SAF-RC-232
100-IU-2 & 100-IU-6 Remaining Waste Sites – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 4/8/15
INITIAL/DATE

COMMENTS:

SDG MA10909 SAF-RC-232

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-B-35:1 (shallow zone, verification)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Asbestos PLM
Cover Sheet

Sample Date:	March 30, 2015
Receipt Date:	March 31, 2015
Reporting Date:	April 7, 2015
SDG #:	MA10909
SAF#:	RC-232
Sampling Location:	100-B-35:1 (shallow zone, ver)
Data Deliverable:	7 Day Turn

Customer Sample Number	Laboratory Sample Number	Analytical Batch Identification	Sample Matrix
J1V5D2	M6HKL	5090047	SOIL
J1V5D3	M6HKM	5090047	SOIL
J1V5D4	M6HKN	5090047	SOIL
J1V5D5	M6HKP	5090047	SOIL
J1V5D6	M6HKQ	5090047	SOIL
J1V5D7	M6HKR	5090047	SOIL
J1V5D8	M6HKT	5090047	SOIL
J1V5D9	M6HKV	5090047	SOIL
J1V5F0	M6HKW	5090047	SOIL
J1V5F1	M6HKX	5090047	SOIL
J1V5F2	M6HKD	5090047	SOIL
J1V5F3	M6HK1	5090047	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:

Rhonda Wagar
Project Manager

2800 George Washington Way Richland, WA 99354 **tel** 509.375.3131 **fax** 509.375.5590 **www.testamericainc.com**

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:	R. Clark	SOP Information	Method	Batch #	5090047
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA10909
Date:	4/7/15	Revision 7			

Sample ID	M6HKL1AA	M6HKM1AA	M6HKN1AA	M6HKP1AA	M6HKQ1AA
Client ID	J1V5D2'	J1V5D3'	J1V5D4'	J1V5D5'	J1V5D6'
Macroscopic examination					
Sample Description	Rocky Sand	Rocky Sand	Rocky Soil	Rocky Sand	Rocky Sand
Homogeneous	N	N	N	N	N
Color	Brown	Tan,Black	Tan,Black	Tan,Black	Tan,Black
% Visible Fibers	0	0	3	0	1
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
% Anthophylite	ND	ND	ND	ND	ND
% Total Asbestos	**ND**	**ND**	**ND**	**ND**	**ND**
Other Materials					
% Cellulose	TRA	ND	2	ND	2
% Glass Fibers	ND	ND	ND	ND	ND
% Other fibers	1	ND	1	1	ND
% Non-fibrous	99	100	97	99	98

Comments:

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

TA Richland
Asbestos PLM

Analyst:	R. Clark	SOP Information	Method	Batch #	**5090047**
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA10909
Date:	4/7/15	Revision 7			

Sample ID	**M6HKR1AA**	**M6HKT1AA**	**M6HKV1AA**	**M6HKW1AA**	**M6HKX1AA**
Client ID	J1V5D7'	J1V5D8'	J1V5D9'	J1V5F0'	J1V5F1'
Macroscopic examination					
Sample Description	Rocky Sand	Rocky Sand	Rocky Sand	Rocky Sand	Rocky Sand
Homogeneous	N	N	N	N	N
Color	Tan	Tan,Black	Tan,Black	Tan,Black	Tan,Black
% Visible Fibers	1	3	1	0	3
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
% Anthophylite	ND	ND	ND	ND	ND
% Total Asbestos	**ND**	**ND**	**ND**	**ND**	**ND**
Other Materials					
% Cellulose	ND	2	1	1	3
% Glass Fibers	ND	ND	ND	ND	ND
% Other fibers	TRA	ND	TRA	TRA	1
% Non-fibrous	100	98	99	99	96

Comments:

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

TA Richland
Asbestos PLM

Analyst:	R. Clark	SOP Information	Method	Batch #	5090047
Analyst Signature:		RL-ASB-002	NIOSH 9002	SDG #	MA10909
Date:	4/7/15	Revision 7			
Sample ID	**M6HK01AA**	**M6HK11AA**			
Client ID	J1V5F2'	J1V5F3'			
Macroscopic examination					
Sample Description	Rocky Sand	Rocky Sand			
Homogeneous	N	N			
Color	Tan,Black	Tan,Black			
% Visible Fibers	0	0			
PLM Analysis					
Asbestiform Minerals					
% Chrysotyle	ND	ND			
% Amosite	ND	ND			
% Crocidolite	ND	ND			
% Tremolite	ND	ND			
% Actinolite	ND	ND			
% Anthophylite	ND	ND			
% Total Asbestos	**ND**	**ND**			
Other Materials					
% Cellulose	ND	TRA			
% Glass Fibers	ND	ND			
% Other fibers	ND	ND			
% Non-fibrous	100	100			

Comments:

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

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-232-095

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100-IU-2 & 100-IU-6 Remaining Waste Sites	**Sampling Location** 100-B-35:1 (shallow zone, ver)		**SAF No.** RC-232
Ice Chest No. SML-159	**Field Logbook No.** EL-1667-03	**COA** 010B352000	**Method of Shipment** Local Delivery
Shipped To TestAmerica Richland - IH	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

