

SAF-RC-006
100-N Ancillary Facilities & 190-DR
Other Solid Sampling for ERDF Waste
Designation
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Tom Edmundson X5-50

KW 4/6/09
INITIAL/DATE

COMMENTS:

SDG 09-A-1527

SAF-RC-006

Rad only

Chem only

Rad & Chem

Complete

Partial

Waste Site(s): 1119-N

RECEIVED
APR 16 2009

EDMC



ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES



Test Report
Page 1 of 5
3/31/09

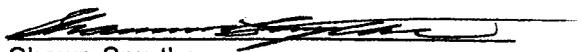
Submitted To: Joan Kessner
Washington Closure Hanford
2620 Fermi Avenue, MSIN H4-21
Richland, WA 99354



REFERENCE DATA:

Client Sample No.: J18LN4 through J18LP8
P.O. No.: Not Available
Sample Location: 1119-N
Sample Type: Bulk
Method Reference: EPA-600/R-93/116
DCL Set ID No.: 09-A-1527
DCL Sample ID No.: 09-07889 through 09-07903
Sample Receipt Date: 3/25/09
Analysis Date: 3/31/09

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. ALS 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.

ALS 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.



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

Client: Washington Closure Hanford
Location: 1119-N

Client Sample ID:	J18LN4	J18LN5	J18LN6	J18LN7	J18LN8
DCL Sample ID:	09-07889	09-07890	09-07891	09-07892	09-07893
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered Inseparable	Homog.	Homog.	Layered Inseparable	Layered Inseparable
Color:	Grey	Grey	Tan	Grey	Grey/Tan
Texture:	Fbrs/Crmbly	Crumbly	Resinous	Flex/Fbrs	Flex/Fbrs
Description:	Material	Material	Mastic	Linoleum	Linoleum/Mastic
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:					
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	ND	ND	ND	ND	ND
Other Materials					
% Cellulose:	>50 ≤ 60	>5 ≤ 10		>20 ≤ 30	>20 ≤ 30
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:			>60 ≤ 70	>5 ≤ 10	>10 ≤ 20
% Non Fibrous:	>30 ≤ 40	>80 ≤ 90	>20 ≤ 30	>50 ≤ 60	>40 ≤ 50

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.



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

Client: Washington Closure Hanford
Location: 1119-N

Client Sample ID:	J18LN9	J18LN9	J18LP0	J18LP1	J18LP2
DCL Sample ID:	09-07894A	09-07894B	09-07895	09-07896	09-07897
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered	Layered	Layered	Layered	Homog.
Color:	Black	Tan	Grey	Grey	Tan
Texture:	Flexible	Flexible	Flex/Fbrs	Flexible	Compact
Description:	Covebase	Mastic	Linoleum	Linoleum	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:		>1 ≤ 3	>10 ≤ 20		
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	ND	>1 ≤ 3	>10 ≤ 20	ND	ND
Other Materials					
% Cellulose:			>5 ≤ 10	>5 ≤ 10	>60 ≤ 70
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:	>20 ≤ 30	>70 ≤ 80	>10 ≤ 20	>10 ≤ 20	
% Non Fibrous:	>60 ≤ 70	>10 ≤ 20	>40 ≤ 50	>60 ≤ 70	>20 ≤ 30

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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


Shawn Smythe
Microscopist

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Wherever possible, separate phases are analyzed and reported individually.



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

Client: Washington Closure Hanford
Location: 1119-N

Client Sample ID:	J18LP3	J18LP4	J18LP4	J18LP5	J18LP6
DCL Sample ID:	09-07898	09-07899A	09-07899B	09-07900	09-07901
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered Inseparable	Layered	Layered	Homog.	Homog.
Color:	Grey/Tan	Tan	Tan	Tan	Grey
Texture:	Crmbly/Fbrs	Fibrous	Resinous	Resinous	Resinous
Description:	Drywall	Material	Material	Mastic	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:			Trace		
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	ND	ND	Trace	ND	ND
Other Materials					
% Cellulose:	>10 ≤ 20	>80 ≤ 90			
% Fiberglass:					
% Other Fibers:				>3 ≤ 5	
% Resin/Binder:			>70 ≤ 80	>60 ≤ 70	>50 ≤ 60
% Non Fibrous:	>70 ≤ 80	>5 ≤ 10	>10 ≤ 20	>20 ≤ 30	>30 ≤ 40

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.



