

SAF-RC-189
100N Field Remediation –
Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21

KW 10/30/12
INITIAL/DATE

COMMENTS:

SDG MA05734

SAF-RC-189

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location: 116-N-2 Verification

Asbestos PLM Cover Sheet

Sample Date: October 18, 2012
Receipt Date: October 22, 2012
Reporting Date: October 29, 2012
SDG #: MA05734
SAF#: RC-189
Data Deliverable: 7 Day Turn

Customer Sample Number	Laboratory Sample Number	Analytical Batch Identification	Sample Matrix
J1R3R1	MW3GJ	2297146	SOIL
J1R3R2	MW3GL	2297146	SOIL
J1R3R3	MW3M	2297146	SOIL
J1R3R4	MW3GN	2297146	SOIL
J1R3R5	MW3GP	2297146	SOIL
J1R3R6	MW3GQ	2297146	SOIL
J1R3R7	MW3GR	2297146	SOIL
J1R3R8	MW3GT	2297146	SOIL
J1R3R9	MW3GW	2297146	SOIL
J1R3T0	MW3GX	2297146	SOIL
J1R3T1	MW3G0	2297146	SOIL
J1R3T2	MW3G1	2297146	SOIL
J1R3T3	MW3G2	2297146	SOIL

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 #	2297146
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05734
Date:	10/25/12	Revision 2			
Macroscopic examination					
Sample ID	MW3GJ1AA	MW3GL1AA	MW3GM1AA	MW3GN1AA	MW3GP1AA
Client ID	J1R3R1'	J1R3R2'	J1R3R3'	J1R3R4'	J1R3R5'
Sample Description	soil and stones	soil and stones	soil and stones	soil and stones	soil and stones
Homogeneous	N	N	N	N	N
Color	brown/gray	brown/gray	brown/gray	brown/gray	brown/gray
% Visible Fibers	0	0	0	0	0
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND	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
% Anthophyllite	ND	ND	ND	ND	ND
% Total Asbestos	ND	ND	ND	ND	ND
Other Materials					
% Cellulose	ND	ND	ND	ND	ND
% Glass Fibers	ND	ND	ND	ND	ND
% Other fibers	ND	ND	ND	ND	ND
% Non-fibrous	100	100	100	100	100

Comments:

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

**TA Richland
Asbestos PLM**

Analyst:	D. Petty	SOP Information	Method	Batch #	2297146 2
Analyst Signature:	<i>[Signature]</i>	RL-ASB-002	NIOSH 9002	SDG #	MA05734
Date:	10/25/12	Revision 2			
Macroscopic Examination					
Sample ID	MW3GQ1AA	MW3GR1AA	MW3GT1AA	MW3GW1AA	MW3GX1AA
Client ID	J1R3R6'	J1R3R7'	J1R3R8'	J1R3R9'	J1R3T0'
Sample Description	soil and stones	soil and stones	soil and stones	soil and stones	soil and stones
Homogeneous	N	N	N	N	N
Color	brown/gray	brown/gray	brown/gray	brown/gray	brown/gray
% Visible Fibers	0	0	0	0	TRA
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND	ND	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
% Anthophyllite	ND	ND	ND	ND	ND
% Total Asbestos	ND	ND	ND	ND	ND
Other Materials					
% Cellulose	ND	ND	ND	ND	ND
% Glass Fibers	ND	ND	ND	ND	ND
% Other fibers	ND	ND	ND	13	3
% Non-fibrous	100	100	100	87	97

Comments:

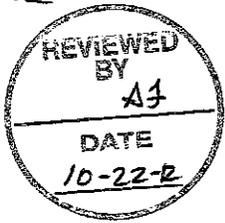
Note: "ND" stands for "None Detected". "TRA" stands for "<1%"

**TA Richland
Asbestos PLM**

Analyst:	D. Petty	SOP Information	Method	Batch #	2297146 3
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA05734
Date:	10/25/12	Revision 2			
Macroscopic examination					
Sample ID	MW3G01AA	MW3G11AA	MW3G21AA		
Client ID	J1R3T1'	J1R3T2'	J1R3T3'		
Sample Description	soil and stones	soil and stones	soil and stones		
Homogeneous	N	N	N		
Color	brown/gray	brown/gray	brown/gray		
% 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	TRA	ND	ND		
% Non-fibrous	100	100	100		

