

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

COMPLETE COPY OF DATA PACKAGE TO:

Bill Rodgers

X9-08

KW 11/15/12
INITIAL/DATE

COMMENTS:

SDG MA05805

SAF-RC-006

Rad only

Chem only

Rad & Chem

Complete

Partial

Waste Site(s): 151-B Substation Building

Asbestos PLM Cover Sheet

Sample Date: November 06, 2012
Receipt Date: November 07, 2012
Reporting Date: November 14, 2012
SDG #: MA05805
SAF#: RC-006
Data Deliverable: 7 Day Turn

Customer Sample Number	Laboratory Sample Number	Analytical Batch Identification	Sample Matrix
J1R2X7	MW89T	2313080	OTHER
J1R2X8**	MW89V	2313080	OTHER
J1R2X9	MW89W	2313080	OTHER
J1R300	MW89X	2313080	OTHER
J1R301	MW890	2313080	OTHER
J1R302	MW891	2313080	OTHER
J1R303	MW892	2313080	OTHER
J1R304	MW893	2313080	OTHER
J1R305	MW894	2313080	OTHER
J1R306	MW895	2313080	OTHER
J1R307	MW896	2313080	OTHER
J1R308	MW897	2313080	OTHER
J1R309	MW898	2313081	OTHER
J1R310	MW899	2313081	OTHER
J1R311	MW9AA	2313081	OTHER
J1R312	MW9AC	2313081	OTHER
J1R313	MW9AD	2313081	OTHER
J1R314	MW9AE	2313081	OTHER
J1R315	MW9AF	2313081	OTHER
J1R316	MW9AG	2313081	OTHER
J1R317	MW9AH	2313081	OTHER
J1R318	MW9AJ	2313081	OTHER
J1R319	MW9AK	2313081	OTHER

(** Sample J1R2X8 had no sample in the container and was not analyzed.)

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.

Comment

** Sample J1R2X8 had no sample in the container and was not analyzed.

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2313080
Analyst Signature:	<i>DP</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Macroscopic examination					
Sample ID	MW89T1AA	MW89V1AA	MW89X1AA	MW8931AA	MW8941AA
Client ID	J1R2X7'	J1R2X8'	J1R300'	J1R304'	J1R305'
Sample Description	insulation and rubber	NO SAMPLE IN THE CONTAINER	transite board	insulation and rubber	insulation and rubber
Homogeneous	N		Y	N	N
Color	white		gray	white	white
% Visible Fibers	60		30	60	60
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	40		15	50	50
% Amosite	20		ND	15	10
% Crocidolite	ND		ND	ND	ND
% Tremolite	ND		ND	ND	ND
% Actinolite	ND		ND	ND	ND
% Anthophyllite	ND		ND	ND	ND
% Total Asbestos	60		15	65	60
Other Materials					
% Cellulose	ND		ND	ND	ND
% Glass Fibers	ND		ND	ND	ND
% Other fibers	ND		ND	ND	ND
% Non-fibrous	40		85	35	40

Comments:

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

TA Richland
Asbestos PLM

Analyst:	D. Petty	SOP Information	Method	Batch #	2313080_2
Analyst Signature:	<i>[Signature]</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/14/12	Revision 2			
Sample ID MW89W1AA					
Client ID J1R2X9'					
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: transite board</u>	<u>Multiple Layer Sample: paint and wall</u>	TOTAL SAMPLE *		
Homogeneous	Y	N	N		
Color	gray	white	gray/white		
% Visible Fibers	40	0	30		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	30	ND	28		
% Amosite	ND	ND	ND		
% Crocidolite	8	ND	7		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	38	ND	35		
Other Materials					
% Cellulose	ND	TRA	TRA		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	62	100	65		

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 #	2313080_3
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Sample ID					
MW8901AA					
Client ID					
J1R301'					
Macroscopic examination					
Sample Description	<u>Multiple Layer</u> <u>Sample: insulation</u> <u>paper</u>	<u>Multiple Layer</u> <u>Sample: fiber mesh</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	gray	white	gray/white		
% Visible Fibers	90	100	95		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	70	ND	68		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	70	ND	68		
Other Materials					
% Cellulose	5	78	3		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	25	22	29		

