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

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COMMENTS:

SDG JP1043 **SAF RC-189**

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

REVISED CASE NARRATIVE

Sample Location: 100-N-83 Verification Sampling

ANALYTICAL REPORT

Job Number: 280-82479-1

SDG Number: JP1043

Job Description: SAF# RC-189

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Senior Project Manager
5/5/2016 4:43 PM

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05/05/2016

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 4025.

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

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Job Number: 280-82479-1

SDG #: JP1043
SAF#: RC-189

Date SDG Closed: April 28, 2016
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1V8V8	280-82479-1	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8V9	280-82479-2	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W0	280-82479-3	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W1	280-82479-4	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W2	280-82479-5	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W3	280-82479-6	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W4	280-82479-7	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W5	280-82479-8	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W6	280-82479-9	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W7	280-82479-10	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W8	280-82479-11	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8W9	280-82479-12	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8X0	280-82479-13	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8X1	280-82479-14	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C
J1V8X2	280-82479-15	6010/7471/9056M/353.2/9045	6010B/7471A/9056M/353.2/9045C

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 4/28/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8º C.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-323098 indicates that physical and chemical interferences are present for Copper, Manganese, Silicon and Zinc. Results have been flagged with an "X".

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Samples J1V8V8, J1V8V9, J1V8W0, J1V8W2, J1V8W3, J1V8W4, J1V8W5, J1V8W6, J1V8W7, J1V8W8, J1V8W9 and J1V8X1 required dilutions prior to the analysis of Beryllium, Cobalt and Iron to minimize the interference caused by Titanium concentrations greater than the linear range. The reporting limits have been adjusted relative to the dilutions required.

Low levels of Chromium are present in the method blank associated with batch 280-323098. Because the concentration in the method blank is not present at a level greater than half the reporting limit, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1V8V8; therefore, control limits are not applicable.

Silicon was recovered outside the control limits in the Matrix Spike performed on sample J1V8V8, and the associated sample result has been flagged “N”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The duplicate analysis of sample J1V8V8 exhibited RPD data outside the control limits for Arsenic and Boron, and the associated sample results have been flagged “M”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

Iron, a common laboratory contaminant, is present at a level greater than the reporting limit in the instrument blank (CCB) associated with sample J1V8W1 in analysis batch 280-323288. As the associated sample amount is greater than twenty times the CCB concentration, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - MCAWW 353.2 - NITRATE NITRITE as N

No anomalies were encountered.

GENERAL CHEMISTRY - SW846 9056M - ANIONS

The Matrix Spike performed on sample J1V8V8 exhibited percent recoveries outside the control limits for Chloride, Sulfate and Fluoride, and the associated sample results have been flagged “N”. There is no indication that the analytical systems were operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The Matrix Spike performed on sample J1V8W4 exhibited percent recoveries outside the control limits for Chloride and Fluoride, and the associated sample results have been flagged “N”. There is no indication that the analytical systems were operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The Orthophosphate as P duplicate analysis of sample J1V8W4 exceeded the RPD limit, and the associated sample result has been flagged “M”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9045C - PH

SU = standard units

No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Lab Section	Qualifier	Description
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
General Chemistry		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	N	MS, MSD: Spike recovery is outside acceptance limits.
	M	Sample duplicate precision not met.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-82479-1	J1V8V8	Solid	04/26/2016 0810	04/28/2016 0940
280-82479-2	J1V8V9	Solid	04/26/2016 0937	04/28/2016 0940
280-82479-3	J1V8W0	Solid	04/26/2016 0830	04/28/2016 0940
280-82479-4	J1V8W1	Solid	04/26/2016 0850	04/28/2016 0940
280-82479-5	J1V8W2	Solid	04/26/2016 1045	04/28/2016 0940
280-82479-6	J1V8W3	Solid	04/26/2016 1100	04/28/2016 0940
280-82479-7	J1V8W4	Solid	04/26/2016 1125	04/28/2016 0940
280-82479-8	J1V8W5	Solid	04/26/2016 1115	04/28/2016 0940
280-82479-9	J1V8W6	Solid	04/26/2016 1145	04/28/2016 0940
280-82479-10	J1V8W7	Solid	04/26/2016 1130	04/28/2016 0940
280-82479-11	J1V8W8	Solid	04/26/2016 1200	04/28/2016 0940
280-82479-12	J1V8W9	Solid	04/26/2016 1220	04/28/2016 0940
280-82479-13	J1V8X0	Solid	04/26/2016 0915	04/28/2016 0940
280-82479-14	J1V8X1	Solid	04/26/2016 1025	04/28/2016 0940
280-82479-15	J1V8X2	Solid	04/26/2016 0740	04/28/2016 0940

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
pH	TAL DEN	SW846 9045C	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
Anions, Ion Chromatography	TAL DEN	SW846 9056M	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 280-82479-1
Sdg Number: JP1043

Method	Analyst	Analyst ID
SW846 6010B	Kelly, Cara M	CMK
SW846 6010B	Rhoades, Chris R	CRR
SW846 7471A	Henning, Christopher D	CDH
MCAWW 353.2	Simons, Nicole A	NAS
SW846 9045C	Uge, Ikem E	IEU
SW846 9056M	Benson, Alex F	AFB
ASTM D-2216	Benson, Alex F	AFB

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8V8**

Lab Sample ID: 280-82479-1
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/26/2016 0810
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.351 g
Analysis Date:	04/30/2016 0130			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6720		1.2	3.8
Antimony		0.29	U	0.29	0.45
Arsenic		2.9	M	0.50	0.75
Barium		58.5		0.057	0.38
Boron		1.2	B M	0.74	1.5
Cadmium		0.16		0.031	0.15
Calcium		7850		10.6	37.6
Chromium		9.1		0.044	0.15
Copper		14.9	X	0.16	0.75
Lead		4.1		0.20	0.38
Magnesium		4650		2.8	15.0
Manganese		288	X	0.075	0.75
Molybdenum		0.20	U	0.20	1.5
Nickel		10		0.092	3.0
Potassium		1350		30.8	225
Selenium		0.65	U	0.65	0.75
Silicon		1760	X N	4.3	7.5
Silver		0.12	U	0.12	0.15
Sodium		366		44.3	90.2
Vanadium		51.0		0.071	1.5
Zinc		39.3	X	0.30	0.75

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	5.0			Initial Weight/Volume:	1.351 g
Analysis Date:	05/02/2016 2057			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.47	B	0.12	0.75
Cobalt		8.2		0.38	3.8
Iron		26000		14.3	18.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.594 g
Analysis Date:	05/02/2016 1753			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0057	U	0.0057	0.017

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8V9**

Lab Sample ID: 280-82479-2
Client Matrix: Solid
% Moisture: 2.1

Date Sampled: 04/26/2016 0937
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.211 g
Analysis Date:	04/30/2016 0140			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6580		1.3	4.2
Antimony		0.32	U	0.32	0.51
Arsenic		2.6		0.56	0.84
Barium		53.1		0.064	0.42
Boron		1.1	B	0.83	1.7
Cadmium		0.15	B	0.035	0.17
Calcium		6620		11.9	42.2
Chromium		9.2		0.049	0.17
Copper		13.3	X	0.18	0.84
Lead		4.0		0.23	0.42
Magnesium		4580		3.1	16.9
Manganese		268	X	0.084	0.84
Molybdenum		0.22	U	0.22	1.7
Nickel		10.1		0.10	3.4
Potassium		1280		34.6	253
Selenium		0.73	U	0.73	0.84
Silicon		1520	X	4.8	8.4
Silver		0.13	U	0.13	0.17
Sodium		332		49.8	101
Vanadium		42.5		0.079	1.7
Zinc		34.5	X	0.34	0.84

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.211 g
Analysis Date:	05/02/2016 2107			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.42		0.056	0.34
Cobalt		7.5		0.17	1.7
Iron		22100		6.4	8.4

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.545 g
Analysis Date:	05/02/2016 1800			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0062	U	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W0

Lab Sample ID: 280-82479-3
Client Matrix: Solid
% Moisture: 2.4

Date Sampled: 04/26/2016 0830
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.216 g
Analysis Date:	04/30/2016 0142			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7560		1.3	4.2
Antimony		0.47	B	0.32	0.51
Arsenic		3.7		0.56	0.84
Barium		54.6		0.064	0.42
Boron		1.6	B	0.83	1.7
Cadmium		0.17		0.035	0.17
Calcium		8930		11.9	42.1
Chromium		11.5		0.049	0.17
Copper		15.2	X	0.18	0.84
Lead		5.1		0.23	0.42
Magnesium		5050		3.1	16.9
Manganese		296	X	0.084	0.84
Molybdenum		0.22	U	0.22	1.7
Nickel		11.8		0.10	3.4
Potassium		1750		34.5	253
Selenium		0.72	U	0.72	0.84
Silicon		2170	X	4.8	8.4
Silver		0.13	U	0.13	0.17
Sodium		324		49.7	101
Vanadium		47.1		0.079	1.7
Zinc		39.0	X	0.34	0.84

