	ND	ND
Grunerite:	ND	ND	ND
Crocidolite:	ND	ND	ND
Actinolite-Tremolite:	ND	ND	ND
Anthophyllite:	ND	ND	ND
TOTAL IN RESIDUE	ND	ND	ND
ASBESTOS PERCENT IN SAMPLE			
	ND	ND	ND

ND = None Detected

TRACE = <1%

*Notes: P. O. #: Not Available.


Shawn Smythe
Analyst


Anna Marie Ristich
Reviewer

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-319	Page 2 of 2		
Collector Mike Stankovich <i>TA Lee</i>		Company Contact Tim Lee		Telephone No. 627-8639		Project Coordinator KESSNER, JH		Price Code 9K	Data Turnaround 7 Days
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli		Sampling Location 337 Building		SAF No. RC-040					
Ice Chest No. <i>Med. Fed Ex Box</i>		Field Logbook No. <i>EL-1518-EL-1603-2</i>		COA See Below		Method of Shipment Federal Express			
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>A070302</i>		Bill of Lading/Air Bill No. See OSPC					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Asbestos</i> 07-A-4082 Special Handling and/or Storage <i>N/A</i>				Preservation None					
				Type of Container G/P					
				No. of Container(s) 1					
				Volume 5g					
SAMPLE ANALYSIS				Asbestos-BULK-EPA					
Sample No.	Matrix *	Sample Date	Sample Time						
J15BY8	23102 OTHER SOLID	7-24-07	1430	X					
J15BY9	23103 OTHER SOLID	7-24-07	1431	X					
J15C00	23104 OTHER SOLID	7-24-07	1432	X					
J15C01	23105 OTHER SOLID	7-24-07	1433	X					
J15C02	23106 OTHER SOLID	7-24-07	1434	X					
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *
Relinquished By/Removed From <i>TA Lee</i>		Date/Time 7-24-07/1440	Received By/Stored In <i>3728 3B</i>		Date/Time 7-24-07/1440				<ul style="list-style-type: none"> S=Soil SE=Sediment SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Trash WT=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>3728# 3B</i>		Date/Time 7-25-07 1200	Received By/Stored In <i>TR Stankovich</i>		Date/Time 7-25-07 1200				
Relinquished By/Removed From <i>WCH</i>		Date/Time 7-25-07 1500	Received By/Stored In <i>Fed Ex</i>		Date/Time				
Relinquished By/Removed From		Date/Time	Received By/Stored In <i>KORRELL</i>		Date/Time 7/26/07/1610				
Relinquished By/Removed From		Date/Time	Received By/Stored In		Date/Time				
Relinquished By/Removed From		Date/Time	Received By/Stored In		Date/Time				
LABORATORY SECTION					Received By <i>KORRELL</i>				Title
FINAL SAMPLE DISPOSITION					Disposal Method				Disposed By <i>7/26/07 1610</i>
					Date/Time				Date/Time