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 #	2313080_4
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Macroscopic examination					
Sample ID	MW8911AA				
Client ID	J1R302'				
Sample Description	<u>Multiple Layer Sample: insulation paper</u>	<u>Multiple Layer Sample: fiber mesh</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	gray	white	gray/white		
% Visible Fibers	90	100	95		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	90	ND	90		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	90	ND	90		
Other Materials					
% Cellulose	5	97	8		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	5	3	2		

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 #	2313080_5
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Sample ID MW8921AA					
Client ID J1R303					
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: insulation paper</u>	<u>Multiple Layer Sample: fiber mesh and paint</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	gray	white	gray/white		
% Visible Fibers	90	90	90		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	90	ND	88		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	90	ND	88		
Other Materials					
% Cellulose	ND	90	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	10	10	7		

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 #	2313080_6
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Macroscopic examination					
Sample ID	MW8951AA	MW8971AA			
Client ID	J1R306'	J1R308'			
Sample Description	insulation and rubber	plastic and paper insulation			
Homogeneous	N	N			
Color	white	white			
% Visible Fibers	60	60			
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	20	60			
% Amosite	50	ND			
% Crocidolite	ND	ND			
% Tremolite	ND	ND			
% Actinolite	ND	ND			
% Anthophyllite	ND	ND			
% Total Asbestos	70	60			
Other Materials					
% Cellulose	ND	ND			
% Glass Fibers	ND	ND			
% Other fibers	ND	ND			
% Non-fibrous	30	40			

Comments:

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

**TA Richland
Asbestos PLM**

Analyst:	D. Petty	SOP Information	Method	Batch #	2313080_7
Analyst Signature:	<i>[Signature]</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/11/12	Revision 2			
Sample ID MW8961AA					
Client ID J1R307					
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: insulation paper</u>	<u>Multiple Layer Sample: fiber mesh</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	gray	white	gray/white		
% Visible Fibers	90	100	92		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	70	ND	68		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	70	ND	68		
Other Materials					
% Cellulose	5	98	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	25	2	27		

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 #	2313081
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID MW8981AA					
Client ID J1R309'					
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: insulation</u>	<u>Multiple Layer Sample: fiber mesh</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	white	white	white		
% Visible Fibers	80	90	82		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	60	ND	58		
% Amosite	30	ND	28		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	90	ND	86		
Other Materials					
% Cellulose	ND	95	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	10	5	9		

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 #	2313081_2
Analyst Signature:	<i>[Signature]</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID					
Sample ID	MW8991AA				
Client ID	J1R310'				
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: insulation paper</u>	<u>Multiple Layer Sample: fiber mesh</u>	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	white	white	white		
% Visible Fibers	90	100	95		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	90	ND	90		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	90	ND	90		
Other Materials					
% Cellulose	ND	95	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	10	5	5		

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 #	2313081_3
Analyst Signature:	<i>[Signature]</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID	MW9AA1AA				
Client ID	J1R311'				
Macroscopic examination					
Sample Description	Multiple Layer Sample: insulation paper	Multiple Layer Sample: fiber mesh	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	white	white	white		
% Visible Fibers	90	90	90		
PEM Analysis					
Asbestiform Minerals					
% Chrysotyle	90	ND	90		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	90	ND	90		
Other Materials					
% Cellulose	ND	90	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	10	10	5		

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 #	2313081 4
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Macroscopic Examination					
Sample ID	MW9AC1AA				
Client ID	J1R312'				
Sample Description	<u>Multiple Layer</u> Sample: tile	<u>Multiple Layer</u> Sample: mastic and paint	TOTAL SAMPLE *		
Homogeneous	Y	N	N		
Color	beige	gray/yellow	multi		
% Visible Fibers	0	0	0		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	ND	ND	ND		
Other Materials					
% Cellulose	ND	TRA	TRA		
% Glass Fibers	ND	ND	ND		
% Other fibers	2	ND	TRA		
% Non-fibrous	98	100	100		