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.216 g
Analysis Date:	05/02/2016 2110			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.47		0.056	0.34
Cobalt		7.0		0.17	1.7
Iron		22900		6.4	8.4

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.512 g
Analysis Date:	05/02/2016 1802			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0066	U	0.0066	0.020

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W1**

Lab Sample ID: 280-82479-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 04/26/2016 0850
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.295 g
Analysis Date:	04/30/2016 0145			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7040		1.2	3.9
Antimony		0.30	U	0.30	0.47
Arsenic		2.8		0.52	0.78
Barium		53.1		0.059	0.39
Beryllium		0.21		0.026	0.16
Boron		1.2	B	0.77	1.6
Cadmium		0.14	B	0.032	0.16
Calcium		3580		11.0	39.1
Chromium		14.6		0.045	0.16
Cobalt		5.9		0.078	0.78
Copper		9.8	X	0.17	0.78
Iron		14600		3.0	3.9
Lead		4.1		0.21	0.39
Magnesium		4050		2.9	15.6
Manganese		210	X	0.078	0.78
Molybdenum		0.20	U	0.20	1.6
Nickel		13.2		0.096	3.1
Potassium		1570		32.0	234
Selenium		0.67	U	0.67	0.78
Silicon		951	X	4.4	7.8
Silver		0.13	U	0.13	0.16
Sodium		167		46.1	93.8
Vanadium		30.8		0.073	1.6
Zinc		30.0	X	0.31	0.78

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.506 g
Analysis Date:	05/02/2016 1805			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0066	U	0.0066	0.020

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W2

Lab Sample ID: 280-82479-5
Client Matrix: Solid
% Moisture: 2.0

Date Sampled: 04/26/2016 1045
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.411 g
Analysis Date:	04/30/2016 0148			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8470		1.1	3.6
Antimony		0.27	U	0.27	0.43
Arsenic		2.3		0.48	0.72
Barium		84.5		0.055	0.36
Boron		2.1		0.71	1.4
Cadmium		0.24		0.030	0.14
Calcium		3480		10.2	36.2
Chromium		12.5		0.042	0.14
Copper		12.5	X	0.16	0.72
Lead		5.3		0.20	0.36
Magnesium		3730		2.7	14.5
Manganese		312	X	0.072	0.72
Molybdenum		0.19	U	0.19	1.4
Nickel		11.2		0.089	2.9
Potassium		2440		29.7	217
Selenium		0.62	U	0.62	0.72
Silicon		1360	X	4.1	7.2
Silver		0.12	U	0.12	0.14
Sodium		219		42.7	86.8
Vanadium		40.6		0.068	1.4
Zinc		37.1	X	0.29	0.72

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.411 g
Analysis Date:	05/02/2016 2112			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.44		0.048	0.29
Cobalt		6.0		0.14	1.4
Iron		20700		5.5	7.2

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.544 g
Analysis Date:	05/02/2016 1807			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0062	U	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W3**

Lab Sample ID: 280-82479-6
Client Matrix: Solid
% Moisture: 2.1

Date Sampled: 04/26/2016 1100
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 04/30/2016 0201
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323288
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26C042916.asc
Initial Weight/Volume: 1.255 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9600		1.3	4.1
Antimony		0.31	U	0.31	0.49
Arsenic		2.6		0.54	0.81
Barium		88.5		0.062	0.41
Boron		2.1		0.80	1.6
Cadmium		0.21		0.033	0.16
Calcium		3570		11.5	40.7
Chromium		14.5		0.047	0.16
Copper		14.0	X	0.18	0.81
Lead		5.6		0.22	0.41
Magnesium		3870		3.0	16.3
Manganese		342	X	0.081	0.81
Molybdenum		0.21	U	0.21	1.6
Nickel		12.4		0.10	3.3
Potassium		2430		33.4	244
Selenium		0.70	U	0.70	0.81
Silicon		1470	X	4.6	8.1
Silver		0.13	U	0.13	0.16
Vanadium		40.8		0.076	1.6
Zinc		40.6	X	0.32	0.81

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 05/02/2016 2202
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.255 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		191		48.0	97.6

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 2.0
Analysis Date: 05/02/2016 2115
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.255 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.48		0.054	0.33
Cobalt		6.8		0.16	1.6
Iron		22000		6.2	8.1

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W3**

Lab Sample ID: 280-82479-6
Client Matrix: Solid
% Moisture: 2.1

Date Sampled: 04/26/2016 1100
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.577 g
Analysis Date:	05/02/2016 1809			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0068	B	0.0059	0.018

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W4

Lab Sample ID: 280-82479-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 04/26/2016 1125
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 04/30/2016 0203
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323288
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26C042916.asc
Initial Weight/Volume: 1.108 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9000		1.5	4.8
Antimony		0.36	U	0.36	0.58
Arsenic		2.7		0.63	0.96
Barium		92.3		0.073	0.48
Boron		1.7	B	0.94	1.9
Cadmium		0.18	B	0.039	0.19
Calcium		3530		13.5	47.9
Chromium		13.5		0.056	0.19
Copper		12.6	X	0.21	0.96
Lead		4.7		0.26	0.48
Magnesium		3980		3.5	19.2
Manganese		332	X	0.096	0.96
Molybdenum		0.25	U	0.25	1.9
Nickel		11.7		0.12	3.8
Potassium		2270		39.3	288
Selenium		0.82	U	0.82	0.96
Silicon		1850	X	5.4	9.6
Silver		0.15	U	0.15	0.19
Vanadium		39.2		0.090	1.9
Zinc		35.1	X	0.38	0.96

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 05/02/2016 2205
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.108 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		166		56.5	115

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 2.0
Analysis Date: 05/02/2016 2128
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.108 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.45		0.063	0.38
Cobalt		6.1		0.19	1.9
Iron		20900		7.3	9.6

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W4**

Lab Sample ID: 280-82479-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 04/26/2016 1125
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.519 g
Analysis Date:	05/02/2016 1812			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0068	U	0.0068	0.021

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W5

Lab Sample ID: 280-82479-8
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/26/2016 1115
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.289 g
Analysis Date:	04/30/2016 0206			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10800		1.2	3.9
Antimony		0.30	U	0.30	0.47
Arsenic		2.3		0.52	0.79
Barium		89.2		0.060	0.39
Boron		2.0		0.77	1.6
Cadmium		0.20		0.032	0.16
Calcium		3480		11.1	39.3
Chromium		14.6		0.046	0.16
Copper		13.7	X	0.17	0.79
Lead		5.4		0.21	0.39
Magnesium		3940		2.9	15.7
Manganese		365	X	0.079	0.79
Molybdenum		0.20	U	0.20	1.6
Nickel		11.7		0.097	3.1
Potassium		2470		32.2	236
Selenium		0.68	U	0.68	0.79
Silicon		1830	X	4.4	7.9
Silver		0.13	U	0.13	0.16
Vanadium		44.2		0.074	1.6
Zinc		40.6	X	0.31	0.79

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.289 g
Analysis Date:	05/02/2016 2207			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		188		46.4	94.3

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.289 g
Analysis Date:	05/02/2016 2131			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.52		0.052	0.31
Cobalt		7.2		0.16	1.6
Iron		23700		6.0	7.9

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W5**

Lab Sample ID: 280-82479-8
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/26/2016 1115
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.589 g
Analysis Date:	05/02/2016 1814			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0057	U	0.0057	0.018

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W6

Lab Sample ID: 280-82479-9
Client Matrix: Solid
% Moisture: 1.8

Date Sampled: 04/26/2016 1145
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.165 g
Analysis Date:	04/30/2016 0208			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8960		1.4	4.4
Antimony		0.33	U	0.33	0.52
Arsenic		2.9		0.58	0.87
Barium		88.5		0.066	0.44
Boron		1.9		0.86	1.7
Cadmium		0.24		0.036	0.17
Calcium		3410		12.3	43.7
Chromium		13.0		0.051	0.17
Copper		13.1	X	0.19	0.87
Lead		5.0		0.24	0.44
Magnesium		3780		3.2	17.5
Manganese		323	X	0.087	0.87
Molybdenum		0.23	U	0.23	1.7
Nickel		11.2		0.11	3.5
Potassium		2450		35.8	262
Selenium		0.75	U	0.75	0.87
Silicon		1890	X	4.9	8.7
Silver		0.14	U	0.14	0.17
Vanadium		39.2		0.082	1.7
Zinc		36.8	X	0.35	0.87

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.165 g
Analysis Date:	05/02/2016 2210			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		171		51.6	105

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.165 g
Analysis Date:	05/02/2016 2133			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.42		0.058	0.35
Cobalt		6.4		0.17	1.7
Iron		21000		6.6	8.7

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W6**

Lab Sample ID: 280-82479-9
Client Matrix: Solid
% Moisture: 1.8

Date Sampled: 04/26/2016 1145
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.554 g
Analysis Date:	05/02/2016 1821			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	U	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W7

