0085584

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

COMPLETE COPY OF DATA PACKAGE TO:

No Distribution Required KW 3/30/10
INITIAL/DATE

COMMENTS:

SDG DC1003480 SAF-RC-040

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location/Waste Site: 324

RECEIVED
APR 05 2010
EDMC

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

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

REFERENCE DATA:

Client Sample No.:	J19V33 through J19V73
P.O. No.:	N/A
Sample Location:	324
Sample Type:	Bulk
Method Reference:	EPA-600/R-93/116
ALS Work Order No.:	LC1003480
ALS Sample ID No.:	1003480-01 through 1003480-41
Sample Receipt Date:	3/17/10
Analysis Date:	3/24/10 through 3/26/10

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 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 Laboratory Group
4388 Glendale-Milford Road, Cincinnati, Ohio 45242
Phone (513) 733 5336 Fax (513) 733 5347 www.alsenviro.com
A Campbell Brothers Limited Company

ALS Laboratory Group
Polarized Light Microscopy
Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V33	J19V34	J19V35	J19V36	J19V37
ALS Sample ID:	1003480-01	1003480-02	1003480-03	1003480-04	1003480-05
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Crumbly	Crumbly	Crumbly	Crumbly	Crumbly
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:					
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:					
% Non Fibrous:	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*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.

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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V38	J19V39	J19V40	J19V41	J19V42
ALS Sample ID:	1003480-06	1003480-07	1003480-08	1003480-09	1003480-10
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Grey	Grey	Brown	Grey	Grey
Texture:	Flexible	Flexible	Flexible	Flexible	Flexible
Description:	Covebase	Material	Covebase	Material	Tile
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:					
% Other Fibers:					
% Resin/Binder:	>20 ≤ 30	>50 ≤ 60	>20 ≤ 30	>50 ≤ 60	>20 ≤ 30
% Non Fibrous:	>60 ≤ 70	>30 ≤ 40	>60 ≤ 70	>30 ≤ 40	>60 ≤ 70

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V43	J19V44	J19V44	J19V45	J19V46
ALS Sample ID:	1003480-11	1003480-12A	1003480-12B	1003480-13	1003480-14
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Layered	Layered	Homog.	Homog.
Color:	Black	Grey	Grey	Grey	Grey
Texture:	Resinous	Flexible	Flexible	Flexible	Crumbly
Description:	Material	Covebase	Mastic	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:					
% Other Fibers:					
% Resin/Binder:	>50 ≤ 60	>20 ≤ 30	>50 ≤ 60	>50 ≤ 60	
% Non Fibrous:	>30 ≤ 40	>60 ≤ 70	>30 ≤ 40	>30 ≤ 40	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V47	J19V47	J19V48	J19V49	J19V50
ALS Sample ID:	1003480-15A	1003480-15B	1003480-16	1003480-17	1003480-18
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered	Layered	Homog.	Homog.	Homog.
Color:	Black	Brown	Brown	Grey	Grey
Texture:	Flexible	Crumbly	Crumbly	Crumbly	Crumbly
Description:	Covebase	Mastic	Mastic	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:					
% Amosite:					>1 ≤ 3
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	**ND**	**ND**	**ND**	**ND**	**>1 ≤ 3**
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:		Trace	>1 ≤ 3		
% Resin/Binder:	>20 ≤ 30	>70 ≤ 80	>70 ≤ 80		
% Non Fibrous:	>60 ≤ 70	>10 ≤ 20	>10 ≤ 20	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V51	J19V52	J19V53	J19V54	J19V55
ALS Sample ID:	1003480-19	1003480-20	1003480-21	1003480-22	1003480-23
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered Inseparable	Homog.	Layered Inseparable	Layered Inseparable	Layered Inseparable
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Crumbly	Crumbly	Crumbly	Crumbly	Crumbly
Description:	Plaster/Skim	Material	Plaster/Skim	Plaster/Skim	Plaster/Skim
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:					
% Other Fibers:					
% Resin/Binder:					
% Non Fibrous:	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V56	J19V57	J19V58	J19V59	J19V59
ALS Sample ID:	1003480-24	1003480-25	1003480-26	1003480-27A	1003480-27B
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered Inseparable	Layered Inseparable	Layered Inseparable	Layered	Layered
Color:	Grey	Grey/Tan	Grey/Tan	Grey	Tan
Texture:	Crumbly	Fbrs/Crmby	Fbrs/Crmby	Flexible	Flexible
Description:	Plaster/Skim	Carpet	Carpet	Covebase	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:					
% Fiberglass:					
% Other Fibers:		>60 ≤ 70	>60 ≤ 70		
% Resin/Binder:		>10 ≤ 20	>10 ≤ 20	>20 ≤ 30	>60 ≤ 70
% Non Fibrous:	>90 ≤ 100	>5 ≤ 10	>5 ≤ 10	>60 ≤ 70	>20 ≤ 30

