0096333

SAF-RC-107
100-H Remaining Sites Burial Grounds – Soil Full Protocol
FINAL DATA PACKAGE

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Kathy Wendt H4-21 KW 4/12/11
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COMMENTS:

SDG JP0148 SAF-RC-107

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 100-H-3 Verification Sampling

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-14079-1

SDG Number: JP0148

Job Description: SAF# RC-107

For:
Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

Attention: Joan H Kessner

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Approved for release.
Kae E Yoder
Project Manager II
4/9/2011 3:05 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
04/09/2011

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-14079-1

SDG #: JP0148
SAF#: RC-107

Date SDG Closed: March 31, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1H093	280-14079-1	8310	8310
J1H094	280-14079-2	8310	8310
J1H095	280-14079-3	8310	8310
J1H096	280-14079-4	8310	8310
J1H097	280-14079-5	8310	8310
J1H098	280-14079-6	8310	8310
J1H099	280-14079-7	8310	8310
J1H0C0	280-14079-8	8310	8310
J1H0C1	280-14079-9	8310	8310
J1H0C2	280-14079-10	8310	8310
J1H0C4	280-14079-11	8310	8310
J1H0C6	280-14079-12	8310	8310
J1H0C7	280-14079-13	8310	8310
J1H0C8	280-14079-14	8310	8310

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this Case Narrative. 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 signature on the Report Cover.

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

The results, RLs and MDLs included in this report have been adjusted for dry weight, as appropriate.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 3/31/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.7 C.

HPLC - SW846 8310 - PAHs
In some cases, the RPD between the primary and confirmation columns exceeded 40%. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

The MS aliquot of the MS/MSD performed on sample J1H0C7 exhibited percent recoveries outside the control limits for Fluoranthene and Pyrene, and the associated sample results have been flagged "N". In addition, the RPD limit was exceeded for Pyrene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Lab Section	Qualifier	Description
General Chemistry		
	U	Analyzed for but not detected.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction	TAL DEN		SW846 3550C
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Method	Analyst	Analyst ID
ASTM D-2216	Berry III, Paul B	PBB
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14079-1	J1H093	Solid	03/29/2011 1245	03/31/2011 0900
280-14079-2	J1H094	Solid	03/29/2011 1243	03/31/2011 0900
280-14079-3	J1H095	Solid	03/29/2011 1244	03/31/2011 0900
280-14079-4	J1H096	Solid	03/29/2011 1246	03/31/2011 0900
280-14079-5	J1H097	Solid	03/29/2011 1249	03/31/2011 0900
280-14079-6	J1H098	Solid	03/29/2011 1255	03/31/2011 0900
280-14079-7	J1H099	Solid	03/29/2011 1241	03/31/2011 0900
280-14079-8	J1H0C0	Solid	03/29/2011 1248	03/31/2011 0900
280-14079-9	J1H0C1	Solid	03/29/2011 1252	03/31/2011 0900
280-14079-10	J1H0C2	Solid	03/29/2011 1250	03/31/2011 0900
280-14079-11	J1H0C4	Solid	03/29/2011 1240	03/31/2011 0900
280-14079-12	J1H0C6	Solid	03/29/2011 1254	03/31/2011 0900
280-14079-13	J1H0C7	Solid	03/29/2011 1246	03/31/2011 0900
280-14079-14	J1H0C8	Solid	03/29/2011 1235	03/31/2011 0900

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H093**

Lab Sample ID: 280-14079-1
Client Matrix: Solid
% Moisture: 6.7

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1449			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.5	U	9.5	110
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		18		3.4	16
Benzo[a]pyrene		15	J	6.7	16
Benzo[b]fluoranthene		12	J	4.4	16
Benzo[g,h,i]perylene		7.6	U	7.6	32
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		13	J X	5.1	42
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		14	U	14	42
Fluorene		5.6	U	5.6	32
Indeno[1,2,3-cd]pyrene		13	U	13	32
Naphthalene		13	U	13	110
Phenanthrene		13	J	13	42
Pyrene		29	J X	13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	88		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H094**

Lab Sample ID: 280-14079-2
Client Matrix: Solid
% Moisture: 7.6

Date Sampled: 03/29/2011 1243
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1519			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.6	U	9.6	110
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.4	U	3.4	16
Benzo[a]pyrene		13	J	6.8	16
Benzo[b]fluoranthene		4.5	U	4.5	16
Benzo[g,h,i]perylene		7.7	U	7.7	32
Benzo[k]fluoranthene		4.2	U	4.2	16
Chrysene		5.2	U	5.2	43
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		14	U	14	43
Fluorene		5.6	U	5.6	32
Indeno[1,2,3-cd]pyrene		13	U	13	32
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	43
Pyrene		13	U	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	94		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H095**