Lab Sample ID: 280-82479-10
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 04/26/2016 1130
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 04/30/2016 0211
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323288
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26C042916.asc
Initial Weight/Volume: 1.101 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10400		1.5	4.7
Antimony		0.36	U	0.36	0.57
Arsenic		2.4		0.62	0.95
Barium		97.7		0.072	0.47
Boron		1.7	B	0.93	1.9
Cadmium		0.24		0.039	0.19
Calcium		3520		13.3	47.3
Chromium		14.3		0.055	0.19
Copper		14.9	X	0.21	0.95
Lead		6.1		0.26	0.47
Magnesium		4170		3.5	18.9
Manganese		392	X	0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		12.8		0.12	3.8
Potassium		2480		38.8	284
Selenium		0.81	U	0.81	0.95
Silicon		1930	X	5.4	9.5
Silver		0.15	U	0.15	0.19
Vanadium		45.0		0.089	1.9
Zinc		41.3	X	0.38	0.95

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 05/02/2016 2212
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.101 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		169		55.8	113

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 2.0
Analysis Date: 05/02/2016 2136
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.101 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.54		0.062	0.38
Cobalt		8.0		0.19	1.9
Iron		24600		7.2	9.5

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W7**

Lab Sample ID: 280-82479-10
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 04/26/2016 1130
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.537 g
Analysis Date:	05/02/2016 1823			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0094	B	0.0064	0.020

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W8

Lab Sample ID: 280-82479-11
Client Matrix: Solid
% Moisture: 8.8

Date Sampled: 04/26/2016 1200
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 04/30/2016 0214
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323288
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26C042916.asc
Initial Weight/Volume: 1.228 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9390		1.4	4.5
Antimony		0.34	U	0.34	0.54
Arsenic		3.0		0.59	0.89
Barium		98.7		0.068	0.45
Boron		2.3		0.88	1.8
Cadmium		0.26		0.037	0.18
Calcium		3920		12.6	44.7
Chromium		12.6		0.052	0.18
Copper		12.2	X	0.19	0.89
Lead		5.8		0.24	0.45
Magnesium		3870		3.3	17.9
Manganese		322	X	0.089	0.89
Molybdenum		0.23	U	0.23	1.8
Nickel		11.2		0.11	3.6
Potassium		2430		36.6	268
Selenium		0.77	U	0.77	0.89
Silicon		1520	X	5.1	8.9
Silver		0.14	U	0.14	0.18
Vanadium		42.4		0.084	1.8
Zinc		39.5	X	0.36	0.89

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 1.0
Analysis Date: 05/02/2016 2215
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.228 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		250		52.7	107

Analysis Method: 6010B
Prep Method: 3050B
Dilution: 2.0
Analysis Date: 05/02/2016 2138
Prep Date: 04/29/2016 1425

Analysis Batch: 280-323611
Prep Batch: 280-323098

Instrument ID: MT_026
Lab File ID: 26A050216.asc
Initial Weight/Volume: 1.228 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.47		0.059	0.36
Cobalt		6.4		0.18	1.8
Iron		21500		6.8	8.9

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W8**

Lab Sample ID: 280-82479-11
Client Matrix: Solid
% Moisture: 8.8

Date Sampled: 04/26/2016 1200
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.536 g
Analysis Date:	05/02/2016 1826			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0075	B	0.0068	0.021

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: J1V8W9

Lab Sample ID: 280-82479-12
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 04/26/2016 1220
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.174 g
Analysis Date:	04/30/2016 0216			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8980		1.4	4.4
Antimony		0.33	U	0.33	0.53
Arsenic		2.6		0.58	0.88
Barium		86.6		0.067	0.44
Boron		1.9		0.86	1.8
Cadmium		0.23		0.036	0.18
Calcium		3500		12.4	43.9
Chromium		13.3		0.051	0.18
Copper		13.5	X	0.19	0.88
Lead		6.4		0.24	0.44
Magnesium		3810		3.2	17.5
Manganese		331	X	0.088	0.88
Molybdenum		0.23	U	0.23	1.8
Nickel		12.3		0.11	3.5
Potassium		2480		36.0	263
Selenium		0.75	U	0.75	0.88
Silicon		1400	X	5.0	8.8
Silver		0.14	U	0.14	0.18
Vanadium		43.9		0.082	1.8
Zinc		39.6	X	0.35	0.88

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.174 g
Analysis Date:	05/02/2016 2218			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		186		51.7	105

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.174 g
Analysis Date:	05/02/2016 2141			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.47		0.058	0.35
Cobalt		6.5		0.18	1.8
Iron		22400		6.7	8.8

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8W9**

Lab Sample ID: 280-82479-12
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 04/26/2016 1220
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.570 g
Analysis Date:	05/02/2016 1828			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0076	B	0.0060	0.018

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8X0**

Lab Sample ID: 280-82479-13
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 04/26/2016 0915
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.456 g
Analysis Date:	04/30/2016 0219			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9440		1.1	3.5
Antimony		0.75		0.27	0.42
Arsenic		2.6		0.47	0.71
Barium		79.8		0.054	0.35
Boron		1.5		0.69	1.4
Cadmium		0.21		0.029	0.14
Calcium		3700		10	35.4
Chromium		15.0		0.041	0.14
Copper		14.1	X	0.15	0.71
Lead		4.9		0.19	0.35
Magnesium		3740		2.6	14.2
Manganese		353	X	0.071	0.71
Molybdenum		0.18	U	0.18	1.4
Nickel		11.5		0.087	2.8
Potassium		2280		29.0	212
Selenium		0.61	U	0.61	0.71
Silicon		1440	X	4.0	7.1
Silver		0.11	U	0.11	0.14
Vanadium		48.6		0.067	1.4
Zinc		39.4	X	0.28	0.71

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.456 g
Analysis Date:	05/02/2016 2220			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		22500		2.7	3.5
Sodium		286		41.7	84.9

Analysis Method:	6010B	Analysis Batch:	280-323859	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	25Z050416.asc
Dilution:	1.0			Initial Weight/Volume:	1.456 g
Analysis Date:	05/04/2016 1114			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.34		0.023	0.14
Cobalt		9.3		0.071	0.71

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8X0**

Lab Sample ID: 280-82479-13
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 04/26/2016 0915
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.554 g
Analysis Date:	05/02/2016 1830			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0062	U	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8X1**

Lab Sample ID: 280-82479-14
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 04/26/2016 1025
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.401 g
Analysis Date:	04/30/2016 0221			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8760		1.2	3.8
Antimony		0.29	U	0.29	0.45
Arsenic		2.6		0.50	0.76
Barium		87.4		0.057	0.38
Boron		1.5		0.74	1.5
Cadmium		0.20		0.031	0.15
Calcium		3460		10.7	37.8
Chromium		13.2		0.044	0.15
Copper		12.6	X	0.16	0.76
Lead		4.7		0.20	0.38
Magnesium		3870		2.8	15.1
Manganese		309	X	0.076	0.76
Molybdenum		0.20	U	0.20	1.5
Nickel		11.2		0.093	3.0
Potassium		2200		31.0	227
Selenium		0.65	U	0.65	0.76
Silicon		1220	X	4.3	7.6
Silver		0.12	U	0.12	0.15
Vanadium		39.3		0.071	1.5
Zinc		35.5	X	0.30	0.76

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.401 g
Analysis Date:	05/02/2016 2223			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Sodium		168		44.6	90.7

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	2.0			Initial Weight/Volume:	1.401 g
Analysis Date:	05/02/2016 2146			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.44		0.050	0.30
Cobalt		6.1		0.15	1.5
Iron		20800		5.7	7.6

7471A Mercury (CVAA)

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8X1**

Lab Sample ID: 280-82479-14
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 04/26/2016 1025
Date Received: 04/28/2016 0940

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.576 g
Analysis Date:	05/02/2016 1833			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	U	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Client Sample ID: **J1V8X2**

Lab Sample ID: 280-82479-15
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/26/2016 0740
Date Received: 04/28/2016 0940

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-323288	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0			Initial Weight/Volume:	1.430 g
Analysis Date:	04/30/2016 0224			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		171		1.1	3.5
Antimony		0.27	U	0.27	0.42
Arsenic		0.68	B	0.46	0.70
Barium		1.8		0.053	0.35
Beryllium		0.023	B	0.023	0.14
Boron		0.69	U	0.69	1.4
Cadmium		0.029	U	0.029	0.14
Calcium		28.7	B	9.9	35.0
Chromium		0.17	C	0.041	0.14
Cobalt		0.070	U	0.070	0.70
Copper		0.15	U X	0.15	0.70
Lead		0.28	B	0.19	0.35
Magnesium		19.9		2.6	14.0
Manganese		5.1	X	0.070	0.70
Molybdenum		0.18	U	0.18	1.4
Nickel		0.086	U	0.086	2.8
Potassium		49.0	B	28.7	210
Selenium		0.60	U	0.60	0.70
Silicon		134	X	4.0	7.0
Silver		0.11	U	0.11	0.14
Vanadium		0.25	B	0.066	1.4
Zinc		0.69	B X	0.28	0.70

