

SAF-RC-006
100-N Area D4 – Other Solid Quick Turn
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kevin Finucane X5-50 KW 11/23/09
INITIAL/DATE

Mike Stankovich X5-50 KW 11/23/09
INITIAL/DATE

COMMENTS:

SDG DC0911236 SAF-RC-006

Rad only Chem only Rad & Chem

Complete Partial

Waste Site(s): 105-N Basin/Transfer Area

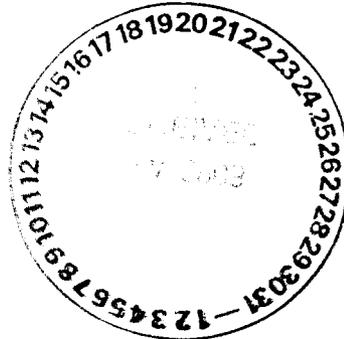
RECEIVED
DEC 07 2009
EDMC

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES



Test Report
Page 1 of 2
11/20/09

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



REFERENCE DATA:

Client Sample No.: J19D19 through J19D24
P.O. No.: N/A
Sample Location: 105-N Basin/Transfer Area
Sample Type: Bulk
Method Reference: EPA-600/R-93/116
ALS Work Order No.: DC 0911236
ALS Sample ID No.: 0911236-01 through 0911236-06
Sample Receipt Date: 11/13/09
Analysis Date: 11/20/09

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 Laboratory Group will dispose of all bulk samples after 60 days unless other arrangements are made.


Shawn Smythe
Analyst


for 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 Laboratory Group Environmental Division (Cincinnati) 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 Laboratory Group
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 105-N Basin/Transfer Area

Client Sample ID: J19D22
ALS Sample ID: 0911236-04

Macroscopic Examination

Accepted/Rejected: Accepted
Homogeneity: Homog.
Color: Grey
Texture: Crumbly
Description: Material
Analysis: PLM

Asbestiform Minerals

% Chrysotile:
% Amosite:
% Crocidolite:
% Tremolite - Actinolite:
% Anthophyllite:

% Total Asbestos: ND

Other Materials

% Cellulose:
% Fiberglass:
% Other Fibers:

% Resin/Binder:
% Non Fibrous: >90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: Sample numbers J19D19, J19D20, J19D21, J19D23 and J19D24 were prepared by gravimetric reduction.

*Notes: P. O. #: N/A.


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

Test Report
Page 1 of 2
11/20/09

REFERENCE DATA:

Client Sample No.: J19D19 through J19D24
P.O. No.: N/A
Sample Location: 105-N Basin/Transfer Area
Sample Type: Bulk
Method Reference: EPA/600/R-93/116, ELAP 198.1 (modified),
PLM Analysis with Gravimetric Reduction

ALS Workorder No.: DC 0911236
ALS Sample ID No.: 0911236-01 through 0911236-06
Sample Receipt Date: 11/13/09
Preparation Date: 11/19/09 through 11/20/09
Analysis Date: 11/20/09

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


for 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. ALS Laboratory Group (Cincinnati) 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.



**ALS Laboratory Group Analytical Report
PLM Bulk Asbestos Analysis using Gravimetric Reduction**

Client: Washington Closure Hanford
Location: 105-N Basin/Transfer Area

SAMPLE IDENTIFICATION					
Client ID:	J19D19	J19D20	J19D21	J19D23	J19D24
ALS ID:	0911236-01	0911236-02	0911236-03	0911236-05	0911236-06
SAMPLE DESCRIPTION					
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Black	Black	Black	Black	Black
Texture:	Resinous	Resinous	Resinous	Resinous	Resinous
Description:	Roofing	Roofing	Roofing	Roofing	Roofing
SAMPLE PREP					
Starting Weight (g):	1.6019	1.7099	0.6868	2.3276	1.3859
Residue Weight (g):	1.0953	0.7520	0.4322	0.3031	0.0327
Weight Percent Residue:	68.38	43.98	62.93	13.02	2.36
PERCENT ASBESTOS DETECTED IN RESIDUE					
Chrysotile:	0.2	0.2	0	0.5	3
Grunerite:	0	0	0	0	0
Crocidolite:	0	0	0	0	0
Actinolite-Tremolite:	0	0	0	0	0
Anthophyllite:	0	0	0	0	0
TOTAL IN RESIDUE	0.2	0.2	ND	0.5	3.0
ASBESTOS PERCENT IN SAMPLE					
	0.1	0.1	ND	0.1	0.1

ND = None Detected

TRACE = <1%

*Notes: P. O. #: N/A.


