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

COMPLETE COPY OF DATA PACKAGE TO:

Bill Rodgers X9-08 KW 11/27/12
INITIAL/DATE

COMMENTS:

SDG MA05851 SAF-RC-006

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site(s): 151-B Substation Building

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Asbestos PLM
Cover Sheet

Sample Date: November 19, 2012
Receipt Date: November 19, 2012
Reporting Date: November 24, 2012
SDG #: MA05851
SAF#: RC-006
Data Deliverable: 7 Day Turn

Customer Sample Number	Laboratory Sample Number	Analytical Batch Identification	Sample Matrix
J1R5W2	MXD1E	2324116	OTHER
J1R5W3	MXD1F	2324116	OTHER
J1R5W4	MXD1G	2324116	OTHER
J1R5W5	MXD1H	2324116	OTHER
J1R5W6	MXD1J	2324116	OTHER
J1R5W7	MXD1K	2324116	OTHER
J1R5W8	MXD1L	2324116	OTHER
J1R5W9	MXD1M	2324116	OTHER
J1R5X0	MXD1N	2324116	OTHER
J1R5X1	MXD1P	2324116	OTHER

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Dennis O'Neill
Project Manager

We certify that the following samples were prepared by Polarized Light Microscopy for asbestos and other fibrous constituents using TestAmerica's procedure, RL-ASB-002. The samples were acceptable upon receipt except where noted. Mountings of fibers observed and representative portions of the material were 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 portions of materials analyzed and are summarized on the attached Asbestos PLM analysis data sheet. TestAmerica will dispose of all bulk samples after 60 days unless other arrangements are made.

*Some samples may contain fibers that are not visible by PLM and can only be discovered by electron microscopy techniques.

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			
Sample ID	**MXD1E1AA**				
Client ID	J1R5W2				
Macroscopic examination					
Sample Description	**Multiple Layer Sample: tar paper**	**Multiple Layer Sample: wood**	**TOTAL SAMPLE ***		
Homogeneous	Y	Y	N		
Color	black	brown	black/brown		
% Visible Fibers	30	90	50		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophylite	ND	ND	ND		
% Total Asbestos	**ND**	**ND**	**ND**		
Other Materials					
% Cellulose	23	90	50		
% Glass Fibers	7	ND	3		
% Other fibers	ND	ND	ND		
% Non-fibrous	70	10	47		

Comments:
**** The sample contains 2 distinct homogeneous layers which were analyzed and reported separately.***
The total asbestos content (calculated as weighted average) of the sample is reported as well.

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116_2
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			

Sample ID	**MXD1F1AA**	**MXD1G1AA**	**MXD1J1AA**	**MXD1K1AA**	**MXD1L1AA**
Client ID	J1R5W3'	J1R5W4'	J1R5W6'	J1R5W7'	J1R5W8'
Macroscopic examination					
Sample Description	cloth	tar and spray paint	caulk	tar and tar paper	wall and paint
Homogeneous	Y	Y	Y	N	N
Color	beige/green	black/white	black	black	white/gray
% Visible Fibers	100	10	0	30	0
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	5	4	ND	ND
% Amosite	ND	ND	ND	ND	ND
% Crocidolite	ND	ND	ND	ND	ND
% Tremolite	ND	ND	ND	ND	ND
% Actinolite	ND	ND	ND	ND	ND
% Anthophylite	ND	ND	ND	ND	ND
% Total Asbestos	**ND**	**5**	**4**	**ND**	**ND**
Other Materials					
% Cellulose	ND	ND	ND	10	ND
% Glass Fibers	ND	4	ND	ND	ND
% Other fibers	100	ND	ND	ND	ND
% Non-fibrous	ND	91	96	90	100

Comments:

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116_3
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			
Sample ID	**MXD1H1AA**				
Client ID	J1R5W5*				
Macroscopic examination					
Sample Description	**Multiple Layer Sample: tar paper**	**Multiple Layer Sample: wood**	**TOTAL SAMPLE ***		
Homogeneous	Y	Y	N		
Color	black	brown	black/brown		
% Visible Fibers	30	90	50		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophylite	ND	ND	ND		
% Total Asbestos	**ND**	**ND**	**ND**		
Other Materials					
% Cellulose	23	90	50		
% Glass Fibers	2	ND	TRA		
% Other fibers	ND	ND	ND		
% Non-fibrous	75	10	50		

Comments:
**** The sample contains 2 distinct homogeneous layers which were analyzed and reported separately.***
The total asbestos content (calculated as weighted average) of the sample is reported as well.