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

Client: Washington Closure Hanford
Location: 1119-N

Client Sample ID:	J18LP7	J18LP8
DCL Sample ID:	09-07902	09-07903
Macroscopic Examination		
Accepted/Rejected:	Accepted	Accepted
Homogeneity:	Homog.	Homog.
Color:	Tan	Grey
Texture:	Compact	Rubbery
Description:	Material	Material
Analysis:	PLM	PLM
Asbestiform Minerals		
% Chrysotile:		
% Amosite:		
% Crocidolite:		
% Tremolite - Actinolite:		
% Anthophyllite:		
% Total Asbestos:	ND	ND
Other Materials		
% Cellulose:	>60 ≤ 70	
% Fiberglass:		
% Other Fibers:		
% Resin/Binder:		>80 ≤ 90
% Non Fibrous:	>20 ≤ 30	>5 ≤ 10

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.

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-006-204	Page 1 of 4
Collector Buckenberger/Moore		Company Contact Mike Stankovich		Telephone No. 430-7142	Project Coordinator KESSNER, JH	Price Code 9K	Data Turnaround 7 Days
Project Designation 100-N Ancillary Facilities & 190-DR Other Solid Sampling f		Sampling Location 1119-N		SAF No. RC-006			
Ice Chest No. <i>Fed Ex Box</i>		Field Logbook No. EL-1516-14	COA RD4MXX2F00	Method of Shipment FED EX			
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>A090148</i>		Bill of Lading/Air Bill No. SEE OSPC			
POSSIBLE SAMPLE HAZARDS/REMARKS <i>PACM</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 <i>09-A-1527</i>		Asbestos- BULK-EPA	<i>PRE 3-24-09</i>				
Sample No. <i>09-</i>	Matrix *	Sample Date	Sample Time				
J18LN4 <i>07889</i>	OTHER SOLID	<i>3-24-09</i>	<i>06:50</i>	<i>X</i>	<i>X</i>		
J18LN5 <i>07890</i>	OTHER SOLID	<i>↓</i>	<i>06:53</i>	<i>X</i>	<i>X</i>		
J18LN6 <i>07891</i>	OTHER SOLID	<i>↓</i>	<i>06:54</i>	<i>X</i>	<i>X</i>		
J18LN7 <i>07892</i>	OTHER SOLID	<i>↓</i>	<i>06:59</i>	<i>X</i>	<i>X</i>		
J18LN8 <i>07893</i>	OTHER SOLID	<i>↓</i>	<i>07:02</i>	<i>X</i>	<i>X</i>		
CHAIN OF POSSESSION		Sign/Print Names		No <i>324/09</i>		SPECIAL INSTRUCTIONS	
Relinquished By/Removed From <i>Cymer Buckenberger</i>	Date/Time <i>3-24-09 09:00</i>	Received By/Stored In <i>M. Stankovich</i>	Date/Time <i>3/24/09 0900</i>	RUSH		Matrix *	
Relinquished By/Removed From <i>M. Stankovich</i>	Date/Time <i>MAR 24 2009 1030</i>	Received By/Stored In <i>J.R. Edmondson</i>	Date/Time <i>3-24-09 1030</i>	<i>TEM if PLM is between 1-5%</i>		S=Soil SE=Settlement SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other	
Relinquished By/Removed From <i>J.R. Edmondson</i>	Date/Time <i>3-24-09 1215</i>	Received By/Stored In <i>Fed Ex</i>	Date/Time <i>3/25/09 1054</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	Title	Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time				