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V60	J19V61	J19V62	J19V63	J19V63
ALS Sample ID:	1003480-28	1003480-29	1003480-30	1003480-31A	1003480-31B
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Layered Inseparable	Homog.	Layered	Layered
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Crumbly	Crumbly	Crumbly	Crumbly	Crumbly
Description:	Mastic	Plaster/Skim	Material	Plaster	Skimcoat
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:	>1 ≤ 3				
% Amosite:					
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	**>1 ≤ 3**	**ND**	**ND**	**ND**	**ND**
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:	>50 ≤ 60				
% Non Fibrous:	>30 ≤ 40	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

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Microscopist

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ALS Laboratory Group
Polarized Light Microscopy
Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V64	J19V65	J19V66	J19V67	J19V68
ALS Sample ID:	1003480-32	1003480-33	1003480-34	1003480-35	1003480-36
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Layered Inseparable	Homog.	Layered Inseparable	Layered Inseparable	Homog.
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Crumbly	Crumbly	Crumbly	Crumbly	Crumbly
Description:	Plaster/Skim	Material	Plaster/Skim	Plaster/Skim	Skimcoat
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:					
% Other Fibers:					
% Resin/Binder:					
% Non Fibrous:	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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ALS Laboratory Group
Polarized Light Microscopy
Asbestos Analytical Report

Client: Washington Closure Hanford
Location: 324

Client Sample ID:	J19V69	J19V70	J19V71	J19V72	J19V73
ALS Sample ID:	1003480-37	1003480-38	1003480-39	1003480-40	1003480-41
Macroscopic Examination					
Accepted/Rejected:	Accepted	Accepted	Accepted	Accepted	Accepted
Homogeneity:	Homog.	Homog.	Homog.	Homog.	Homog.
Color:	Grey	Grey	Grey	Grey	Grey
Texture:	Crumbly	Cmpt/Fbrs	Rubbery	Crumbly	Crumbly
Description:	Skimcoat	Transite	Material	Material	Material
Analysis:	PLM	PLM	PLM	PLM	PLM
Asbestiform Minerals					
% Chrysotile:	Trace	>10 ≤ 20			
% Amosite:					Trace
% Crocidolite:					
% Tremolite - Actinolite:					
% Anthophyllite:					
% Total Asbestos:	**Trace**	**>10 ≤ 20**	**ND**	**ND**	**Trace**
Other Materials					
% Cellulose:					
% Fiberglass:					
% Other Fibers:					
% Resin/Binder:					
% Non Fibrous:	>90 ≤ 100	>70 ≤ 80	>30 ≤ 40 >50 ≤ 60	>90 ≤ 100	>90 ≤ 100

ND = None Detected Trace = <1%

Special Prep Procedures: None.

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

Shawn Smythe
Microscopist

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1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 1 of 9 | MD 31610

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: Fed Ex Box	Field Logbook No.: EL-1518-12	COA: RD4MXX2F00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A100059		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K | Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

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										
J19V33	01	OTHER SOLID	3/16/10	7:45	X									
J19V34	02	OTHER SOLID	3/16/10	7:48	X									
J19V35	03	OTHER SOLID	3/16/10	7:51	X									
J19V36	04	OTHER SOLID	3/16/10	7:54	X									
J19V37	05	OTHER SOLID	3/16/10	7:57	X									

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Jim Murbach	3/16/10 10:30	mstankovich	3/16/10 1030
mstankovich	3/16/10 1230	J.E. Bernal	3-16-10 1230
J.E. Bernal	3-16-10 1235	FED EX	
		ALS	3/17/10 1031