Analysis Method:	6010B	Analysis Batch:	280-323611	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0			Initial Weight/Volume:	1.430 g
Analysis Date:	05/02/2016 2159			Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Iron		247		2.7	3.5
Sodium		41.3	U	41.3	83.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.555 g
Analysis Date:	05/02/2016 1835			Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0060	U	0.0060	0.018

General Chemistry

Client Sample ID: J1V8V8

Lab Sample ID: 280-82479-1
Client Matrix: Solid
% Moisture: 1.5
Date Sampled: 04/26/2016 0810
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	1.7		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1446						DryWt Corrected: Y
Chloride-Soluble	7.2	N	mg/Kg	1.9	4.8	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Nitrate as N-Soluble	1.8	B	mg/Kg	0.30	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Bromide-Soluble	0.38	U	mg/Kg	0.38	1.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.4	B	mg/Kg	1.2	4.8	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Sulfate-Soluble	12.7	N	mg/Kg	1.6	4.8	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y
Fluoride-Soluble	0.79	U N	mg/Kg	0.79	4.8	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1619						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.72		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	1.5		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8V9

Lab Sample ID: 280-82479-2
Client Matrix: Solid
% Moisture: 2.1

Date Sampled: 04/26/2016 0937
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	3.5		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1448					DryWt Corrected: Y	
Chloride-Soluble	6.8		mg/Kg	1.9	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Nitrate as N-Soluble	3.8		mg/Kg	0.31	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Bromide-Soluble	0.38	U	mg/Kg	0.38	1.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Orthophosphate as P-Soluble	1.9	B	mg/Kg	1.2	4.9	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Sulfate-Soluble	8.7		mg/Kg	1.7	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	
Fluoride-Soluble	0.80	U	mg/Kg	0.80	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1718					DryWt Corrected: Y	

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.67		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409					DryWt Corrected: N	
Percent Moisture	2.1		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407					DryWt Corrected: N	

General Chemistry

Client Sample ID: J1V8W0

Lab Sample ID: 280-82479-3
Client Matrix: Solid
% Moisture: 2.4
Date Sampled: 04/26/2016 0830
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	8.8		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1450					DryWt Corrected: Y	
Chloride-Soluble	7.4		mg/Kg	2.0	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Nitrate as N-Soluble	8.5		mg/Kg	0.31	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Bromide-Soluble	0.38	U	mg/Kg	0.38	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Orthophosphate as P-Soluble	2.4	B	mg/Kg	1.2	4.9	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Sulfate-Soluble	7.4		mg/Kg	1.7	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	
Fluoride-Soluble	0.81	B	mg/Kg	0.80	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1738					DryWt Corrected: Y	

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.24		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409					DryWt Corrected: N	
Percent Moisture	2.4		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407					DryWt Corrected: N	

General Chemistry

Client Sample ID: J1V8W1

Lab Sample ID: 280-82479-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 04/26/2016 0850
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	2.8		mg/Kg	0.36	0.75	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1452						DryWt Corrected: Y
Chloride-Soluble	6.1		mg/Kg	1.9	4.7	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Nitrate as N-Soluble	2.2	B	mg/Kg	0.30	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Bromide-Soluble	0.37	U	mg/Kg	0.37	1.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Nitrite as N-Soluble	0.32	U	mg/Kg	0.32	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.8	B	mg/Kg	1.2	4.7	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Sulfate-Soluble	5.5		mg/Kg	1.6	4.7	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y
Fluoride-Soluble	0.78	U	mg/Kg	0.78	4.7	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1758						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.34		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	1.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W2

Lab Sample ID: 280-82479-5
Client Matrix: Solid
% Moisture: 2.0

Date Sampled: 04/26/2016 1045
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	4.7		mg/Kg	0.36	0.75	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1512						DryWt Corrected: Y
Chloride-Soluble	6.4		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Nitrate as N-Soluble	3.6		mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Orthophosphate as P-Soluble	2.8	B	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Sulfate-Soluble	5.7		mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1818						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.35		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	2.0		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W3

Lab Sample ID: 280-82479-6
Client Matrix: Solid
% Moisture: 2.1

Date Sampled: 04/26/2016 1100
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	8.4		mg/Kg	0.37	0.77	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1514						DryWt Corrected: Y
Chloride-Soluble	6.9		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Nitrate as N-Soluble	5.8		mg/Kg	0.31	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Orthophosphate as P-Soluble	3.2	B	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Sulfate-Soluble	7.0		mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y
Fluoride-Soluble	0.82	U	mg/Kg	0.82	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1838						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.35		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	2.1		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W4

Lab Sample ID: 280-82479-7
Client Matrix: Solid
% Moisture: 5.8
Date Sampled: 04/26/2016 1125
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	2.1		mg/Kg	0.38	0.79	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1516					DryWt Corrected: Y	
Chloride-Soluble	6.8	N	mg/Kg	2.1	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Nitrate as N-Soluble	1.4	B	mg/Kg	0.33	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Bromide-Soluble	0.41	U	mg/Kg	0.41	2.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Orthophosphate as P-Soluble	1.8	B M	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Sulfate-Soluble	4.9	B	mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	
Fluoride-Soluble	0.86	U N	mg/Kg	0.86	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 1938					DryWt Corrected: Y	

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.54		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409					DryWt Corrected: N	
Percent Moisture	5.8		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407					DryWt Corrected: N	

General Chemistry

Client Sample ID: J1V8W5

Lab Sample ID: 280-82479-8
Client Matrix: Solid
% Moisture: 1.3
Date Sampled: 04/26/2016 1115
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	4.6		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1518						DryWt Corrected: Y
Chloride-Soluble	7.2		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Nitrate as N-Soluble	3.0		mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.6	B	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Sulfate-Soluble	6.0		mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y
Fluoride-Soluble	0.89	B	mg/Kg	0.83	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2037						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.19		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	1.3		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W6

Lab Sample ID: 280-82479-9
Client Matrix: Solid
% Moisture: 1.8

Date Sampled: 04/26/2016 1145
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	1.4		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1520					DryWt Corrected: Y	
Chloride-Soluble	6.6		mg/Kg	2.0	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Nitrate as N-Soluble	1.4	B	mg/Kg	0.31	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Bromide-Soluble	0.38	U	mg/Kg	0.38	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.4	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Orthophosphate as P-Soluble	2.6	B	mg/Kg	1.2	4.9	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Sulfate-Soluble	6.5		mg/Kg	1.7	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	
Fluoride-Soluble	0.80	U	mg/Kg	0.80	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2057					DryWt Corrected: Y	

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.43		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409					DryWt Corrected: N	
Percent Moisture	1.8		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407					DryWt Corrected: N	

General Chemistry

Client Sample ID: J1V8W7

Lab Sample ID: 280-82479-10
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 04/26/2016 1130
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	5.9		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1522						DryWt Corrected: Y
Chloride-Soluble	7.2		mg/Kg	2.1	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Nitrate as N-Soluble	4.6		mg/Kg	0.32	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.4	B	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Sulfate-Soluble	6.7		mg/Kg	1.7	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y
Fluoride-Soluble	0.84	U	mg/Kg	0.84	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2117						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.10		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	4.0		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W8

Lab Sample ID: 280-82479-11
Client Matrix: Solid
% Moisture: 8.8
Date Sampled: 04/26/2016 1200
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	3.4		mg/Kg	0.39	0.82	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1524						DryWt Corrected: Y
Chloride-Soluble	7.3		mg/Kg	2.1	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Nitrate as N-Soluble	3.1		mg/Kg	0.33	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Orthophosphate as P-Soluble	2.7	B	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Sulfate-Soluble	5.9		mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y
Fluoride-Soluble	0.85	U	mg/Kg	0.85	5.2	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2137						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.90		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	8.8		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8W9

Lab Sample ID: 280-82479-12
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 04/26/2016 1220
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	9.9		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1526						DryWt Corrected: Y
Chloride-Soluble	6.8		mg/Kg	2.0	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Nitrate as N-Soluble	4.8		mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Orthophosphate as P-Soluble	3.1	B	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Sulfate-Soluble	5.1		mg/Kg	1.7	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2157						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.09		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409						DryWt Corrected: N
Percent Moisture	2.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8X0

Lab Sample ID: 280-82479-13
Client Matrix: Solid
% Moisture: 2.9
Date Sampled: 04/26/2016 0915
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	4.2		mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1528					DryWt Corrected: Y	
Chloride-Soluble	7.1		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Nitrate as N-Soluble	3.2		mg/Kg	0.31	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Orthophosphate as P-Soluble	2.9	B	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Sulfate-Soluble	13.9		mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	
Fluoride-Soluble	1.5	B	mg/Kg	0.82	5.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2217					DryWt Corrected: Y	

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.68		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1409					DryWt Corrected: N	
Percent Moisture	2.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407					DryWt Corrected: N	