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 #	2313081 5
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID					
MW9AD1AA					
Client ID					
J1R313'					
Macroscopic examination					
Sample Description	<u>Multiple Layer</u> Sample: tile	<u>Multiple Layer</u> Sample: mastic	TOTAL SAMPLE *		
Homogeneous	Y	Y	N		
Color	beige	brown	beige/brown		
% Visible Fibers	0	0	0		
PLM Analysis					
Asbestos Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	ND	ND	ND		
Other Materials					
% Cellulose	ND	ND	ND		
% Glass Fibers	ND	ND	ND		
% Other fibers	2	ND	TRA		
% Non-fibrous	98	100	100		

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 #	2313081_6
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Macroscopic examination					
Sample ID	MW9AE1AA	MW9AF1AA			
Client ID	J1R314'	J1R315'			
Sample Description	ceiling tile and paint	ceiling tile and paint			
Homogeneous	N	N			
Color	gray/white	gray/white			
% Visible Fibers	30	30			
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND			
% Amosite	ND	ND			
% Crocidolite	ND	ND			
% Tremolite	ND	ND			
% Actinolite	ND	ND			
% Anthophyllite	ND	ND			
% Total Asbestos	ND	ND			
Other Materials					
% Cellulose	10	23			
% Glass Fibers	17	13			
% Other fibers	ND	ND			
% Non-fibrous	73	64			

Comments:

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

**TA Richland
Asbestos PLM**

Analyst:	D. Petty	SOP Information	Method	Batch #	2313081_7
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Macroscopic examination					
Sample ID	MW9AG1AA				
Client ID	J1R316				
Sample Description	<u>Multiple Layer Sample: molding and mastic</u>	<u>Multiple Layer Sample: paper and mastic</u>	TOTAL SAMPLE *		
Homogeneous	N	N	N		
Color	black	brown	black/brown		
% Visible Fibers	0	85	5		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	ND	ND	ND		
Other Materials					
% Cellulose	ND	67	5		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	100	33	95		

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 #	2313081_8
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID					
MW9AH1AA					
Client ID					
J1R317					
Macroscopic examination					
Sample Description	<u>Multiple Layer Sample: molding</u>	<u>Multiple Layer Sample: mastic</u>	TOTAL SAMPLE *		
Homogeneous	N	N	N		
Color	black	brown	black/brown		
% Visible Fibers	0	0	0		
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND		
% Amosite	ND	ND	ND		
% Crocidolite	ND	ND	ND		
% Tremolite	ND	ND	ND		
% Actinolite	ND	ND	ND		
% Anthophyllite	ND	ND	ND		
% Total Asbestos	ND	ND	ND		
Other Materials					
% Cellulose	ND	ND	ND		
% Glass Fibers	ND	ND	ND		
% Other fibers	ND	ND	ND		
% Non-fibrous	100	100	100		

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 #	2313081_9
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID MW9AJ1AA					
Client ID J1R318'					
Macroscopic examination					
Sample Description	<u>Multiple layer sample: paper and paint</u>	<u>Multiple layer sample: paper</u>	<u>Multiple layer sample: powder</u>	TOTAL SAMPLE *	
Homogeneous	N	Y	Y	N	
Color	brown/white	white	white	brown/white	
% Visible Fibers	80	90	2	20	
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND	ND	
% Amosite	ND	ND	ND	ND	
% Crocidolite	ND	ND	ND	ND	
% Tremolite	ND	ND	ND	ND	
% Actinolite	ND	ND	ND	ND	
% Anthophyllite	ND	ND	ND	ND	
% Total Asbestos	ND	ND	ND	ND	
Other Materials					
% Cellulose	80	80	TRA	30	
% Glass Fibers	ND	ND	ND	ND	
% Other fibers	ND	ND	ND	ND	
% Non-fibrous	20	20	100	70	

Comments:

*** The sample contains 3 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 #	2313081_10
Analyst Signature:	<i>DJ</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05805
Date:	11/12/12	Revision 2			
Sample ID	MW9AK1AA				
Client ID	J1R319'				
Macroscopic examination					
Sample Description	<u>Multiple layer sample: paper and paint</u>	<u>Multiple layer sample: paper</u>	<u>Multiple layer sample: powder</u>	TOTAL SAMPLE *	
Homogeneous	N	Y	Y	N	
Color	white	gray	white	gray/white	
% Visible Fibers	80	90	2	10	
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND	ND	
% Amosite	ND	ND	ND	ND	
% Crocidolite	ND	ND	ND	ND	
% Tremolite	ND	ND	ND	ND	
% Actinolite	ND	ND	ND	ND	
% Anthophyllite	ND	ND	ND	ND	
% Total Asbestos	ND	ND	ND	ND	
Other Materials					
% Cellulose	60	97	ND	10	
% Glass Fibers	ND	ND	2	TRA	
% Other fibers	ND	ND	ND	ND	
% Non-fibrous	40	3	98	90	

Comments:

*** The sample contains 3 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%"

5 WMR
11-6-12

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-006-368	Page 2 of 6
Collector James DeRoos		Company Contact Bill Rodgers		Telephone No. 206.251.7439		Project Coordinator KESSNER, JH	
Project Designation 100-N Area D4 - Other		Sampling Location 151-B Substation Building		SAF No. RC-006		Price Code 9K Data Turnaround 7 Days	
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. See OSPC 11-7-12 comb NA			
POSSIBLE SAMPLE HAZARDS/REMARKS ASBESTOS Special Handling and/or Storage None JAK070457 MA05805 Due 11-14-12 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			
J1R302 MW891		OTHER	11-6-12	0926	X		
J1R303 MW892		OTHER	11-6-12	0930	X		
J1R304 MW893		OTHER	11-6-12	0932	X		
J1R305 MW894		OTHER	11-6-12	0945	X		
J1R306 MW895		OTHER	11-6-12	0947	X		
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
James DeRoos		11-6-12 1400		Bill Rodgers		11-6-12 1400	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Bill Rodgers		11-7-12 1500		Bill Rodgers		11-7-12 1500	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Bill Rodgers		11-7-12 1510		Bill Rodgers		11-7-12 1510	
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	



- 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

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			RC-006-368	Page 2 of 8
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. See OSCP 11-7-12 cm B NA	

POSSIBLE SAMPLE HAZARDS/REMARKS ASBESTOS Special Handling and/or Storage None JAK070457 MA05805 Due 11-14-12	Preservation	None											
	Type of Container	G/P											
	No. of Container(s)	1											
	Volume	5g											
SAMPLE ANALYSIS		Asbestos-Bulk - NIOSH 9002											

Sample No.	Matrix *	Sample Date	Sample Time										
J1R307 MW896	OTHER	11-6-12	0949	X									
J1R308 MW897	OTHER	11-6-12	0954	X									
J1R309 MW898	OTHER	11-6-12	0956	X									
J1R310 MW899	OTHER	11-6-12	0959	X									
J1R311 MW9AA	OTHER	11-6-12	1005	X									

CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix * S=Soil SE=Sediment 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	Date/Time	Received By/Stored In	Date/Time	None				
James DeRoos	11-6-12 1400	Bill Rodgers	11-6-12 1400					
Bill Rodgers	11-7-12 1500	John Bingham	11-7-12 1500					
John Bingham	11-7-12 1510	J. Beck	11-7-12 1510					
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					