SPECIAL INSTRUCTIONS

REVIEWED BY mto DATE 3/16/10

Matrix *: S Soil; SE Sediment; SO Solid; SL Sludge; W Water; O Oil; A Air; DS Drum Solid; DL Drum Liquid; 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

1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 1 of 9 | MD 3/16/10

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: FED EX BOX	Field Logbook No.: EL-1518-12	COA: RD4MXX2L00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A100059		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K | Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

none

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										
J19V38	06	OTHER SOLID	3/16/10	8:00	x									
J19V39	07	OTHER SOLID	3/16/10	8:03	x									
J19V40	08	OTHER SOLID	3/16/10	8:06	x									
J19V41	09	OTHER SOLID	3/16/10	8:09	x									
J19V42	10	OTHER SOLID	3/16/10	8:12	x									

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

Relinquished By Removed From	Date/Time	Received By/Stored In	Date/Time
J Murbach	3/16/10 10:30	MStankovich	1030 3/16/10
Relinquished By Removed From WCH	Date/Time 1230	Received By/Stored In	Date/Time
MStankovich	3/16/10	Fed Ex	
Relinquished By Removed From	Date/Time	Received By/Stored In	Date/Time 3/17/10 1021
Relinquished By Removed From	Date/Time	Received By/Stored In	Date/Time
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

REVIEWED BY DEB DATE 3-16-10

Matrix *: S Soil; SE Sediment; SO Solid; SL Sludge; W Water; O Oil; A Air; DS Drum Solid; DL Drum Liquid; T Tissue; WI Wipe; L Liquid; V Vegetation; O Other

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

WCH-EE-011

1063480

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-040-444	Page 1 of 1/9

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KLESSNER, JH
Project Designation: 300 Area DI Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: FED EX BOX	Field Logbook No.: 11-1518-12	COA: RD4MXX2F00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A10056 SY		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K

Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

SAMPLE ANALYSIS

Preservation	None												
Type of Container	G/P												
No. of Container(s)	1												
Volume	2g												
	Asbestos BULK EPA												

Sample No		Matrix *	Sample Date	Sample Time	Asbestos BULK EPA									
J19V43	11	OTHER SOLID	3/16/10	8:15	X									
J19V44	12	OTHER SOLID	3/16/10	8:18	X									
J19V45	13	OTHER SOLID	3/16/10	8:21	X									
J19V46	14	OTHER SOLID	3/16/10	8:24	X									
J19V47	15	OTHER SOLID	3/16/10	8:27	X									

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Murbach	3/16/10 10:30	MStankovich	3/16/10 1030
MStankovich	3/16/10 1030	Fed Ex	
			3/17/10 1031

SPECIAL INSTRUCTIONS

REVIEWED BY JES DATE 3/16/10

Matrix *: S Soil; SL Sediment; SO Solid; SL Sludge; W Water; O Oil; A Air; Dr Drum Solid; Dl Drum Liquid; F Foam; W 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

1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 4 of 19 | MA 3160

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: FED EX BOX	Field Logbook No.: FL 1518-12	COA: RD3MXX2F00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A100057		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K | Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	2g										
SAMPLE ANALYSIS	Asbestos BULK EPA										

Sample No.		Matrix *	Sample Date	Sample Time										
J19V48	16	OTHER SOLID	3/16/10	8:30	X									
J19V49	17	OTHER SOLID	3/16/10	8:33	X									
J19V50	18	OTHER SOLID	3/16/10	8:36	X									
J19V51	19	OTHER SOLID	3/16/10	8:39	X									
J19V52	20	OTHER SOLID	3/16/10	8:42	X									

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Murbach	3/16/10 10:30	MStankovich	3/16/10 1030
MStankovich	3/16/10 1230	Fed Ex	
		[illegible]	3/17/10 1031

SPECIAL INSTRUCTIONS

REVIEWED BY [illegible] DATE [illegible]

Matrix *: A - Seal; SD - Sediment; SO - Solid; SL - Sludge; W - Water; G - Gas; A - Air; DS - Drum Solid; DL - Drum Liquid; T - Tissue; WI - Wipe; L - Liquid; V - Vegetation; N - Other