General Chemistry

Client Sample ID: J1V8X1

Lab Sample ID: 280-82479-14
Client Matrix: Solid
% Moisture: 5.6

Date Sampled: 04/26/2016 1025
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	2.4		mg/Kg	0.37	0.78	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1530						DryWt Corrected: Y
Chloride-Soluble	6.8		mg/Kg	2.0	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Nitrate as N-Soluble	1.6	B	mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Orthophosphate as P-Soluble	2.2	B	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Sulfate-Soluble	5.4		mg/Kg	1.7	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.1	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2237						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.34		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1707						DryWt Corrected: N
Percent Moisture	5.6		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

General Chemistry

Client Sample ID: J1V8X2

Lab Sample ID: 280-82479-15
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/26/2016 0740
Date Received: 04/28/2016 0940

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	0.74	1.0	353.2
Analysis Batch: 280-323977	Analysis Date: 05/04/2016 1544						DryWt Corrected: Y
Chloride-Soluble	7.4		mg/Kg	2.0	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Nitrate as N-Soluble	0.31	U	mg/Kg	0.31	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Bromide-Soluble	0.38	U	mg/Kg	0.38	2.0	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Nitrite as N-Soluble	0.33	U	mg/Kg	0.33	2.5	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.2	U	mg/Kg	1.2	4.9	1.0	9056M
Analysis Batch: 280-323171	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Sulfate-Soluble	4.4	B	mg/Kg	1.7	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y
Fluoride-Soluble	0.80	U	mg/Kg	0.80	4.9	1.0	9056M
Analysis Batch: 280-323172	Analysis Date: 04/29/2016 2337						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	6.79		SU	0.100	0.100	1.0	9045C
Analysis Batch: 280-323227	Analysis Date: 04/29/2016 1707						DryWt Corrected: N
Percent Moisture	0.10	U	%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-323360	Analysis Date: 04/30/2016 1407						DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Method Blank - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-323098/1-A	Analysis Batch:	280-323288	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/30/2016 0125	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.0730	B	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Lead	0.27	U	0.27	0.50
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Method Blank - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-323098/1-A	Analysis Batch:	280-323611	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/02/2016 2051	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Iron	3.8	U	3.8	5.0

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Lab Control Sample - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-323098/2-A	Analysis Batch:	280-323288	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/30/2016 0127	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	50.0	53.12	106	82 - 110	
Arsenic	100	102.3	102	85 - 110	
Barium	200	204.8	102	87 - 112	
Beryllium	5.00	4.78	96	84 - 114	
Boron	100	105.2	105	80 - 120	
Cadmium	10.0	10.72	107	87 - 110	
Calcium	5000	4699	94	82 - 114	
Chromium	20.0	19.29	96	84 - 114	
Cobalt	50.0	51.38	103	87 - 110	
Copper	25.0	24.27	97	88 - 110	
Lead	50.0	51.60	103	86 - 110	
Magnesium	5000	4509	90	90 - 110	
Manganese	50.0	46.01	92	88 - 110	
Molybdenum	100	108.4	108	86 - 110	
Nickel	50.0	49.70	99	87 - 110	
Potassium	5000	5248	105	89 - 110	
Selenium	200	198.3	99	83 - 110	
Silicon	1000	145.8	15	10 - 70	
Silver	5.00	4.69	94	87 - 114	
Sodium	5000	5326	107	90 - 112	
Vanadium	50.0	44.82	90	88 - 110	
Zinc	50.0	43.74	87	76 - 114	

Lab Control Sample - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-323098/2-A	Analysis Batch:	280-323611	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/02/2016 2054	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	190.7	95	82 - 116	
Iron	100	97.09	97	87 - 120	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Matrix Spike - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323288	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.009 g
Analysis Date:	04/30/2016 0137	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	6720		201	9615	1436	50 - 200	4
Antimony	0.29	U	50.3	28.80	57	20 - 200	
Arsenic	2.9		101	90.18	87	76 - 111	
Barium	58.5		201	244.0	92	52 - 159	
Boron	1.2	B	101	88.99	87	80 - 120	
Cadmium	0.16		10.1	9.49	93	40 - 130	
Calcium	7850		5030	13180	106	43 - 165	
Chromium	9.1		20.1	29.44	101	70 - 200	
Copper	14.9		25.2	37.69	90	37 - 187	
Lead	4.1		50.3	47.04	85	70 - 200	
Magnesium	4650		5030	8948	85	64 - 145	
Manganese	288		50.3	358.3	140	40 - 200	4
Molybdenum	0.20	U	101	90.70	90	75 - 103	
Nickel	10		50.3	52.17	84	61 - 126	
Potassium	1350		5030	6574	104	56 - 172	
Selenium	0.65	U	201	168.1	84	76 - 104	
Silicon	1760		1010	1637	-12	20 - 200	N
Silver	0.12	U	5.03	3.91	78	75 - 141	
Sodium	366		5030	5303	98	78 - 111	
Vanadium	51.0		50.3	97.50	92	50 - 169	
Zinc	39.3		50.3	77.22	75	70 - 200	

Matrix Spike - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323611	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.009 g
Analysis Date:	05/02/2016 2104	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Beryllium	0.47	B	5.03	5.15	93	72 - 105	
Cobalt	8.2		50.3	52.61	88	72 - 106	
Iron	26000		101	28440	2395	70 - 200	4

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323288	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26C042916.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.461 g
Analysis Date:	04/30/2016 0135	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	6720		5462	21	40	
Antimony	0.29	U	0.26	NC	40	U
Arsenic	2.9		1.95	38	30	M
Barium	58.5		43.93	28	30	
Boron	1.2	B	0.833	39	30	B M
Cadmium	0.16		0.151	6	30	
Calcium	7850		6416	20	30	
Chromium	9.1		7.73	16	40	
Copper	14.9		14.22	5	30	
Lead	4.1		3.39	18	40	
Magnesium	4650		3822	20	30	
Manganese	288		247.9	15	40	
Molybdenum	0.20	U	0.18	NC	30	U
Nickel	10		8.45	17	30	
Potassium	1350		1099	21	40	
Selenium	0.65	U	0.60	NC	30	U
Silicon	1760		1642	7	40	
Silver	0.12	U	0.11	NC	30	U
Sodium	366		306.0	18	30	
Vanadium	51.0		41.97	19	30	
Zinc	39.3		31.43	22	40	

Duplicate - Batch: 280-323098

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323611	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-323098	Lab File ID:	26A050216.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.461 g
Analysis Date:	05/02/2016 2102	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/29/2016 1425				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Beryllium	0.47	B	0.396	18	30	B
Cobalt	8.2		7.12	14	30	
Iron	26000		22600	14	40	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Method Blank - Batch: 280-323465

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-323465/1-A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	05/02/2016 1744	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-323465

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-323465/2-A	Analysis Batch:	280-323619	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	05/02/2016 1746	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.443	106	87 - 111	

Matrix Spike - Batch: 280-323465

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323619	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.526 g
Analysis Date:	05/02/2016 1758	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0057	U	0.483	0.500	104	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323465

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323619	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-323465	Lab File ID:	160502ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.569 g
Analysis Date:	05/02/2016 1756	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2016 1250				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0057	U	0.0059	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Method Blank - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-323542/3-A	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	100 mL
Analysis Date:	05/04/2016 1444	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Result	Qual	MDL	RL
Nitrate Nitrite as N-Soluble	0.36	U	0.36	0.75

Method Reporting Limit Check - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-323977/21	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	05/04/2016 0946	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0982	98	50 - 150	B

Lab Control Sample - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-323542/1-A	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	100 mL
Analysis Date:	05/04/2016 1440	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	49.6	50.27	101	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Matrix Spike - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-82479-4	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	5 mL
Analysis Date:	05/04/2016 1456	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	2.8		39.9	40.75	95	90 - 110	

Matrix Spike - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-82479-15	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	5 mL
Analysis Date:	05/04/2016 1548	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.36	U	39.9	39.96	100	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-82479-4	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	100 mL
Analysis Date:	05/04/2016 1454	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	2.8		2.87	1	10	

Duplicate - Batch: 280-323977

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-82479-15	Analysis Batch:	280-323977	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\050416.RS
Dilution:	1.0	Leach Batch:	280-323542	Initial Weight/Volume:	100 mL
Analysis Date:	05/04/2016 1546	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	05/02/2016 1444				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	0.36	U	0.35	NC	10	U

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Lab Control Sample - Batch: 280-323227

Method: 9045C
Preparation: N/A

Lab Sample ID:	LCS 280-322970/106-A	Analysis Batch:	280-323227	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-322970	Initial Weight/Volume:	1 mL
Analysis Date:	04/29/2016 1409	Units:	SU	Final Weight/Volume:	1 mL
Prep Date:	N/A				
Leach Date:	04/28/2016 0839				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
pH adj. to 25 deg C-Soluble	7.00	6.900	99	97 - 103	