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-006-204		Page 2 of 4	
Collector Buckenberger/Moore		Company Contact Mike Stankovich		Telephone No. 430-7142		Project Coordinator KESSNER, JH		Price Code 9K Data Turnaround 7 Days	
Project Designation 100-N Ancillary Facilities & 190-DR Other Solid Sampling f		Sampling Location 1119-N			SAF No. RC-006				
Ice Chest No. <i>Fred Ex Box</i>		Field Logbook No. EL-1516-14		COA RD4MXX2F00		Method of Shipment FED EX			
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>A090148</i>			Bill of Lading/Air Bill No. SEE OSPC				
POSSIBLE SAMPLE HAZARDS/REMARKS <i>PACM</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					
				<i>1527</i>		<i>APR 3-24-09</i>			
Sample No.	Matrix *	Sample Date	Sample Time						
J18LN9 <i>07874</i>	OTHER SOLID	<i>3-24-09</i>	<i>07:05</i>	<i>X</i>	<i>X</i>				
J18LP0 <i>07875</i>	OTHER SOLID		<i>07:08</i>	<i>X</i>	<i>X</i>				
J18LP1 <i>07876</i>	OTHER SOLID		<i>07:11</i>	<i>X</i>	<i>X</i>				
J18LP2 <i>07877</i>	OTHER SOLID		<i>07:14</i>	<i>X</i>	<i>X</i>				
J18LP3 <i>07878</i>	OTHER SOLID		<i>07:17</i>	<i>X</i>	<i>X</i>				
CHAIN OF POSSESSION		Sign/Print Names		Date/Time		SPECIAL INSTRUCTIONS			
Relinquished By/Removed From		Received By/Stored In		Date/Time		RUSH <i>TEM if PLM is between 1-5%</i>			
<i>Gregory Buckenberger 3-24-09 09:00</i>		<i>Mike Stankovich 3/24/09 0900</i>							
<i>Mike Stankovich MAR 24 2009 1030</i>		<i>J.R. Stankovich 3-24-09 1030</i>							
<i>J.R. Stankovich 3-24-09 1215</i>		<i>Fred Ex</i>							
		<i>3/25/09 1054</i>							
Relinquished By/Removed From		Received By/Stored In		Date/Time		Matrix *			
						S=Soil SE=Sediment SO=Solid SL=Sludge W = Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue Wl=Wipe L=Liquid V=Vegetation X=Other			
Relinquished By/Removed From		Received By/Stored In		Date/Time					
Relinquished By/Removed From		Received By/Stored In		Date/Time					
LABORATORY SECTION		Received By		Title		Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-006-204		Page 3 of 4		
Collector Buckenberger/Moore		Company Contact Mike Stankovich		Telephone No. 430-7142		Project Coordinator KESSNER, JH		Price Code 9K Data Turnaround 7 Days		
Project Designation 100-N Ancillary Facilities & 190-DR Other Solid Sampling f		Sampling Location 1119-N		SAF No. RC-006						
Ice Chest No. <i>Fed Ex Box</i>		Field Logbook No. EL-1516-14		COA RD4MXX2F00		Method of Shipment FED EX				
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. <i>A090148</i>				Bill of Lading/Air Bill No. SEE OSPC				
POSSIBLE SAMPLE HAZARDS/REMARKS <i>PACM</i>			Preservation	None						
Special Handling and/or Storage <i>N/A</i>			Type of Container	G/P						
			No. of Container(s)	1						
			Volume	5g						
				Asbestos-BULK-EPA						
SAMPLE ANALYSIS <i>1527</i>										
Sample No.	Matrix *	Sample Date	Sample Time							
J18LP4	<i>07899</i> OTHER SOLID	<i>3-24-08</i>	<i>07:20</i>	<i>X</i>						
J18LP5	<i>07900</i> OTHER SOLID		<i>07:27</i>	<i>X</i>						
J18LP6	<i>07901</i> OTHER SOLID		<i>07:26</i>	<i>X</i>						
J18LP7	<i>07902</i> OTHER SOLID		<i>07:29</i>	<i>X</i>						
J18LP8	<i>07903</i> OTHER SOLID	<i>V</i>	<i>07:32</i>	<i>X</i>						
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *
Relinquished By/Removed From <i>Cameron Buckenberger</i>		Date/Time <i>3-24-09 09:00</i>		Received By/Stored In <i>MTR Mike Stankovich</i>		Date/Time <i>3/24/09 0900</i>		RUSH <i>TEM of PLM is between 1-5%</i>		S=Soil SE=Sediment SO=Solid SI=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From <i>MTR Mike Stankovich</i>		Date/Time <i>MAR 24 2009 1030</i>		Received By/Stored In <i>J.R. Stankovich</i>		Date/Time <i>3-24-09 1030</i>				
Relinquished By/Removed From <i>J.R. Stankovich</i>		Date/Time <i>3-24-09 1215</i>		Received By/Stored In <i>Fed Ex</i>		Date/Time <i>3/25/09 1054</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>[Signature]</i>		Title		Date/Time				
FINAL SAMPLE DISPOSITION		Disposal Method <i>[Signature]</i>		Disposed By		Date/Time				