Lab Sample ID: 280-14079-3
Client Matrix: Solid

% Moisture: 10.7

Date Sampled: 03/29/2011 1244
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1550			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.9	U	9.9	110
Anthracene		3.4	U	3.4	22
Benzo[a]anthracene		3.5	U	3.5	17
Benzo[a]pyrene		7.1	U	7.1	17
Benzo[b]fluoranthene		4.6	U	4.6	17
Benzo[g,h,i]perylene		7.9	U	7.9	33
Benzo[k]fluoranthene		4.3	U	4.3	17
Chrysene		5.3	U	5.3	44
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		14	U	14	44
Fluorene		5.8	U	5.8	33
Indeno[1,2,3-cd]pyrene		13	U	13	33
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	44
Pyrene		13	U	13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	89		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H096**

Lab Sample ID: 280-14079-4
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/29/2011 1246
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1620			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.9	U	9.9	110
Anthracene		7.4	J	3.3	22
Benzo[a]anthracene		23		3.5	16
Benzo[a]pyrene		7.0	U	7.0	16
Benzo[b]fluoranthene		42	X	4.6	16
Benzo[g,h,i]perylene		11	J	7.9	33
Benzo[k]fluoranthene		13	J X	4.3	16
Chrysene		23	J	5.3	44
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		56		14	44
Fluorene		5.8	U	5.8	33
Indeno[1,2,3-cd]pyrene		18	J	13	33
Naphthalene		13	U	13	110
Phenanthrene		27	J X	13	44
Pyrene		54	X	13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	91		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H097**

Lab Sample ID: 280-14079-5
Client Matrix: Solid
% Moisture: 14.7

Date Sampled: 03/29/2011 1249
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1651			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		10	U	10	110
Anthracene		3.5	U	3.5	23
Benzo[a]anthracene		3.7	U	3.7	17
Benzo[a]pyrene		7.3	U	7.3	17
Benzo[b]fluoranthene		4.8	U	4.8	17
Benzo[g,h,i]perylene		8.3	U	8.3	34
Benzo[k]fluoranthene		4.5	U	4.5	17
Chrysene		5.5	U	5.5	46
Dibenzo(a,h)anthracene		13	U	13	34
Fluoranthene		15	U	15	46
Fluorene		6.1	U	6.1	34
Indeno[1,2,3-cd]pyrene		14	U	14	34
Naphthalene		14	U	14	110
Phenanthrene		14	U	14	46
Pyrene		14	U	14	46

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	91		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H098**

Lab Sample ID: 280-14079-6
Client Matrix: Solid
% Moisture: 8.0

Date Sampled: 03/29/2011 1255
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1722			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.3	U	9.3	100
Anthracene		3.1	U	3.1	21
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		6.6	U	6.6	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		4.1	U	4.1	15
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	88		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H099**

Lab Sample ID: 280-14079-7
Client Matrix: Solid

% Moisture: 9.3

Date Sampled: 03/29/2011 1241
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1752			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.3	U	9.3	100
Anthracene		4.7	J X	3.2	21
Benzo[a]anthracene		13	J X	3.3	16
Benzo[a]pyrene		13	J	6.6	16
Benzo[b]fluoranthene		15	J X	4.3	16
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		7.0	J	4.1	16
Chrysene		17	J	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		17	J X	13	41
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		13	J	12	31
Naphthalene		12	U	12	100
Phenanthrene		22	J X	12	41
Pyrene		42		12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	95		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C0**

Lab Sample ID: 280-14079-8
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 03/29/2011 1248
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1823			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.2	U	9.2	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		11	J	3.3	15
Benzo[a]pyrene		10	J X	6.5	15
Benzo[b]fluoranthene		10	J X	4.3	15
Benzo[g,h,i]perylene		7.3	U	7.3	31
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		11	J	4.9	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		23	J	12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	96		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C1**