Shawn Smythe
Analyst


Anna Marie Ristich
Reviewer

0911236

Washington Closure Hanford
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST
 Collector: *Mike Stankovich*
 Project Designation: 105-N Area D4 - Other Solid Quick Turn
 Ice Chest No. Fed Ex Box
 Shipped To: ALS Laboratories - Cincinnati
 POSSIBLE SAMPLE HAZARDS/REMARKS: ACM
 Special Handling and/or Storage: Asbestos

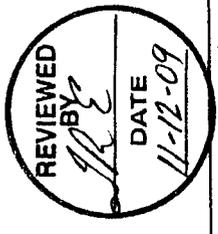
Sample No.	Matrix *	Sample Date	Sample Time	Preservation	Type of Container	No. of Container(s)	Volume	None	Asbestos-BULK-EPA
J19D19	OTHER SOLID	11-11-09	09:00		G/P	1	5g		
J19D20	OTHER SOLID	11-11-09	09:10						
J19D21	OTHER SOLID	11-11-09	09:15						
J19D22	OTHER SOLID	11-11-09	09:25						
J19D23	OTHER SOLID	11-11-09	09:30						

CHAIN OF POSSESSION

Relinquished By/Removed From: <i>Jim Murbach</i>	Date/Time: 11-11-09 10:10	Received By/Stored In: <i>Mike Stankovich</i>	Date/Time: 11-11-09 15:00
Relinquished By/Removed From: <i>Mike Stankovich</i>	Date/Time: 11-11-09 15:00	Received By/Stored In: <i>J. E. Bernhart</i>	Date/Time: 11-11-09
Relinquished By/Removed From: <i>J. E. Bernhart</i>	Date/Time: 11-12-09	Received By/Stored In: <i>FED EX</i>	Date/Time: 11-13-09
Relinquished By/Removed From:	Date/Time:	Received By/Stored In:	Date/Time:
Relinquished By/Removed From:	Date/Time:	Received By/Stored In:	Date/Time:

SPECIAL INSTRUCTIONS

LABORATORY SECTION
 Received By: *AMS* Title: 1113109 1010
FINAL SAMPLE DISPOSITION
 Disposed Method: *Fealx*
 Disposed By: *Fealx*



- Matrix ***
- S=Soil
 - SE=Settlement
 - SG=Sludge
 - SL=Sludge
 - W=Water
 - O=Oil
 - A=Air
 - DS=Drum Spills
 - DL=Drum Leaks
 - T=Tank
 - WL=Wipe
 - L=Liquid
 - V=Vegetation
 - X=Other

0911236

Washington Closure Hanford		RC-006-224		Page 2 of 2																																																																			
Collector <i>WJ</i> <i>11/11/09</i> <i>Mar back</i>		Price Code 9K		Data Turnaround 7 Days																																																																			
Project Designation 100-N Area D4 - Other Solid Quick Turn		Project Coordinator KESSNER, JH		SAF No. RC-006																																																																			
Company Contact Mike Stankovich		Telephone No. 430-7142		Method of Shipment FED EX																																																																			
Sampling Location 105-N Basin/Transfer Area		COA RD4MXX2F00		Bill of Lading/Air Bill No. SEE OSPC																																																																			
Field Logbook No. EL-1516-16		Offsite Property No. A10052																																																																					
Shipped To ALS Laboratories - Cincinnati																																																																							
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Special Handling and/or Storage Asbestos																																																																							
Sample No.	Matrix *	Sample Date	Sample Time	Name																																																																			
J19D24	OTHER SOLID	11-11-09	09:35	GP																																																																			
J19D25	OTHER SOLID			1																																																																			
J19D26	OTHER SOLID			5g																																																																			
J19D27	OTHER SOLID			Asbestos-BULK-EPA																																																																			
J19D28	OTHER SOLID																																																																						
SAMPLE ANALYSIS																																																																							
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Matrix *
S=Soil
SL=Sludgment
SO=Solid
SH=Sludge
W=Water
O=Oil
A=Air
DL=Drum Liquid
TL=Tray
WV=Wipe
L=Liquid
V=Vegetative
X=Other