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

WCH-EE-011

1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 1 of 1 | MO 31610

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: FED EX BOX	Field Logbook No.: EL-1518-12	COA: RD4MXX2F00	Method of Shipment: FedEx
Shipped To: AES Laboratories - Cincinnati	Offsite Property No.: A-1000 57		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K

Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

Preservation	None									
Type of Container	G/P									
No. of Container(s)	1									
Volume	Sp									
SAMPLE ANALYSIS	Asbestos BULK EPA									

Sample No.		Matrix *	Sample Date	Sample Time										
J19V53	21	OTHER SOLID	3/16/10	8:45	X									
J19V54	22	OTHER SOLID	3/16/10	8:48	X									
J19V55	23	OTHER SOLID	3/16/10	8:51	X									
J19V56	24	OTHER SOLID	3/16/10	8:54	X									
J19V57	25	OTHER SOLID	3/16/10	8:57	X									

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
J Murbach	3/16/10 10:30	MTStankovich	3/16/10 1030
MTStankovich	3/16/10 1230	Fed Ex	
		[illegible]	3/17/10 1031

SPECIAL INSTRUCTIONS

REVIEWED BY JEB DATE 3-16-10

Matrix *: Soil, SE Sediment, SO Solid, SL Sludge, W Water, O Oil, A Air, DO Drum Solid, DL Drum Liquid, T Tissue, WI Wipe, L Liquid, V Vegetation, X Other

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

WCH-EE-011

1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444

Collector: Jim Murbach

Company Contact: Mike Stankovich

Telephone No.: 430-7142

Project Coordinator: KESSNER, JH

Price Code: 9K

Data Turnaround: 7 Days

Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid

Sampling Location: 324

SAF No.: RC-040

Ice Chest No.: Fed Ex Box

Field Logbook No.: EE-1518-12

COA: RD4MXX2F00

Method of Shipment: FedEx

Shipped To: ALS Laboratories - Cincinnati

Offsite Property No.: A100059

Bill of Lading/Air Bill No.: See OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

Preservation	None										
Type of Container	GP										
No. of Container(s)	1										
Volume	2										
SAMPLE ANALYSIS	Asbestos BULK EPA										

Sample No.		Matrix *	Sample Date	Sample Time										
J19V58	26	OTHER SOLID	3/16/10	9:00	X									
J19V59	27	OTHER SOLID	3/16/10	9:03	X									
J19V60	28	OTHER SOLID	3/16/10	9:06	X									
J19V61	29	OTHER SOLID	3/16/10	9:09	X									
J19V62	30	OTHER SOLID	3/16/10	9:12	X									

CHAIN OF POSSESSION

Sign/Print Names

Relinquished By Removed From	Date Time	Received By Stored In	Date Time
Jim Murbach	3/16/10 10:30	MStankovich	3/16/10 1030
MStankovich	3/16/10 1230	J.E. Bernhe	3-16-10 1230
J.E. Bernhe	3-16-10 1235	FED EX	
Fed Ex		[signature]	3/17/10 6:31

SPECIAL INSTRUCTIONS

REVIEWED BY [signature] DATE 3/16/10

Matrix *: S Soil, SE Soil/Sediment, SO Solid, SL Sludge, W Water, O Oil, A Air, DS Drum Solid, DL Drum Liquid, T Tissue, WI Wipe, L Liquid, V Vegetation, X Other

LABORATORY SECTION: Received By [signature] Title Date Time

FINAL SAMPLE DISPOSITION: Disposal Method Disposed By Date Time

WCH-EE-011

1003460

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 1 of 9

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: FedEx Box	Field Logbook No.: EL-1518-12	COA: RD4MXX2F00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A100059		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K

Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

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										
J19V63	31	OTHER SOLID	3/16/10	9:15	X									
J19V64	32	OTHER SOLID	3/16/10	9:18	X									
J19V65	33	OTHER SOLID	3/16/10	9:21	X									
J19V66	34	OTHER SOLID	3/16/10	9:24	X									
J19V67	35	OTHER SOLID	3/16/10	9:27	X									

