0096783

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

COMPLETE COPY OF DATA PACKAGE TO:

No Distribution Required KW 5/19/11
INITIAL/DATE

COMMENTS:

SDG DC1104689 SAF-RC-040

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location/Waste Site: Building 326

RECEIVED
MAY 3 1 2011
EDMC

DC1104689

ALS Environmental

12-May-2011

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

Tel: 509-375-4688
Fax: 509-372-9651

Re: Building 326

Work Order: **1104689**

Dear Joan,

ALS Environmental received 10 samples on 28-Apr-2011 10:27 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Anna Ristich

Electronically approved by: Anna Ristich

Anna Ristich
Project Manager

ALS Environmental Date: 12-May-11

Client: Washington Closure Hanford
Project: Building 326
Work Order: **1104689**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1104689-01	J1H272	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-02	J1H273	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-03	J1H274	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-04	J1H275	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-05	J1H276	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-06	J1H277	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-07	J1H278	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-08	J1H279	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-09	J1H280	Bulk		4/26/2011	4/28/2011 10:27	☐
1104689-10	J1H281	Bulk		4/26/2011	4/28/2011 10:27	☐

Client: Washington Closure Hanford
Project: Building 326
Work Order: 1104689

Case Narrative

Estimates of concentration are made on an area basis.

Trace = <1%

Wherever possible, separate phases are analyzed and reported individually.

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.

The Federal Register Vol. 55, No. 224, Tuesday Nov. 20 1990 Rules and Regulations, as clarified by the memo of May 8, 1991, Clarification of Asbestos NESHAP Requirement to Perform Point Counting states "...if the analyst detects asbestos in the sample and estimates the amount by visual estimation to be less than 10%, the owner or operator of the building may (1) elect to assume the amount to be greater than 1% and treat the material as asbestos-containing material or (2) require verification of the amount by point counting." Any of the samples tested can be reanalyzed by point counting or an equivalent estimation technique at the client's request.

ALS Laboratory Group Environmental Divison (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 Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-01A
Client Sample ID: J1H272

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Yellow/Black			
Description	Material			
Homogeneity	Layered/Inseparable			
Texture	Fibrous/Resinous			
Other Materials			**E600/R-93/116**	
Cellulose	ND	%		
Fiberglass	>50<=60	%		
Non-fibrous	>5<=10	%		
Other fibers	ND	%		
Resin/binder	>20<=30	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	>3<=5	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**>3<=5**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-02A
Client Sample ID: J1H273

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Black/Yellow			
Description	Material			
Homogeneity	Layered/Inseparable			
Texture	Resinous/Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	ND	%		
Fiberglass	>20<=30	%		
Non-fibrous	>5<=10	%		
Other fibers	ND	%		
Resin/binder	>40<=50	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	>5<=10	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**>5<=10**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-03A
Client Sample ID: J1H274

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Black			
Description	Material			
Homogeneity	Homogeneous			
Texture	Resinous/Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	ND	%		
Fiberglass	>10<=20	%		
Non-fibrous	>5<=10	%		
Other fibers	ND	%		
Resin/binder	>50<=60	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	>5<=10	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**>5<=10**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-04A
Client Sample ID: J1H275

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Black			
Description	Material			
Homogeneity	Homogeneous			
Texture	Crumbly/Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	ND	%		
Fiberglass	>10<=20	%		
Non-fibrous	>5<=10	%		
Other fibers	ND	%		
Resin/binder	>50<=60	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	>5<=10	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**>5<=10**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-05A
Client Sample ID: J1H276

Collection Date: 4/26/2011
Matrix: BULK

Analyses	Result	Units		Analytical Results
Asbestos by PLM with Ashing				Date Analyzed **5/11/2011**
Macroscopic Examination	Prep Date:	**5/11/2011**	**E600/R-93/116**	Analyst: **SMS**
Color	Black			
Description	Roofing			
Homogeneity	Homogeneous			
Texture	Resinous			
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Lab ID: 1104689-06A
Client Sample ID: J1H277

Collection Date: 4/26/2011
Matrix: BULK

Analyses	Result	Units		Analytical Results
Asbestos by PLM with Ashing				Date Analyzed **5/11/2011**
Macroscopic Examination	Prep Date:	**5/11/2011**	**E600/R-93/116**	Analyst: **SMS**
Color	Black			
Description	Roofing			
Homogeneity	Homogeneous			
Texture	Resinous			
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-07A
Client Sample ID: J1H278

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM with Ashing				Date Analyzed **5/11/2011**
Macroscopic Examination	Prep Date:	**5/11/2011**	**E600/R-93/116**	Analyst: **SMS**
Color	Black/Tan			
Description	Roofing			
Homogeneity	Layered/Inseparable			
Texture	Resinous/Fibrous			
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-08A
Client Sample ID: J1H279

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Grey			
Description	Material			
Homogeneity	Homogeneous			
Texture	Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	>60<=70	%		
Fiberglass	>20<=30	%		
Non-fibrous	ND	%		
Other fibers	ND	%		
Resin/binder	ND	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-09A
Client Sample ID: J1H280

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Yellow/Grey			
Description	Material			
Homogeneity	Layered/Inseparable			
Texture	Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	>50<=60	%		
Fiberglass	>30<=40	%		
Non-fibrous	ND	%		
Other fibers	ND	%		
Resin/binder	ND	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Note:

ALS Environmental

Date: *12-May-11*

Client: Washington Closure Hanford
Project: Building 326

Work Order: 1104689

Lab ID: 1104689-10A
Client Sample ID: J1H281

Collection Date: 4/26/2011
Matrix: BULK

Analytical Results

Analyses	Result	Units		
Asbestos by PLM				Date Analyzed **5/9/2011**
Macroscopic Examination	Prep Date: **5/9/2011**		**E600/R-93/116**	Analyst: **SMS**
Color	Grey			
Description	Material			
Homogeneity	Homogeneous			
Texture	Fibrous			
Other Materials			**E600/R-93/116**	
Cellulose	>60<=70	%		
Fiberglass	>20<=30	%		
Non-fibrous	ND	%		
Other fibers	ND	%		
Resin/binder	ND	%		
Asbestiform Minerals			**E600/R-93/116**	
Amosite	ND	%		
Anthophyllite	ND	%		
Chrysotile	ND	%		
Crocidolite	ND	%		
Tremolite - actinolite	ND	%		
Total asbestos	**ND**	**%**		

Note:

Client: Washington Closure Hanford
Project: Building 326
WorkOrder: **1104689**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit

Units Reported	Description
%	

ALS Environmental

Sample Receipt Checklist

Client Name: **WASHINGTON-RICHLAND** Date/Time Received: **28-Apr-11 10:27**

Work Order: **1104689** Received by: **JNW**

Checklist completed by Jan Wilcox (eSignature) 28-Apr-11 (Date) Reviewed by: Kelsey Kennedy (eSignature) 28-Apr-11 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-040-602	Page 1 of 2
Collector: Inions/Deroos/Repko	Company Contact: Mike Stankovich	Telephone No.: 5094307142	Project Coordinator: KESSNER, JH	Price Code: 9K — Data Turnaround: 7 Days
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: Building 326		SAF No.: RC-040	
Ice Chest No.: NA	Field Logbook No.: EL-1518-19	COA: RD4MXX2F00	Method of Shipment: ~~Hand Deliver~~ Fed Ex MD 4/26/11	
Shipped To: ~~Test America Richland (IH)~~ ALS Cincinnati MD 4/26/11	Offsite Property No.: NA		Bill of Lading/Air Bill No.: ~~NA~~ AJ 4-27-11 7970 3383 4736	

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

1104689

~~1104689~~ 4/28/11

Preservation	None											
Type of Container	G/P											
No. of Container(s)	1											
Volume	60g											
SAMPLE ANALYSIS	Asbestos-Bulk - NIOSH 9002											

MD 4/26/11

Sample No.	Matrix *	Sample Date	Sample Time									
J1H272 14 01	OTHER SOLID	4 ~~12~~-26-11	1248	X								
J1H273 12 02	OTHER SOLID	↓	1249	X								
J1H274 13 03	OTHER SOLID	↓	1252	X								
J1H275 14 04	OTHER SOLID	↓	1255	X								
J1H276 15 05	OTHER SOLID	↓	1256	X								

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	Matrix *
Relinquished By/Removed From: James R DeRoos Date/Time: 4-26-11 1345	Received By/Stored In: MZ MStankovich Date/Time: 4/26/11 1345	None	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: MZ MStankovich Date/Time: 4/27/11 0640	Received By/Stored In: A. Freier Date/Time: 4-27-11 0640		
Relinquished By/Removed From: A. Freier Date/Time: 4-27-11 0830	Received By/Stored In: Fed Ex Date/Time:		
Relinquished By/Removed From: Fed Ex Date/Time:	Received By/Stored In: [signature] Date/Time: 4/28/11 1027		
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:		
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:		

REVIEWED BY JEB DATE 4-27-11

LABORATORY SECTION	Received By: [signature]	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-040-602	Page 2 of 2

Collector: Inions/Deroos/Repko	Company Contact: Mike Stankovich	Telephone No.: 5094307142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: Building 326		SAF No.: RC-040
Ice Chest No.: NA	Field Logbook No.: EL-1518-19	COA: RD4MXX2F00	Method of Shipment: ~~Hand Deliver~~ Fed Ex
Shipped To: MS 4/26/11 ~~Test America Richland (IH)~~ ALS - Cincinnati	Offsite Property No.: NA		Bill of Lading/Air Bill No.: ~~NA~~ AJ 4-26-11 7970 3383 4736

Price Code: 9K

Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

1104689

~~H0468~~ 7/5/2011

Preservation	None											
Type of Container	G/P											
No. of Container(s)	1											
Volume	60g											
SAMPLE ANALYSIS	Asbestos-Bulk - NIOSH 9002											

MS 4/26/11

Sample No.	Matrix *	Sample Date	Sample Time									
J1H277 06 16 4/26/11	OTHER SOLID	4 ~~12~~-26-11	1301	X								
J1H278 07 17	OTHER SOLID		1302	X								
J1H279 08 18	OTHER SOLID		1304	X								
J1H280 09 19	OTHER SOLID		1306	X								
J1H281 10 29	OTHER SOLID		1308	X								

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
James Deroos [signature]	4-26-11 1345	MZW MStankovich	4/26/11 1345
MZW MStankovich	4/27/11 0640	A. Freier A. Freier	4-27-11 0640
WCH A. Freier A. Freier	4-27-11 0800	Fed Ex	

SPECIAL INSTRUCTIONS

None

REVIEWED BY JEB DATE 4-27-11

Matrix *

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011