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116_4
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			
Sample ID	**MXD1M1AA**				
Client ID	J1R5W9				
Macroscopic examination					
Sample Description	**Multiple Layer Sample: tar paper**	**Multiple Layer Sample: wood**	**TOTAL SAMPLE ***		
Homogeneous	Y	Y	N		
Color	black	brown	black/brown		
% Visible Fibers	30	90	50		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophylite	ND	ND	ND		
% Total Asbestos	**ND**	**ND**	**ND**		
Other Materials					
% Cellulose	8	70	50		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	92	30	50		

Comments:
**** The sample contains 2 distinct homogeneous layers which were analyzed and reported separately. The total asbestos content (calculated as weighted average) of the sample is reported as well.***

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116_5
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			
Sample ID	**MXD1N1AA**				
Client ID	J1R5X0'				
Macroscopic examination					
Sample Description	**Multiple Layer Sample: tar paper**	**Multiple Layer Sample: wood**	**TOTAL SAMPLE ***		
Homogeneous	Y	Y	N		
Color	black	brown	black/brown		
% Visible Fibers	70	95	80		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophylite	ND	ND	ND		
% Total Asbestos	**ND**	**ND**	**ND**		
Other Materials					
% Cellulose	37	80	80		
% Glass Fibers	2	ND	TRA		
% Other fibers	ND	ND	ND		
% Non-fibrous	61	20	20		

Comments:
**** The sample contains 2 distinct homogeneous layers which were analyzed and reported separately. The total asbestos content (calculated as weighted average) of the sample is reported as well.***

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2324116_6
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05851
Date:	11/20/12	Revision 2			
Sample ID	**MXD1P1AA**				
Client ID	J1R5X1'				
Macroscopic examination					
Sample Description	**Multiple Layer Sample: tar paper**	**Multiple Layer Sample: wood**	**TOTAL SAMPLE ***		
Homogeneous	Y	Y	N		
Color	black	brown	black/brown		
% Visible Fibers	30	90	60		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophylite	ND	ND	ND		
% Total Asbestos	**ND**	**ND**	**ND**		
Other Materials					
% Cellulose	20	67	60		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	80	33	40		

Comments:
**** The sample contains 2 distinct homogeneous layers which were analyzed and reported separately. The total asbestos content (calculated as weighted average) of the sample is reported as well.***

Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-006-380	Page 1 of 2
Collector James DeRoos	**Company Contact** Bill Rodgers	**Telephone No.** 206.251.7439	**Project Coordinator** KESSNER, JH	**Price Code** 9K / **Data Turnaround** 7 Days
Project Designation 100-N Area D4 - Other	**Sampling Location** 151-B Substation Building		**SAF No.** RC-006	
Ice Chest No. NA	**Field Logbook No.** EL-1516-21	**COA** RD4MXX2F00	**Method of Shipment** Hand Deliver	
Shipped To Test America Richland (IH)	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

ASBESTOS

Special Handling and/or Storage

None

J2K190429

MA05851

Due 11-26-12

J2K190429

Preservation	None									
Type of Container	G/P									
No. of Container(s)	1									
Volume	5g									
	Asbestos-Bulk - NIOSH 9002									

Sample No.	Matrix *	Sample Date	Sample Time								
J1R5W2 MXD1E	OTHER	11-19-12	0951	X							
J1R5W3 MXD1F	OTHER	11-19-12	1000	X							
J1R5W4 MXD16	OTHER	11-19-12	1005	X							
J1R5W5 MXD1H	OTHER	11-19-12	1012	X							
J1R5W6 MXD1J	OTHER	11-19-12	1020	X							

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time 1300 11-19-12	Received By/Stored In W.H. Rodgers	Date/Time 1300 11-19-12
Relinquished By/Removed From W.H. Rodgers	Date/Time 1500 11-19-12	Received By/Stored In A. Freier	Date/Time 1500 11-19-12
Relinquished By/Removed From A. Freier	Date/Time 11-19-12 1520	Received By/Stored In J. Bock TALS	Date/Time 1520 11-19-12
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

None

REVIEWED BY CMB DATE 11-19-12

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

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-006-380	Page 2 of 2
Collector James DeRoos	**Company Contact** Bill Rodgers	**Telephone No.** 206.251.7439	**Project Coordinator** KESSNER, JH	**Price Code** 9K **Data Turnaround** 7 Days
Project Designation 100-N Area D4 - Other	**Sampling Location** 151-B Substation Building		**SAF No.** RC-006	
Ice Chest No. NA	**Field Logbook No.** EL-1516-21	**COA** RD4MXX2F00	**Method of Shipment** Hand Deliver	
Shipped To Test America Richland (IH)	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA	

POSSIBLE SAMPLE HAZARDS/REMARKS
ASBESTOS

Special Handling and/or Storage
None

J2K190429

MAD5851
Due 11-26-12

SAMPLE ANALYSIS

Preservation	None												
Type of Container	G/P												
No. of Container(s)	1												
Volume	5g												
	Asbestos-Bulk - NIOSH 9002												
Sample No.	Matrix *	Sample Date	Sample Time										
J1R5W7 mXD1K	OTHER	11-19-12	1024	X									
J1R5W8 mXD1L	OTHER	11-19-12	1026	X									
J1R5W9 mXD1M	OTHER	11-19-12	1030	X									
J1R5X0 mXD1N	OTHER	11-19-12	1038	X									
J1R5X1 mXD1P	OTHER	11-19-12	1050	X									

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
James R DeRoos	11-19-12 1300	WH Rodgers WHR	11-19-12 1300
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
WH Rodgers WHR	11-19-12 1500	A. Freier A. Freier	11-19-12 1500
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
A. Freier A. Freier	WHR 11-19-12 1520	TALS J. Bock	11-19-12 1530
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
None

REVIEWED BY CMB DATE 11-19-12

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