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

Relinquished By / Removed From	Date Time	Received By / Stored In	Date Time
Jim Murbach	3/16/10 10:30	MStankovich	3/16/10 1030
MStankovich	3/16/10 1230	J. E. Bernhard	3-16-10 1230
J. E. Bernhard	3-16-10 1235	FED EX	
		ALS	3/17/10 1031

SPECIAL INSTRUCTIONS

REVIEWED BY MTS DATE 3/16/10

Matrix *: S - Soil; SD - Sediment; SO - Solid; SL - Sludge; SW - Water; O - Oil; A - Air; DS - Drum Solid; DL - Drum Liquid; T - Tissue; WL - Wipe; U - Liquid; V - Vegetation; X - Other

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

WCH-EE 011

1003480

mo 3160

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444

Page 1 of 1 of 9

Collector Jim Murbach	**Company Contact** Mike Stankovich	**Telephone No.** 430-7142	**Project Coordinator** KESSNER, JH
Project Designation 300 Area DI Waste Characterization Sampling - Other Solid	**Sampling Location** 324		**SAF No.** RC-040
Ice Chest No. FED EX BOX	**Field Logbook No.** FL-1518-12	**COA** RD4MXX2F00	**Method of Shipment** FedEx
Shipped To ALS Laboratory - Cincinnati	**Offsite Property No.** 41202557		**Bill of Lading/Air Bill No.** See OSPC

Price Code 9K

Data Turnaround 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

NONE

SAMPLE ANALYSIS

Preservation	None													
Type of Container	GP													
No. of Container(s)	1													
Volume	50													
	Asbestos BULK EPA													

Sample No.	Matrix *	Sample Date	Sample Time											
J19V68 36	OTHER SOLID	3/16/10	9:30	X										
J19V69 37	OTHER SOLID	3/16/10	9:33	X										
J19V70 38	OTHER SOLID	3/16/10	9:36	X										
J19V71 39	OTHER SOLID	3/16/10	9:39	X										
J19V72 40	OTHER SOLID	3/16/10	9:42	X										

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Murbach	3/16/10 10:30	MZK MStankovich	1030 3/16/10
MStankovich WCH	3/16/10 1230	Fed Ex	
		ALS	3/17/10 1031

Sign/Print Names

SPECIAL INSTRUCTIONS

REVIEWED BY JEK DATE 3/18/10

Matrix *

Air	
Groundwater	
Surface Water	
Soil/Solid	
Sludge	
Water	
Oil	
Air	
Drum Solid	
Drum Liquid	
Tank Liquid	
Tank Sludge	
Liquid	
Vegetation	
Other	

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

WCH-EE-011

1003480

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-040-444 | Page 9 of 9 | MS 3/16/10

Collector: Jim Murbach	Company Contact: Mike Stankovich	Telephone No.: 430-7142	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Characterization Sampling - Other Solid	Sampling Location: 324		SAF No.: RC-040
Ice Chest No.: [illegible]	Field Logbook No.: EE-1518-12	COA: RD4MXX2F00	Method of Shipment: FedEx
Shipped To: ALS Laboratories - Cincinnati	Offsite Property No.: A100057		Bill of Lading/Air Bill No.: See OSPC

Price Code: 9K | Data Turnaround: 7 Days

POSSIBLE SAMPLE HAZARDS/REMARKS

Asbestos

Special Handling and/or Storage

None

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	5g										
SAMPLE ANALYSIS	Asbestos BULK EPA										

JM 3/16/10

Sample No		Matrix *	Sample Date	Sample Time										
J19V73	41	OTHER SOLID	3/16/10	9:45	X									
J19V74	42	OTHER SOLID												
J19V75	43	OTHER SOLID												
J19V76	44	OTHER SOLID												
J19V77	45	OTHER SOLID												

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

Relinquished By Removed From	Date Time	Received By Stored In	Date Time
J Murbach / Jim Murbach	3/16/10 10:30	MStankovich	3/16/10 1030
MStankovich	3/16/10 1230	Fed Ex	
		GACS	3/17/10 1051

SPECIAL INSTRUCTIONS

REVIEWED BY JEA DATE 3-16-10

Matrix *: [illegible]

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

WCH-EE-011