Lab Control Sample - Batch: 280-323227

Method: 9045C
Preparation: N/A

Lab Sample ID:	LCS 280-322970/127-A	Analysis Batch:	280-323227	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-322970	Initial Weight/Volume:	1 mL
Analysis Date:	04/29/2016 1409	Units:	SU	Final Weight/Volume:	1 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 0804				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
pH adj. to 25 deg C-Soluble	7.00	6.890	98	97 - 103	

Duplicate - Batch: 280-323227

Method: 9045C
Preparation: N/A

Lab Sample ID:	280-82479-12	Analysis Batch:	280-323227	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-322970	Initial Weight/Volume:	1 mL
Analysis Date:	04/29/2016 1409	Units:	SU	Final Weight/Volume:	1 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 0804				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH adj. to 25 deg C-Soluble	7.09	7.150	0.8	5	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Method Blank - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-323222/2-A	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0008.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1559	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 1300				

Analyte	Result	Qual	MDL	RL
Nitrate as N-Soluble	0.31	U	0.31	2.5
Nitrite as N-Soluble	0.33	U	0.33	2.5
Orthophosphate as P-Soluble	1.2	U	1.2	5.0

Method Reporting Limit Check - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-323171/3	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	0003.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1305	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.206	103	50 - 150	B
Nitrite as N-Soluble	0.200	0.216	108	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.220	110	50 - 150	B

Lab Control Sample - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-323222/1-A	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0007.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1539	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 1300				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	50.0	49.17	98	90 - 110	
Nitrite as N-Soluble	50.0	49.70	99	90 - 110	
Orthophosphate as P-Soluble	50.0	52.57	105	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-82479-1
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Matrix Spike - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0011.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1658	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	1.8	B	49.0	45.72	90	80 - 120	
Nitrite as N-Soluble	0.33	U	49.0	44.63	91	80 - 120	
Orthophosphate as P-Soluble	1.4	B	49.0	42.33	84	80 - 120	

Matrix Spike - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-7	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0021.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 2017	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	1.4	B	52.4	50.00	93	80 - 120	
Nitrite as N-Soluble	0.35	U	52.4	49.04	94	80 - 120	
Orthophosphate as P-Soluble	1.8	B	52.4	49.11	90	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0010.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1638	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	1.8	B	1.75	4	15	B
Nitrite as N-Soluble	0.33	U	0.33	NC	15	U
Orthophosphate as P-Soluble	1.4	B	1.61	15	15	B

Duplicate - Batch: 280-323171

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-7	Analysis Batch:	280-323171	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0020.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1958	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	1.4	B	1.41	0.5	15	B
Nitrite as N-Soluble	0.35	U	0.35	NC	15	U
Orthophosphate as P-Soluble	1.8	B	2.43	32	15	B M

Client: Washington Closure Hanford

Job Number: 280-82479-1
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Method Blank - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-323222/2-A	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0008.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1559	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 1300				

Analyte	Result	Qual	MDL	RL
Chloride-Soluble	2.0	U	2.0	5.0
Bromide-Soluble	0.39	U	0.39	2.0
Sulfate-Soluble	1.7	U	1.7	5.0
Fluoride-Soluble	0.82	U	0.82	5.0

Method Reporting Limit Check - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-323172/3	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	0003.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1305	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	2.50	2.36	94	50 - 150	B
Bromide-Soluble	0.200	0.224	112	50 - 150	
Sulfate-Soluble	2.50	2.43	97	50 - 150	B
Fluoride-Soluble	0.200	0.223	111	50 - 150	B

Lab Control Sample - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-323222/1-A	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0007.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1539	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	04/29/2016 1300				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1000	984.2	98	90 - 110	
Bromide-Soluble	50.0	49.88	100	90 - 110	
Sulfate-Soluble	1000	972.0	97	90 - 110	
Fluoride-Soluble	50.0	51.71	103	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Matrix Spike - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0011.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1658	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	7.2		245	188.9	74	80 - 120	N
Bromide-Soluble	0.38	U	49.0	45.26	92	80 - 120	
Sulfate-Soluble	12.7		245	205.8	79	80 - 120	N
Fluoride-Soluble	0.79	U	49.0	37.46	76	80 - 120	N

Matrix Spike - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-7	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0021.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 2017	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	6.8		262	207.3	77	80 - 120	N
Bromide-Soluble	0.41	U	52.4	49.58	95	80 - 120	
Sulfate-Soluble	4.9	B	262	229.3	86	80 - 120	
Fluoride-Soluble	0.86	U	52.4	37.34	71	80 - 120	N

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-1	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0010.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1638	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	7.2		7.23	0.9	10	
Bromide-Soluble	0.38	U	0.38	NC	10	U
Sulfate-Soluble	12.7		12.72	0.6	10	
Fluoride-Soluble	0.79	U	0.80	NC	10	U

Duplicate - Batch: 280-323172

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-82479-7	Analysis Batch:	280-323172	Instrument ID:	WC_IonChrom11
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	0020.d
Dilution:	1.0	Leach Batch:	280-323222	Initial Weight/Volume:	5 mL
Analysis Date:	04/29/2016 1958	Units:	mg/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				10 uL
Leach Date:	04/29/2016 1300				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	6.8		6.89	2	10	
Bromide-Soluble	0.41	U	0.41	NC	10	U
Sulfate-Soluble	4.9	B	5.05	3	10	B
Fluoride-Soluble	0.86	U	0.85	NC	10	U

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

Duplicate - Batch: 280-323360

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-82479-7	Analysis Batch:	280-323360	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/30/2016 1407	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	5.8	5.7	3	20	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-323098					
LCS 280-323098/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-323098/1-A	Method Blank	T	Solid	3050B	
280-82479-1	J1V8V8	T	Solid	3050B	
280-82479-1DU	Duplicate	T	Solid	3050B	
280-82479-1MS	Matrix Spike	T	Solid	3050B	
280-82479-2	J1V8V9	T	Solid	3050B	
280-82479-3	J1V8W0	T	Solid	3050B	
280-82479-4	J1V8W1	T	Solid	3050B	
280-82479-5	J1V8W2	T	Solid	3050B	
280-82479-6	J1V8W3	T	Solid	3050B	
280-82479-7	J1V8W4	T	Solid	3050B	
280-82479-8	J1V8W5	T	Solid	3050B	
280-82479-9	J1V8W6	T	Solid	3050B	
280-82479-10	J1V8W7	T	Solid	3050B	
280-82479-11	J1V8W8	T	Solid	3050B	
280-82479-12	J1V8W9	T	Solid	3050B	
280-82479-13	J1V8X0	T	Solid	3050B	
280-82479-14	J1V8X1	T	Solid	3050B	
280-82479-15	J1V8X2	T	Solid	3050B	
Analysis Batch:280-323288					
LCS 280-323098/2-A	Lab Control Sample	T	Solid	6010B	280-323098
MB 280-323098/1-A	Method Blank	T	Solid	6010B	280-323098
280-82479-1	J1V8V8	T	Solid	6010B	280-323098
280-82479-1DU	Duplicate	T	Solid	6010B	280-323098
280-82479-1MS	Matrix Spike	T	Solid	6010B	280-323098
280-82479-2	J1V8V9	T	Solid	6010B	280-323098
280-82479-3	J1V8W0	T	Solid	6010B	280-323098
280-82479-4	J1V8W1	T	Solid	6010B	280-323098
280-82479-5	J1V8W2	T	Solid	6010B	280-323098
280-82479-6	J1V8W3	T	Solid	6010B	280-323098
280-82479-7	J1V8W4	T	Solid	6010B	280-323098
280-82479-8	J1V8W5	T	Solid	6010B	280-323098
280-82479-9	J1V8W6	T	Solid	6010B	280-323098
280-82479-10	J1V8W7	T	Solid	6010B	280-323098
280-82479-11	J1V8W8	T	Solid	6010B	280-323098
280-82479-12	J1V8W9	T	Solid	6010B	280-323098
280-82479-13	J1V8X0	T	Solid	6010B	280-323098
280-82479-14	J1V8X1	T	Solid	6010B	280-323098
280-82479-15	J1V8X2	T	Solid	6010B	280-323098