Lab Sample ID: 280-14079-9
Client Matrix: Solid
% Moisture: 2.2

Date Sampled: 03/29/2011 1252
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	33.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1924			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.3	U	9.3	93
Acenaphthylene		8.4	U	8.4	93
Anthracene		2.8	U	2.8	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.0	U	6.0	14
Benzo[b]fluoranthene		3.9	U	3.9	14
Benzo[g,h,i]perylene		6.7	U	6.7	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.5	U	4.5	37
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	37
Fluorene		4.9	U	4.9	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	93
Phenanthrene		11	U	11	37
Pyrene		11	U	11	37

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	95		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C2**

Lab Sample ID: 280-14079-10
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/29/2011 1250
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	33.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 1954			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.4	U	8.4	94
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.0	U	6.0	14
Benzo[b]fluoranthene		3.9	U	3.9	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.5	U	4.5	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	94
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	92		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C4**

Lab Sample ID: 280-14079-11
Client Matrix: Solid
% Moisture: 12.0

Date Sampled: 03/29/2011 1240
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 2025			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.9	U	9.9	110
Anthracene		3.4	U	3.4	22
Benzo[a]anthracene		35	X	3.5	17
Benzo[a]pyrene		25		7.1	17
Benzo[b]fluoranthene		26		4.6	17
Benzo[g,h,i]perylene		7.9	U	7.9	33
Benzo[k]fluoranthene		8.4	J X	4.3	17
Chrysene		30	J	5.3	44
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		57	X	14	44
Fluorene		9.8	J	5.8	33
Indeno[1,2,3-cd]pyrene		13	U X	13	33
Naphthalene		13	U	13	110
Phenanthrene		69		13	44
Pyrene		75		13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	93		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C6**

Lab Sample ID: 280-14079-12
Client Matrix: Solid
% Moisture: 6.4

Date Sampled: 03/29/2011 1254
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 2055			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.2	U	9.2	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		12	J	6.6	15
Benzo[b]fluoranthene		24		4.3	15
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		4.1	J X	4.0	15
Chrysene		13	J	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	93		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C7**

Lab Sample ID: 280-14079-13
Client Matrix: Solid
% Moisture: 9.7

Date Sampled: 03/29/2011 1246
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 2126			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.9	U	9.9	110
Anthracene		17	J	3.3	22
Benzo[a]anthracene		66		3.5	16
Benzo[a]pyrene		55		7.0	16
Benzo[b]fluoranthene		82		4.6	16
Benzo[g,h,i]perylene		27	J	7.9	33
Benzo[k]fluoranthene		34		4.3	16
Chrysene		81		5.3	44
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		190	N	14	44
Fluorene		12	J	5.8	33
Indeno[1,2,3-cd]pyrene		41		13	33
Naphthalene		13	U	13	110
Phenanthrene		120		13	44
Pyrene		190	N	13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	95		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Client Sample ID: **J1H0C8**

Lab Sample ID: 280-14079-14
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 03/29/2011 1235
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60237	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/01/2011 2257			Injection Volume:	20 uL
Prep Date:	03/31/2011 1955			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	96
Acenaphthylene		8.7	U	8.7	96
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.1	U	3.1	14
Benzo[a]pyrene		6.2	U	6.2	14
Benzo[b]fluoranthene		4.1	U	4.1	14
Benzo[g,h,i]perylene		6.9	U	6.9	29
Benzo[k]fluoranthene		3.8	U	3.8	14
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	96
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	94		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H093**

Lab Sample ID: 280-14079-1
Client Matrix: Solid

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H094**

Lab Sample ID: 280-14079-2
Client Matrix: Solid

Date Sampled: 03/29/2011 1243
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H095**

Lab Sample ID: 280-14079-3
Client Matrix: Solid

Date Sampled: 03/29/2011 1244
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H096**

Lab Sample ID: 280-14079-4
Client Matrix: Solid

Date Sampled: 03/29/2011 1246
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H097**

Lab Sample ID: 280-14079-5
Client Matrix: Solid

Date Sampled: 03/29/2011 1249
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	14.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H098**

Lab Sample ID: 280-14079-6
Client Matrix: Solid

Date Sampled: 03/29/2011 1255
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.0		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H099**

Lab Sample ID: 280-14079-7
Client Matrix: Solid

Date Sampled: 03/29/2011 1241
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C0**

Lab Sample ID: 280-14079-8
Client Matrix: Solid

Date Sampled: 03/29/2011 1248
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C1**

Lab Sample ID: 280-14079-9
Client Matrix: Solid

Date Sampled: 03/29/2011 1252
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C2**

Lab Sample ID: 280-14079-10
Client Matrix: Solid

Date Sampled: 03/29/2011 1250
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C4**