Comments:

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

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-189-134		Page 1 of 3																																																													
Collector Q. Stowe		Company Contact Joan Kessner		Telephone No. 375-4688		Project Coordinator KESSNER, JH		Price Code 8L Data Turnaround 7 Days																																																													
Project Designation 100N Field Remediation - Soil Full Protocol		Sampling Location 116-N-2 Verification		SAF No. RC-189																																																																	
Ice Chest No. NA		Field Logbook No. EI-1652-07		COA R116N22000		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 Potential Rad & DDT Limits AS 10-22-12 Special Handling and/or Storage J2J230422 MA05734 Due 10-29-12					Preservation None	Type of Container G/P	Number of Container(s) 1	Volume 250mL	Asbestos-Bulk - NIOSH 9002																																																												
<table border="1"> <thead> <tr> <th>Sample No.</th> <th>Matrix *</th> <th>Sample Date</th> <th>Sample Time</th> <th>RCF</th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>J1R3R1 mw365</td> <td>SOIL</td> <td>10-18-12</td> <td>1315</td> <td>X</td> <td>34716</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>J1R3R2 mw36L</td> <td>SOIL</td> <td>10-18-12</td> <td>1327</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>J1R3R3 mw36m</td> <td>SOIL</td> <td>10-18-12</td> <td>1335</td> <td>X</td> <td>34717</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>J1R3R4 mw36N</td> <td>SOIL</td> <td>10-18-12</td> <td>1345</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>J1R3R5 mw36P</td> <td>SOIL</td> <td>10-18-12</td> <td>1400</td> <td>X</td> <td>34718</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Sample No.	Matrix *	Sample Date	Sample Time	RCF						J1R3R1 mw365	SOIL	10-18-12	1315	X	34716					J1R3R2 mw36L	SOIL	10-18-12	1327	X						J1R3R3 mw36m	SOIL	10-18-12	1335	X	34717					J1R3R4 mw36N	SOIL	10-18-12	1345	X						J1R3R5 mw36P	SOIL	10-18-12	1400	X	34718				
Sample No.	Matrix *	Sample Date	Sample Time	RCF																																																																	
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CHAIN OF POSSESSION					SPECIAL INSTRUCTIONS																																																																
Relinquished By/Removed From Quincy Stowe		Date/Time 1700 10/18/12		Received By/Stored In Dennis Newman		Date/Time 1700 10/18/12		AS 10-22-12  Custodian unavailable to remove samples from controlled storage. Shipper removed samples, taking custody for shipment to lab.																																																													
Relinquished By/Removed From Dennis Newman		Date/Time 1910 10/18/12		Received By/Stored In Dennis Newman		Date/Time 1910 10/18/12																																																															
Relinquished By/Removed From Dennis Newman		Date/Time 1910 10/18/12		Received By/Stored In Ref. #3, 1060 Babelle		Date/Time 1910 10/18/12																																																															
Relinquished By/Removed From Ref. #3, 1060 Babelle		Date/Time 0900 10-19-12		Received By/Stored In CMM		Date/Time 0900 10-19-12																																																															
Relinquished By/Removed From CMM		Date/Time 10/22/12 1600		Received By/Stored In Julie Box		Date/Time 10/22/12 1600																																																															
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-189-134		Page 2 of 3	
Collector Q. Stowe		Company Contact Joan Kessner		Telephone No. 375-4688		Project Coordinator KESSNER, JH		Price Code 8L Data Turnaround 7 Days	