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-006-368		Page 4 of 8		
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. <i>NA</i>		Field Logbook No. EL-1516-21		COA RD4MXX2F00		Method of Shipment Hand Deliver				
Shipped To Test America Richland (IH)		Offsite Property No. <i>NA</i>			Bill of Lading/Air Bill No. See OSPE <i>11-7-12 umb NA</i>					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>ASBESTOS</i>				Preservation	None					
Special Handling and/or Storage <i>None</i>				Type of Container	G/P					
<i>JAK070457</i>				No. of Container(s)	1					
<i>MA05805</i>				Volume	5g					
<i>Due 11-14-12</i>				Asbestos-Bulk - NIOSH 9002						
SAMPLE ANALYSIS										
Sample No.	Matrix *	Sample Date	Sample Time							
J1R312 <i>mw9AC</i>	OTHER	<i>11-6-12</i>	<i>1007</i>	X						
J1R313 <i>mw9AD</i>	OTHER	<i>11-6-12</i>	<i>1009</i>	X						
J1R314 <i>mw9AE</i>	OTHER	<i>11-6-12</i>	<i>1012</i>	X						
J1R315 <i>mw9AF</i>	OTHER	<i>11-6-12</i>	<i>1015</i>	X						
J1R316 <i>mw9AG</i>	OTHER	<i>11-6-12</i>	<i>1019</i>	X						
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS				
Relinquished By/Removed From <i>James DeRoos</i>		Date/Time <i>11-6-12 1400</i>		Received By/Stored In <i>Bill Rodgers</i>		Date/Time <i>11-6-12 1400</i>		None		Matrix * S=Soil SE=Sediment 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>Bill Rodgers</i>		Date/Time <i>11-7-12 1500</i>		Received By/Stored In <i>Bill Rodgers</i>		Date/Time <i>11-7-12 1500</i>				
Relinquished By/Removed From <i>Bill Rodgers</i>		Date/Time <i>11-7-12 1510</i>		Received By/Stored In <i>J. Beck</i>		Date/Time <i>11-7-12 1510</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				
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-006-368	Page 5 of 2 with 11-6-12		
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. <i>NA</i>		Field Logbook No. EL-1516-21		COA RD4MXX2F00		Method of Shipment Hand Deliver			
Shipped To Test America Richland (IH)		Offsite Property No. <i>NA</i>		Bill of Lading/Air Bill No. See OSEC <i>NA</i> 11-7-12 <i>UMB</i>					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>ASBESTOS</i>			Preservation	None					
Special Handling and/or Storage <i>None</i>			Type of Container	G/P					
<i>JAK070457</i>			No. of Container(s)	1					
<i>MA05805</i>			Volume	5g					
<i>Due 11-14-12</i>				Asbestos-Bulk - NIOSH 9002					
SAMPLE ANALYSIS									
Sample No.	Matrix *	Sample Date	Sample Time						
J1R317 <i>mw9AH</i>	OTHER	<i>11-6-12</i>	<i>1021</i>	X					
J1R318 <i>mw9AJ</i>	OTHER	<i>11-6-12</i>	<i>1024</i>	X					
J1R319 <i>mw9AK</i>	OTHER	<i>11-6-12</i>	<i>1026</i>	X					
J1R320	OTHER								
J1R321	OTHER								
CHAIN OF POSSESSION			Sign/Print Names		SPECIAL INSTRUCTIONS				
Relinquished By/Removed From		Date/Time	Received By/Stored In		None				
<i>James DeRoos</i>		<i>11-6-12 1400</i>	<i>Bill Rodgers</i>						
<i>Bill Rodgers</i>		<i>11-7-12 1500</i>	<i>Chris Bingham</i>						
<i>Chris Bingham</i>		<i>11-7-12 1510</i>	<i>J. Back</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	
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				

Sample Check-in List

Date/Time Received: 11-7-12 / 1510 Container GM Screen Result: (Airlock) .06 Initials [B]
 Sample GM Screen Result (Sample Receiving) .04 Initials [B]

Client: WCH SDG #: MA05805 NA [] SAF #: RC-006 NA []

Lot Number: JAK070457

Chain of Custody # RC-006-368

Shipping Container ID: hand deliv. NA [] Air Bill Number: _____ NA [B]

Samples received inside shipping container/cooler/box Yes [B]] Continue with 1 through 4. Initial appropriate response.
 No []] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]]
- 3. Cooler temperature: _____ °C NA [B]]
- 4. Vermiculite/packing materials is NA [B]] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [B]] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 23
- 7. Containers received: 23 x bag

8. Sample holding times exceeded? NA [] Yes [] No [B]]

9. Samples have:
[B] tape hazard labels
[B] custody seals appropriate sample labels

10. Matrix:
[B] A (FLT, Wipe, Solid, Soil) _____ I (Water)
 _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples:
[B] are in good condition _____ are leaking
 _____ are broken _____ have air bubbles (Only for samples requiring no head space)
 Other _____

12. Sample pH appropriate for analysis requested Yes [] No [] NA [B]]
 (If acidification is necessary, then document sample ID, initial pH, amount of HNO₃ added and pH after addition on table overleaf)

RPL ID # of preservative used : _____

13. Were any anomalies identified in sample receipt? Yes [] No [B]]

14. Description of anomalies (include sample numbers): NA [B]