Lab Sample ID: 280-14079-11
Client Matrix: Solid

Date Sampled: 03/29/2011 1240
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.0		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C6**

Lab Sample ID: 280-14079-12
Client Matrix: Solid

Date Sampled: 03/29/2011 1254
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.4		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C7**

Lab Sample ID: 280-14079-13
Client Matrix: Solid

Date Sampled: 03/29/2011 1246
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	9.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

General Chemistry

Client Sample ID: **J1H0C8**

Lab Sample ID: 280-14079-14
Client Matrix: Solid

Date Sampled: 03/29/2011 1235
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.10	U	%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60166 Analysis Date: 03/31/2011 1222 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-60166					
280-14079-1	J1H093	T	Solid	D-2216	
280-14079-1DU	Duplicate	T	Solid	D-2216	
280-14079-2	J1H094	T	Solid	D-2216	
280-14079-3	J1H095	T	Solid	D-2216	
280-14079-4	J1H096	T	Solid	D-2216	
280-14079-5	J1H097	T	Solid	D-2216	
280-14079-6	J1H098	T	Solid	D-2216	
280-14079-7	J1H099	T	Solid	D-2216	
280-14079-8	J1H0C0	T	Solid	D-2216	
280-14079-9	J1H0C1	T	Solid	D-2216	
280-14079-10	J1H0C2	T	Solid	D-2216	
280-14079-11	J1H0C4	T	Solid	D-2216	
280-14079-12	J1H0C6	T	Solid	D-2216	
280-14079-13	J1H0C7	T	Solid	D-2216	
280-14079-14	J1H0C8	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-60237					
LCS 280-60237/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60237/1-A	Method Blank	T	Solid	3550C	
280-14079-1	J1H093	T	Solid	3550C	
280-14079-2	J1H094	T	Solid	3550C	
280-14079-3	J1H095	T	Solid	3550C	
280-14079-4	J1H096	T	Solid	3550C	
280-14079-5	J1H097	T	Solid	3550C	
280-14079-6	J1H098	T	Solid	3550C	
280-14079-7	J1H099	T	Solid	3550C	
280-14079-8	J1H0C0	T	Solid	3550C	
280-14079-9	J1H0C1	T	Solid	3550C	
280-14079-10	J1H0C2	T	Solid	3550C	
280-14079-11	J1H0C4	T	Solid	3550C	
280-14079-12	J1H0C6	T	Solid	3550C	
280-14079-13	J1H0C7	T	Solid	3550C	
280-14079-13MS	Matrix Spike	T	Solid	3550C	
280-14079-13MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14079-14	J1H0C8	T	Solid	3550C	
Analysis Batch:280-60367					
LCS 280-60237/2-A	Lab Control Sample	T	Solid	8310	280-60237
MB 280-60237/1-A	Method Blank	T	Solid	8310	280-60237
280-14079-1	J1H093	T	Solid	8310	280-60237
280-14079-2	J1H094	T	Solid	8310	280-60237
280-14079-3	J1H095	T	Solid	8310	280-60237
280-14079-4	J1H096	T	Solid	8310	280-60237
280-14079-5	J1H097	T	Solid	8310	280-60237
280-14079-6	J1H098	T	Solid	8310	280-60237
280-14079-7	J1H099	T	Solid	8310	280-60237
280-14079-8	J1H0C0	T	Solid	8310	280-60237
280-14079-9	J1H0C1	T	Solid	8310	280-60237
280-14079-10	J1H0C2	T	Solid	8310	280-60237
280-14079-11	J1H0C4	T	Solid	8310	280-60237
280-14079-12	J1H0C6	T	Solid	8310	280-60237
280-14079-13	J1H0C7	T	Solid	8310	280-60237
280-14079-13MS	Matrix Spike	T	Solid	8310	280-60237
280-14079-13MSD	Matrix Spike Duplicate	T	Solid	8310	280-60237
280-14079-14	J1H0C8	T	Solid	8310	280-60237

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Method Blank - Batch: 280-60237