Project Designation 100N Field Remediation - Soil Full Protocol		Sampling Location 116-N-2 Verification		SAF No. RC-189					
Ice Chest No. NA		Field Logbook No. EL-1652-07		COA R116N22000		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 Potential Rad & DOT Limits As 10-22-12 Special Handling and/or Storage J2J230422 MA05734 Due 10-29-12				Preservation None					
				Type of Container G/P					
				No. of Container(s) 1					
				Volume 250mL					
				Asbestos-Bulk - NIOSH 9002					
SAMPLE ANALYSIS									
Sample No.	Matrix *	Sample Date	Sample Time						
J1R3R6	mw36Q	10-18-12	1418	✓					
J1R3R7	mw36R	10-18-12	1430	✓					
J1R3R8	mw36T	10-18-12	1440	✓					
J1R3R9	mw36W	10-18-12	1450	✓					
J1R3T0	mw36X	10-18-12	1455	X	34723				
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By/Removed From Quincy Stowe		Date/Time 1706 10/18/12		Received By/Stored In Dennis Newman		Date/Time 1700 10/18/12		 <p>Custodian unavailable to remove samples from controlled storage. Shipper removed samples, taking custody for shipment to lab.</p>	
Relinquished By/Removed From Dennis Newman		Date/Time 1910 10/18/12		Received By/Stored In Ref. #3, 1060 Battelle		Date/Time 1910 10/18/12			
Relinquished By/Removed From Ref #3, 1060 Battelle		Date/Time 0900 10-19-12		Received By/Stored In Dennis Newman		Date/Time 0900 10/19/12			
Relinquished By/Removed From Dennis Newman		Date/Time 1000#3 10-22-12		Received By/Stored In Dennis Newman		Date/Time 1000 10-22-12			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
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-189-134		Page 2 of 2		
Collector Q. Stowe		Company Contact Joan Kessner		Telephone No. 375-4688		Project Coordinator KESSNER, JH		Price Code 8L Data Turnaround 7 Days		
Project Designation 100N Field Remediation - Soil Full Protocol		Sampling Location 116-N-2 Verification		SAF No. RC-189						
Ice Chest No. <i>NA</i>		Field Logbook No. EI-1652-07		COA R116N22000		Method of Shipment Hand Deliver				
Shipped To Test America Richland (IH)		Offsite Property No. <i>NA</i>		Bill of Lading/Air Bill No. <i>NA</i>						
POSSIBLE SAMPLE HAZARDS/REMARKS <i>Potential Rad L DOT Limits A3 10-22-12</i>				Preservation	None					
Special Handling and/or Storage <i>J2J230422</i>				Type of Container	G/P					
				No. of Container(s)	1					
				Volume	250mL					
<i>MA05734 Due 10-29-12</i> SAMPLE ANALYSIS				Asbestos-Bulk - NIOSH 9002						
Sample No.	Matrix *	Sample Date	Sample Time							
J1R3T1	<i>mw360</i>	<i>10-18-12</i>	<i>1500</i>	<i>X</i>						
J1R3T2	<i>mw351</i>	<i>10-18-12</i>	<i>1510</i>	<i>X</i>						
J1R3T3	<i>mw362</i>	<i>10-18-12</i>	<i>1400</i>	<i>X</i>						
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS		Matrix *
Relinquished By/Removed From <i>Quincy Stowe</i>		Date/Time <i>1700 10/18/12</i>		Received By/Stored In <i>Den Newman</i>		Date/Time <i>1700 10/18/12</i>		 <p>Custodian unavailable to remove samples from controlled storage. Shipper removed samples, taking custody for shipment to lab.</p>		<ul style="list-style-type: none"> 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>Den Newman</i>		Date/Time <i>1910 10/18/12</i>		Received By/Stored In <i>Res. #3, 1060 Battelle</i>		Date/Time <i>1910 10/18/12</i>				
Relinquished By/Removed From <i>Res. #3, 1060 Battelle</i>		Date/Time <i>0900 10-19-12</i>		Received By/Stored In <i>Den Newman</i>		Date/Time <i>1060#3 10-19-12 0900</i>				
Relinquished By/Removed From <i>Den Newman</i>		Date/Time <i>1000#3 10-22-12 1000</i>		Received By/Stored In <i>S. Beck</i>		Date/Time <i>10-22-12 1600</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				
LABORATORY SECTION	Received By			Title			Date/Time			
FINAL SAMPLE DISPOSITION	Disposal Method			Disposed By			Date/Time			