Price Code 8B — **Data Turnaround** 7 days

Other Labs Shipped To N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	250mL										
Sample Analysis	Asbestos-Bulk - NIOSH 9002										

Sample No.	Matrix	Sample Date	Sample Time									
J1V5D2 M6HKL	SOIL	03/30/15	0950	X								
J1V5D3 M6HKM	SOIL	03/30/15	0956	X								
J1V5D4 M6HKN	SOIL	03/30/15	1006	X								
J1V5D5 M6HKP	SOIL	03/30/15	0902	X								
J1V5D6 M6HKQ	SOIL	03/30/15	0933	X								

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	3-30-15 1125	C. Martinez/C. Martinez	3/30/15 1125
C. Martinez/C. Martinez	3/30/15 1550	C. Bingham	3/30/15 1550
C. Bingham	3/30/15 1555	1060 Battelle, fridge #34	3/30/15 1555
1060 Battelle, fridge #34	3/31/15 0700	C. Bingham	3/31/15 0700
C. Bingham MCH	3/31/15 1500	J. Friesz, TARL	3/31/15 1500

FINAL SAMPLE DISPOSITION — Disposal Method — Disposed By — Date/Time

SPECIAL INSTRUCTIONS

J5C310424

J5C310424
SDG# MA10909
Due 4/7/15

REVIEWED BY Kwadwo Inemo
DATE 3/31/15

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-232-095	Page 2 of3

Collector	Company Contact	Telephone No.	Project Coordinator	Price Code	Data Turnaround
STOWE, QG	Joan Kessner	375-4688	KESSNER, JH	8B	7 days

Project Designation	Sampling Location	SAF No.
100-IU-2 & 100-IU-6 Remaining Waste Sites	100-B-35:1 (shallow zone, ver)	RC-232

Ice Chest No.	Field Logbook No.	COA	Method of Shipment
SML-159	EL-1667-03	010B352000	Local Delivery

Shipped To	Offsite Property No.	Bill of Lading/Air Bill No.
TestAmerica Richland - IH	N/A	N/A

Other Labs Shipped To: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS: *N/A*

Special Handling and/or Storage: *cooling as required*

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	250mL										
Sample Analysis	Asbestos-Bulk - NIOSH 9002										
Sample No.	Matrix	Sample Date	Sample Time								
J1V5D7 M6HKR	SOIL	03/30/15	0927	X							
J1V5D8 M6HKT	SOIL	03/30/15	0858	X							
J1V5D9 M6HKV	SOIL	03/30/15	0849	X							
J1V5F0 M6HKW	SOIL	03/30/15	0909	X							
J1V5F1 M6HKX	SOIL	03/30/15	0905	X							

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	3-30-15 1125	C. Martinez/C. Martinez	3/30/15 1125
C. Martinez/C. Martinez	3/30/15 1550	C. Bingham	3/30/15 1550
C. Bingham	3/30/15 1555	1060 Battelle, fridge #3A	3/30/15 1555
1060 Battelle, fridge #3A	3/31/15 0700	C. Bingham	3/31/15 0700
C. Bingham MCH	3/31/15 1500	J. Friesz, TARL	3/31/15 1500

Sign/Print Names

SPECIAL INSTRUCTIONS

J5C310424

J5C310424
MA10909

REVIEWED BY Kirkwood Warren DATE 3/31/15

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-232-095

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100-IU-2 & 100-IU-6 Remaining Waste Sites	**Sampling Location** 100-B-35:1 (shallow zone, ver)		**SAF No.** RC-232
Ice Chest No. SML-159	**Field Logbook No.** EL-1667-03	**COA** 010B352000	**Method of Shipment** Local Delivery
Shipped To TestAmerica Richland - IH	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

Price Code 8B

Data Turnaround 7 days

Other Labs Shipped To N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	250mL										
Sample Analysis	Asbestos-Bulk - NIOSH 9002										

Sample No.	Matrix	Sample Date	Sample Time								
J1V5F2 M6HK0	SOIL	03/30/15	0915	X							
J1V5F3 M6HK1	SOIL	03/30/15	0922	X							

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	3-30-15 1125	C. Martinez/C. Martinez	3/30/15 1125
C. Martinez/C. Martinez	3/30/15 1550	C. Bingham	3/30/15 1550
C. Bingham	3/30/15 1555	1060 Battelle, fridge #3A	3/30/15 1555
1060 Battelle, fridge #3A	3/31/15 0700	C. Bingham	3/31/15 0700
C. Bingham WCH	3/31/15 1500	J. Friesz, TARL	3/31/15 1500

FINAL SAMPLE DISPOSITION — Disposal Method — Disposed By — Date/Time

SPECIAL INSTRUCTIONS

J5C310424
MA10909

RECEIVED BY K. Weathermon DATE 3/31/15

WCH-EE-011