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-60237/1-A	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60237	Lab File ID:	G0401008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.9 g
Analysis Date:	04/01/2011 1348	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	03/31/2011 1955			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.1	U	9.1	91
Acenaphthylene	8.2	U	8.2	91
Anthracene	2.8	U	2.8	18
Benzo[a]anthracene	2.9	U	2.9	14
Benzo[a]pyrene	5.8	U	5.8	14
Benzo[b]fluoranthene	3.8	U	3.8	14
Benzo[g,h,i]perylene	6.6	U	6.6	27
Benzo[k]fluoranthene	3.6	U	3.6	14
Chrysene	4.4	U	4.4	36
Dibenzo(a,h)anthracene	10	U	10	27
Fluoranthene	12	U	12	36
Fluorene	4.8	U	4.8	27
Indeno[1,2,3-cd]pyrene	11	U	11	27
Naphthalene	11	U	11	91
Phenanthrene	11	U	11	36
Pyrene	11	U	11	36

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	92	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Lab Control Sample - Batch: 280-60237

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-60237/2-A	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60237	Lab File ID:	G0401009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	04/01/2011 1418	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	03/31/2011 1955			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1930	1830	95	72 - 115	
Acenaphthylene	1930	1830	95	60 - 115	
Anthracene	1930	1690	88	61 - 115	
Benzo[a]anthracene	1930	2020	105	76 - 115	
Benzo[a]pyrene	1930	1630	85	69 - 115	
Benzo[b]fluoranthene	1930	1970	102	81 - 115	
Benzo[g,h,i]perylene	1930	1860	96	71 - 115	
Benzo[k]fluoranthene	1930	1970	102	85 - 115	
Chrysene	1930	1950	101	70 - 115	
Dibenzo(a,h)anthracene	1930	1980	102	79 - 115	
Fluoranthene	1930	1950	101	67 - 115	
Fluorene	1930	1890	98	72 - 115	
Indeno[1,2,3-cd]pyrene	1930	2050	106	76 - 115	
Naphthalene	1930	1940	101	77 - 115	
Phenanthrene	1930	1930	100	79 - 115	
Pyrene	1930	1950	101	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60237

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-14079-13	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60237	Lab File ID:	G0401024.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/01/2011 2156			Final Weight/Volume:	4000 uL
Prep Date:	03/31/2011 1955			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14079-13	Analysis Batch:	280-60367	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60237	Lab File ID:	G0401025.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.8 g
Analysis Date:	04/01/2011 2227			Final Weight/Volume:	4000 uL
Prep Date:	03/31/2011 1955			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	98	98	72 - 115	2	20		
Acenaphthylene	96	96	60 - 115	2	21		
Anthracene	96	91	61 - 115	8	20		
Benzo[a]anthracene	113	105	76 - 115	10	20		
Benzo[a]pyrene	93	88	69 - 115	7	20		
Benzo[b]fluoranthene	111	106	81 - 115	6	20		
Benzo[g,h,i]perylene	98	97	71 - 115	4	20		
Benzo[k]fluoranthene	108	112	85 - 115	1	20		
Chrysene	106	100	70 - 115	8	20		
Dibenzo(a,h)anthracene	105	104	79 - 115	3	20		
Fluoranthene	118	97	67 - 115	20	20	N	
Fluorene	104	100	72 - 115	6	20		
Indeno[1,2,3-cd]pyrene	108	107	76 - 115	3	20		
Naphthalene	103	103	77 - 115	3	20		
Phenanthrene	113	98	79 - 115	16	20		
Pyrene	123	97	77 - 115	24	20	N	*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	104	97	72 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14079-1
Sdg Number: JP0148

Duplicate - Batch: 280-60166

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14079-1	Analysis Batch:	280-60166	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/31/2011 1222	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	6.7	6.6	3	20	

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-065	Page 1 of 3

Collector J. Kuepfer	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100-H Remaining Sites Burial Grounds - Soil Full Protocol	**Sampling Location** 100-H-3 Verification Sampling		**SAF No.** RC-107
Ice Chest No. WCH-08-017	**Field Logbook No.** EL 1627-05	**COA** 0100H32600	**Method of Shipment** Government Vehicle/FedEx
Shipped To TestAmerica Incorporated, ~~Richland~~ Denver OWT 3-28-11	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** 7945 9252 5120

Price Code ~~8L~~ 8B OWT 3-28-11

Data Turnaround ~~21~~ 7 Days OWT 3-28-11

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C
Type of Container	aG
No. of Container(s)	1
Volume	120mL
SAMPLE ANALYSIS	PAHs - 8310

Sample No.	Matrix *	Sample Date	Sample Time	PAHs - 8310
J1H093	SOIL	3/29/11	1245	X
J1H094	SOIL	3/29/11	~~12~~ 1243	X
J1H095	SOIL	3/29/11	1244	X
J1H096	SOIL	3/29/11	1246	X
J1H097	SOIL	3/29/11	1249	X