337B

~~BX9~~

~~Roofing, metal, blk tar & gray rock~~

~~BX8~~

~~Roof metal, flashing, blk tar & gray rock~~

~~BY0~~

~~"~~

~~BY1~~

~~FT, 9x9, clean, control room on~~

~~BY2~~

~~hi press vessel insulation, labelled ACM, white, hard fibrous~~

~~BY3~~

~~hi press vessel 4" line, white cotton, fibrous, patch on line~~

~~BY4~~

~~Cable covering, cloth, G'Box wires~~

~~BY5~~

~~hi press vessel, white canvass over pink fiberglass, 1"-2" diameter lines~~

~~BY6~~

~~BY7~~

~~BY8~~

~~BY9~~

~~COO~~

~~Canvass on 12" diameter line "HOT SURFACE" line~~

Assume d. electrical components - high voltage
- HVAC gaskets
- FIRE DOORS

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-319	Page 1 of 3
Collector <i>Mike Stankovitch</i> TA Lee	Company Contact Tim Lee	Telephone No. 627-8639	Project Coordinator KESSNER, JH	Price Code 9K	Data Turnaround 7 Days		
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli	Sampling Location 337 Building	SAF No. RC-040					
Ice Chest No. <i>Med. Fed Ex Box</i>	Field Logbook No. EL-1310 EL-1603-2	COA See Below	Method of Shipment Federal Express				
Shipped To DataChem Laboratories - Cincinnati	Offsite Property No. A070302	Bill of Lading/Air Bill No. See OSPC					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Asbestos</i> Special Handling and/or Storage <i>N/A</i>	Preservation	None					
	Type of Container	G/P					
	No. of Container(s)	1					
	Volume	5g					
SAMPLE ANALYSIS		Asbestos- BULK-EPA					
Sample No.	Matrix *	Sample Date	Sample Time				
J15BX8	23107	OTHER SOLID	7-24-07 1400	X			
J15BX9	23108	OTHER SOLID	7-24-07 1405	X			
J15BY0	23109	OTHER SOLID	7-24-07 1410	X			
J15BY1	23110	OTHER SOLID	7-24-07 1415	X			
J15BY2	23111	OTHER SOLID	7-24-07 1420	X			
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS		
Relinquished By/Removed From <i>TA Lee</i>	Date/Time 7-24-07/1440	Received By/Stored In <i>3728 3B</i>	Date/Time 7-24-07/1440	Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00		Matrix * S=Soil SE=Settlement SO=Solid SI=Sludge W = Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Trace WI=Wipe L=Liquid V=Vegetation X=Other	
Relinquished By/Removed From <i>3728# 3B</i>	Date/Time 7-25-07 1200	Received By/Stored In <i>JR Stambler</i>	Date/Time 7-25-07 1200	Sampling COA - R337B0 1000			
Relinquished By/Removed From <i>JR Stambler</i>	Date/Time 7-25-07 1500	Received By/Stored In <i>Fed Ex</i>	Date/Time				
Relinquished By/Removed From	Date/Time	Received By/Stored In <i>DO Reel</i>	Date/Time 7/26/07 1610	Sampler unavailable to relinquish samples from 3728 Ref # <i>3B</i> . 3728 Custodian removed samples for shipping on <u>7/25/07</u> .			
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time				
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time				
LABORATORY SECTION	Received By <i>DO Reel</i>	Title		Date/Time 7/26/07 1610			
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time			

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-040-319	Page 2 of 2	
Collector Mike Stankovich <i>TA Lee</i>	Company Contact Tim Lee	Telephone No. 627-8639	Project Coordinator KESSNER, JH	Price Code 9K	Data Turnaround 7 Days			
Project Designation 300 Area D&D Waste Characterization Sampling - Other Soli	Sampling Location 337 Building	SAF No. RC-040						
Ice Chest No. <i>Med. Fed Ex Box</i>	Field Logbook No. EL-1518 <i>EL-1603-2</i>	COA See Below	Method of Shipment Federal Express					
Shipped To DataChem Laboratories - Cincinnati	Offsite Property No. <i>A070302</i>	Bill of Lading/Air Bill No. See OSPC						
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Asbestos</i>		Preservation	None					
Special Handling and/or Storage <i>N/A</i>		Type of Container	G/P					
		No. of Container(s)	1					
		Volume	5g					
SAMPLE ANALYSIS		Asbestos-BULK-EPA						
Sample No.	Matrix *	Sample Date	Sample Time					
J15BY3	23112 OTHER SOLID	7-24-07	1425	X				
J15BY4	23113 OTHER SOLID	7-24-07	1426	X				
J15BY5	23114 OTHER SOLID	7-24-07	1427	X				
J15BY6	23115 OTHER SOLID	7-24-07	1428	X				
J15BY7	23116 OTHER SOLID	7-24-07	1429	X				
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS			
Relinquished By/Removed From <i>TA Lee</i>	Date/Time <i>7-24-07/1440</i>	Received By/Stored In <i>3728 3B</i>	Date/Time <i>7-24-07/1440</i>	Laboratory Analysis, Data Management, and Shipping COA - RD4MXX2F00 Sampling COA - R337B0 1000				Matrix * S=Soil SE=Sediment SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Trash WI=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>3728# 3B</i>	Date/Time <i>7-25-07 1200</i>	Received By/Stored In <i>JR Standen</i>	Date/Time <i>7-25-07 1200</i>	Sampler unavailable to relinquish samples from 3728 Ref # <i>3B</i> . 3728 Custodian removed samples for shipping on <i>7/25/07</i> .				
Relinquished By/Removed From <i>JR Standen</i>	Date/Time <i>7-25-07 1500</i>	Received By/Stored In <i>Fed Ex</i>	Date/Time					
Relinquished By/Removed From	Date/Time	Received By/Stored In <i>XORrell</i>	Date/Time <i>7/26/07 1610</i>					
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time					
LABORATORY SECTION	Received By <i>XORrell</i>	Title			Date/Time <i>7/26/07 1610</i>			
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time				