Client: Washington Closure Hanford

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QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-323465					
LCS 280-323465/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-323465/1-A	Method Blank	T	Solid	7471A	
280-82479-1	J1V8V8	T	Solid	7471A	
280-82479-1DU	Duplicate	T	Solid	7471A	
280-82479-1MS	Matrix Spike	T	Solid	7471A	
280-82479-2	J1V8V9	T	Solid	7471A	
280-82479-3	J1V8W0	T	Solid	7471A	
280-82479-4	J1V8W1	T	Solid	7471A	
280-82479-5	J1V8W2	T	Solid	7471A	
280-82479-6	J1V8W3	T	Solid	7471A	
280-82479-7	J1V8W4	T	Solid	7471A	
280-82479-8	J1V8W5	T	Solid	7471A	
280-82479-9	J1V8W6	T	Solid	7471A	
280-82479-10	J1V8W7	T	Solid	7471A	
280-82479-11	J1V8W8	T	Solid	7471A	
280-82479-12	J1V8W9	T	Solid	7471A	
280-82479-13	J1V8X0	T	Solid	7471A	
280-82479-14	J1V8X1	T	Solid	7471A	
280-82479-15	J1V8X2	T	Solid	7471A	
Analysis Batch:280-323611					
LCS 280-323098/2-A	Lab Control Sample	T	Solid	6010B	280-323098
MB 280-323098/1-A	Method Blank	T	Solid	6010B	280-323098
280-82479-1	J1V8V8	T	Solid	6010B	280-323098
280-82479-1DU	Duplicate	T	Solid	6010B	280-323098
280-82479-1MS	Matrix Spike	T	Solid	6010B	280-323098
280-82479-2	J1V8V9	T	Solid	6010B	280-323098
280-82479-3	J1V8W0	T	Solid	6010B	280-323098
280-82479-5	J1V8W2	T	Solid	6010B	280-323098
280-82479-6	J1V8W3	T	Solid	6010B	280-323098
280-82479-7	J1V8W4	T	Solid	6010B	280-323098
280-82479-8	J1V8W5	T	Solid	6010B	280-323098
280-82479-9	J1V8W6	T	Solid	6010B	280-323098
280-82479-10	J1V8W7	T	Solid	6010B	280-323098
280-82479-11	J1V8W8	T	Solid	6010B	280-323098
280-82479-12	J1V8W9	T	Solid	6010B	280-323098
280-82479-13	J1V8X0	T	Solid	6010B	280-323098
280-82479-14	J1V8X1	T	Solid	6010B	280-323098
280-82479-15	J1V8X2	T	Solid	6010B	280-323098

Client: Washington Closure Hanford

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QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-323619					
LCS 280-323465/2-A	Lab Control Sample	T	Solid	7471A	280-323465
MB 280-323465/1-A	Method Blank	T	Solid	7471A	280-323465
280-82479-1	J1V8V8	T	Solid	7471A	280-323465
280-82479-1DU	Duplicate	T	Solid	7471A	280-323465
280-82479-1MS	Matrix Spike	T	Solid	7471A	280-323465
280-82479-2	J1V8V9	T	Solid	7471A	280-323465
280-82479-3	J1V8W0	T	Solid	7471A	280-323465
280-82479-4	J1V8W1	T	Solid	7471A	280-323465
280-82479-5	J1V8W2	T	Solid	7471A	280-323465
280-82479-6	J1V8W3	T	Solid	7471A	280-323465
280-82479-7	J1V8W4	T	Solid	7471A	280-323465
280-82479-8	J1V8W5	T	Solid	7471A	280-323465
280-82479-9	J1V8W6	T	Solid	7471A	280-323465
280-82479-10	J1V8W7	T	Solid	7471A	280-323465
280-82479-11	J1V8W8	T	Solid	7471A	280-323465
280-82479-12	J1V8W9	T	Solid	7471A	280-323465
280-82479-13	J1V8X0	T	Solid	7471A	280-323465
280-82479-14	J1V8X1	T	Solid	7471A	280-323465
280-82479-15	J1V8X2	T	Solid	7471A	280-323465
Analysis Batch:280-323859					
280-82479-13	J1V8X0	T	Solid	6010B	280-323098

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-82479-1
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QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-322970					
LCS 280-322970/106-A	Lab Control Sample	S	Solid	DI Leach	
LCS 280-322970/127-A	Lab Control Sample	S	Solid	DI Leach	
280-82479-1	J1V8V8	S	Solid	DI Leach	
280-82479-2	J1V8V9	S	Solid	DI Leach	
280-82479-3	J1V8W0	S	Solid	DI Leach	
280-82479-4	J1V8W1	S	Solid	DI Leach	
280-82479-5	J1V8W2	S	Solid	DI Leach	
280-82479-6	J1V8W3	S	Solid	DI Leach	
280-82479-7	J1V8W4	S	Solid	DI Leach	
280-82479-8	J1V8W5	S	Solid	DI Leach	
280-82479-9	J1V8W6	S	Solid	DI Leach	
280-82479-10	J1V8W7	S	Solid	DI Leach	
280-82479-11	J1V8W8	S	Solid	DI Leach	
280-82479-12	J1V8W9	S	Solid	DI Leach	
280-82479-12DU	Duplicate	S	Solid	DI Leach	
280-82479-13	J1V8X0	S	Solid	DI Leach	
280-82479-14	J1V8X1	S	Solid	DI Leach	
280-82479-15	J1V8X2	S	Solid	DI Leach	
Analysis Batch:280-323171					
LCS 280-323222/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-323222/2-A	Method Blank	S	Solid	9056M	
280-82479-1	J1V8V8	S	Solid	9056M	
280-82479-1DU	Duplicate	S	Solid	9056M	
280-82479-1MS	Matrix Spike	S	Solid	9056M	
280-82479-2	J1V8V9	S	Solid	9056M	
280-82479-3	J1V8W0	S	Solid	9056M	
280-82479-4	J1V8W1	S	Solid	9056M	
280-82479-5	J1V8W2	S	Solid	9056M	
280-82479-6	J1V8W3	S	Solid	9056M	
280-82479-7	J1V8W4	S	Solid	9056M	
280-82479-7DU	Duplicate	S	Solid	9056M	
280-82479-7MS	Matrix Spike	S	Solid	9056M	
280-82479-8	J1V8W5	S	Solid	9056M	
280-82479-9	J1V8W6	S	Solid	9056M	
280-82479-10	J1V8W7	S	Solid	9056M	
280-82479-11	J1V8W8	S	Solid	9056M	
280-82479-12	J1V8W9	S	Solid	9056M	
280-82479-13	J1V8X0	S	Solid	9056M	
280-82479-14	J1V8X1	S	Solid	9056M	
280-82479-15	J1V8X2	S	Solid	9056M	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-323172					
LCS 280-323222/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-323222/2-A	Method Blank	S	Solid	9056M	
280-82479-1	J1V8V8	S	Solid	9056M	
280-82479-1DU	Duplicate	S	Solid	9056M	
280-82479-1MS	Matrix Spike	S	Solid	9056M	
280-82479-2	J1V8V9	S	Solid	9056M	
280-82479-3	J1V8W0	S	Solid	9056M	
280-82479-4	J1V8W1	S	Solid	9056M	
280-82479-5	J1V8W2	S	Solid	9056M	
280-82479-6	J1V8W3	S	Solid	9056M	
280-82479-7	J1V8W4	S	Solid	9056M	
280-82479-7DU	Duplicate	S	Solid	9056M	
280-82479-7MS	Matrix Spike	S	Solid	9056M	
280-82479-8	J1V8W5	S	Solid	9056M	
280-82479-9	J1V8W6	S	Solid	9056M	
280-82479-10	J1V8W7	S	Solid	9056M	
280-82479-11	J1V8W8	S	Solid	9056M	
280-82479-12	J1V8W9	S	Solid	9056M	
280-82479-13	J1V8X0	S	Solid	9056M	
280-82479-14	J1V8X1	S	Solid	9056M	
280-82479-15	J1V8X2	S	Solid	9056M	
Prep Batch: 280-323222					
LCS 280-323222/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-323222/2-A	Method Blank	S	Solid	DI Leach	
280-82479-1	J1V8V8	S	Solid	DI Leach	
280-82479-1DU	Duplicate	S	Solid	DI Leach	
280-82479-1MS	Matrix Spike	S	Solid	DI Leach	
280-82479-2	J1V8V9	S	Solid	DI Leach	
280-82479-3	J1V8W0	S	Solid	DI Leach	
280-82479-4	J1V8W1	S	Solid	DI Leach	
280-82479-5	J1V8W2	S	Solid	DI Leach	
280-82479-6	J1V8W3	S	Solid	DI Leach	
280-82479-7	J1V8W4	S	Solid	DI Leach	
280-82479-7DU	Duplicate	S	Solid	DI Leach	
280-82479-7MS	Matrix Spike	S	Solid	DI Leach	
280-82479-8	J1V8W5	S	Solid	DI Leach	
280-82479-9	J1V8W6	S	Solid	DI Leach	
280-82479-10	J1V8W7	S	Solid	DI Leach	
280-82479-11	J1V8W8	S	Solid	DI Leach	
280-82479-12	J1V8W9	S	Solid	DI Leach	
280-82479-13	J1V8X0	S	Solid	DI Leach	
280-82479-14	J1V8X1	S	Solid	DI Leach	
280-82479-15	J1V8X2	S	Solid	DI Leach	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-323227					
LCS 280-322970/106-A	Lab Control Sample	S	Solid	9045C	
LCS 280-322970/127-A	Lab Control Sample	S	Solid	9045C	
280-82479-1	J1V8V8	S	Solid	9045C	
280-82479-2	J1V8V9	S	Solid	9045C	
280-82479-3	J1V8W0	S	Solid	9045C	
280-82479-4	J1V8W1	S	Solid	9045C	
280-82479-5	J1V8W2	S	Solid	9045C	
280-82479-6	J1V8W3	S	Solid	9045C	
280-82479-7	J1V8W4	S	Solid	9045C	
280-82479-8	J1V8W5	S	Solid	9045C	
280-82479-9	J1V8W6	S	Solid	9045C	
280-82479-10	J1V8W7	S	Solid	9045C	
280-82479-11	J1V8W8	S	Solid	9045C	
280-82479-12	J1V8W9	S	Solid	9045C	
280-82479-12DU	Duplicate	S	Solid	9045C	
280-82479-13	J1V8X0	S	Solid	9045C	
280-82479-14	J1V8X1	S	Solid	9045C	
280-82479-15	J1V8X2	S	Solid	9045C	
Analysis Batch:280-323360					
280-82479-1	J1V8V8	T	Solid	D-2216	
280-82479-2	J1V8V9	T	Solid	D-2216	
280-82479-3	J1V8W0	T	Solid	D-2216	
280-82479-4	J1V8W1	T	Solid	D-2216	
280-82479-5	J1V8W2	T	Solid	D-2216	
280-82479-6	J1V8W3	T	Solid	D-2216	
280-82479-7	J1V8W4	T	Solid	D-2216	
280-82479-7DU	Duplicate	T	Solid	D-2216	
280-82479-8	J1V8W5	T	Solid	D-2216	
280-82479-9	J1V8W6	T	Solid	D-2216	
280-82479-10	J1V8W7	T	Solid	D-2216	
280-82479-11	J1V8W8	T	Solid	D-2216	
280-82479-12	J1V8W9	T	Solid	D-2216	
280-82479-13	J1V8X0	T	Solid	D-2216	
280-82479-14	J1V8X1	T	Solid	D-2216	
280-82479-15	J1V8X2	T	Solid	D-2216	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-323542					
LCS 280-323542/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-323542/3-A	Method Blank	S	Solid	DI Leach	
280-82479-1	J1V8V8	S	Solid	DI Leach	
280-82479-2	J1V8V9	S	Solid	DI Leach	
280-82479-3	J1V8W0	S	Solid	DI Leach	
280-82479-4	J1V8W1	S	Solid	DI Leach	
280-82479-4DU	Duplicate	S	Solid	DI Leach	
280-82479-4MS	Matrix Spike	S	Solid	DI Leach	
280-82479-5	J1V8W2	S	Solid	DI Leach	
280-82479-6	J1V8W3	S	Solid	DI Leach	
280-82479-7	J1V8W4	S	Solid	DI Leach	
280-82479-8	J1V8W5	S	Solid	DI Leach	
280-82479-9	J1V8W6	S	Solid	DI Leach	
280-82479-10	J1V8W7	S	Solid	DI Leach	
280-82479-11	J1V8W8	S	Solid	DI Leach	
280-82479-12	J1V8W9	S	Solid	DI Leach	
280-82479-13	J1V8X0	S	Solid	DI Leach	
280-82479-14	J1V8X1	S	Solid	DI Leach	
280-82479-15	J1V8X2	S	Solid	DI Leach	
280-82479-15DU	Duplicate	S	Solid	DI Leach	
280-82479-15MS	Matrix Spike	S	Solid	DI Leach	
Analysis Batch:280-323977					
LCS 280-323542/1-A	Lab Control Sample	S	Solid	353.2	
MB 280-323542/3-A	Method Blank	S	Solid	353.2	
280-82479-1	J1V8V8	S	Solid	353.2	
280-82479-2	J1V8V9	S	Solid	353.2	
280-82479-3	J1V8W0	S	Solid	353.2	
280-82479-4	J1V8W1	S	Solid	353.2	
280-82479-4DU	Duplicate	S	Solid	353.2	
280-82479-4MS	Matrix Spike	S	Solid	353.2	
280-82479-5	J1V8W2	S	Solid	353.2	
280-82479-6	J1V8W3	S	Solid	353.2	
280-82479-7	J1V8W4	S	Solid	353.2	
280-82479-8	J1V8W5	S	Solid	353.2	
280-82479-9	J1V8W6	S	Solid	353.2	
280-82479-10	J1V8W7	S	Solid	353.2	
280-82479-11	J1V8W8	S	Solid	353.2	
280-82479-12	J1V8W9	S	Solid	353.2	
280-82479-13	J1V8X0	S	Solid	353.2	
280-82479-14	J1V8X1	S	Solid	353.2	
280-82479-15	J1V8X2	S	Solid	353.2	
280-82479-15DU	Duplicate	S	Solid	353.2	
280-82479-15MS	Matrix Spike	S	Solid	353.2	