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Joan Kuepfer [signature]	3/29/11 1330	JV Fullmer [signature]	1330 3/29/11
JV Fullmer [signature]	1630 3-29-11	A. Freier A. Freier	1630 3-29-11
A. Freier A. Freier	WCH 0950 3-30-11	Fed Ex	
		[signature]	3/31/11 900

SPECIAL INSTRUCTIONS

REVIEWED BY JEB DATE 3-30-11

JP0148

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-065	Page 2 of 3

Collector J. Kuepfer	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code 8L 8B	Data Turnaround 21 Days		
Project Designation 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location 100-H-3 Verification Sampling		SAF No. RC-107
Ice Chest No. WCH-08-017	Field Logbook No. EL 1627-05	COA 0100H32600	Method of Shipment Government Vehicle/FedEx
Shipped To TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No. NA		Bill of Lading/Air Bill No. 7945 9252 5120

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C										
Type of Container	aG										
No. of Container(s)	1										
Volume	120mL										
SAMPLE ANALYSIS	PAHs - 8310										
Sample No. / Matrix * / Sample Date / Sample Time											
J1H098 / SOIL / 3/29/11 / 1255	X										
J1H099 / SOIL / 3/29/11 / 1241	X										
J1H0C0 / SOIL / 3/29/11 / 1248	X										
J1H0C1 / SOIL / 3/29/11 / 1252	X										
J1H0C2 / SOIL / 3/29/11 / 1250	X										

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Kuepfer	3/29/11 1330	JV Fullmer	3/29/11 1330
JV Fullmer	3-29-11 1630	A. Freier	3-29-11 1630
A. Freier (WCH)	3-30-11 0950	Fed Ex	
			3/31/11 800

SPECIAL INSTRUCTIONS

REVIEWED BY JEB DATE 3-30-11

JP0148

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

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

WCH-EE-011

3.7 ee #33111 ih

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-107-065	Page 3 of 3
Collector: J. Kuepfer	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 88 (QW 5-28-11)
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 100-H-3 Verification Sampling		SAF No.: RC-107	Data Turnaround: ~~21~~ 7 Days (QW 3-28-11)
Ice Chest No.: WCH-08-017	Field Logbook No.: EL 1627-05	COA: 0100H32600	Method of Shipment: Government Vehicle/FedEx	
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver (QW 3.28.11)	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7945 9252 5120	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C											
Type of Container	aG											
No. of Container(s)	1											
Volume	120mL											
SAMPLE ANALYSIS	PAHs - 8310											

Sample No.	Matrix *	Sample Date	Sample Time										
J1H0C4	SOIL	3/29/11	1240	X									
J1H0C6	SOIL	3/29/11	1254	X									
J1H0C7	SOIL	3/29/11	1246	X									
J1H0C8	SOIL	3/29/11	1235	X									

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From: J Kuepfer [signature]	Date/Time: 3/29/11 1330	Received By/Stored In: JV Fullmer [signature]	Date/Time: 1334 3/29/11
Relinquished By/Removed From: JV Fullmer [signature]	Date/Time: 1630 3-29-11	Received By/Stored In: A. Freier [signature]	Date/Time: 1630 3-29-11
Relinquished By/Removed From: WCH A. Freier [signature]	Date/Time: 0950 3-30-11	Received By/Stored In: Fed Ex	Date/Time:
Relinquished By/Removed From:	Date/Time:	Received By/Stored In: [signature]	Date/Time: 3/31/11 900
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 JEB DATE 3-30-11

JP0148

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

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 Solid

Analytical Due:

Report Due: 4/7/11 (Rush 5 day TAT)

Sample Check-in List

Date/Time Received: 3/31/11 900 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0148 NA[ ] SAF #: RC-107 NA [ ]

Job Number: 14079 Chain of Custody # RC-107-065

Shipping Container ID: WCH-08-017 Air Bill # 7945925251 20

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 3.7 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 16
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - Broken
   - Leaking
   - Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers):

Sample Custodian: Date: 3/31/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date 4/1/11

LS-023, Rev. 7, 1/08

From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

J11151102250225

Ship Date: 30MAR11
ActWgt: 75.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref # JILL DOEL
Invoice #
PO #
Dept #

THU - 31 MAR A1
PRIORITY OVERNIGHT

TRK# 0201 7945 9252 5120

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

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