Client: Washington Closure Hanford

Job Number: 280-82479-1
Sdg Number: JP1043

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
S = Soluble
T = Total

Washington Closure Hanford — CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector: MARCHAND, EG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-83 Verification Sampling		SAF No.: RC-189
Ice Chest No.: ERC-96-511	Field Logbook No.: EL-1652-12	COA: 000N832000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A13H482		Bill of Lading/Air Bill No.: SEE OSPC

Other Labs Shipped To: TestAmerica Richland

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

Cool as required

280-82479 Chain of Custody

Preservation			Cool <=6C	Cool <=6C									
Type of Container			G/P	G/P									
No. of Container(s)			1	1									
Volume			250mL	250mL									
Sample Analysis			See item (1) in Special Instructions	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045									
Sample No.	**Matrix**	**Sample Date**	**Sample Time**										
J1V8V8	SOIL	4-26-16	0810	✓	✓								
J1V8V9	SOIL	4-26-16	0937	✓	✓								
J1V8W0	SOIL	4-26-16	0830	✓	✓								
J1V8W1	SOIL	4-26-16	0850	✓	✓								
J1V8W2	SOIL	4-26-16	1045	✓	✓								

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson T.R. Edmundson	4-26-16 1230
T.R. Edmundson T.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson T.R. Edmundson	4-27-16 1000
T.R. Edmundson T.R. Edmundson (WCH)	4-27-16 1500	Fed Ex	4-27-16 —
		[signature]	0940 28 Apr 16

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)

1.0127-0.2 28 Apr 16 Transfer

REVIEWED BY KWpertile DATE 4-27-16

JP1043

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector MARCHAND, EG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 Day		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-83 Verification Sampling		**SAF No.** RC-189
Ice Chest No. ERC-96-511	**Field Logbook No.** EL-1652-12	**COA** 000N832000	**Method of Shipment** Commercial Carrier
Shipped To TestAmerica Denver	**Offsite Property No.** A131482		**Bill of Lading/Air Bill No.** SRE OSPC

Other Labs Shipped To
TestAmerica Richland

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool as required

Preservation	Cool <=6C	Cool <=6C										
Type of Container	G/P	G/P										
No. of Container(s)	1	1										
Volume	250mL	250mL										
Sample Analysis	See item (1) in Special Instructions	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045										

Sample No.	Matrix	Sample Date	Sample Time										
J1V8W3	SOIL	4-26-16	1100	✓	✓								
J1V8W4	SOIL	4-26-16	1025	✓	✓								
J1V8W5	SOIL	4-26-16	1115	✓	✓								
J1V8W6	SOIL	4-26-16	1145	✓	✓								
J1V8W7	SOIL	4-26-16	1130	✓	✓								

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
WCH T.R. Edmundson J.R. Edmundson	4-27-16 1500	Fed Ex	4-27-16 —
		[illegible]	0940 28 Apr 16

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)

REVIEWED BY RW Portela DATE 4-27-16

JP1043

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector MARCHAND, EG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 Day		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-83 Verification Sampling		**SAF No.** RC-189
Ice Chest No. ERC-96-511	**Field Logbook No.** EL-1652-12	**COA** 000N832000	**Method of Shipment** Commercial Carrier
Shipped To TestAmerica Denver	**Offsite Property No.** 13 TRE 4-27-16 A1A1482		**Bill of Lading/Air Bill No.** SEE OSPC

Other Labs Shipped To
TestAmerica Richland

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool as required

Preservation	Cool <=6C	Cool <=6C									
Type of Container	G/P	G/P									
No. of Container(s)	1	1									
Volume	250mL	250mL									
Sample Analysis	See item (1) in Special Instructions	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045									

Sample No.	Matrix	Sample Date	Sample Time									
J1V8W8	SOIL	4-26-16	1200	✓	✓							
J1V8W9	SOIL	4-26-16	1220	✓	✓							
J1V8X0	SOIL	4-26-16	0915	✓	✓							
J1V8X1	SOIL	4-26-16	1025	✓	✓							
J1V8X2	SOIL	4-26-16	0740	✓	✓							

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26Apr2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
WCH T.R. Edmundson J.R. Edmundson	4-27-16 1500	Fed Ex	4-27-16 —
		0940 28Apr16	

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)

REVIEWED BY Kwpestel DATE 4-27-16

JP1043

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

☆90 w/ permission 28Apr16

Project 28002142

Report Due: 5/5/2016
TALs TAT: 5-Day-RUSH > DVB 4-28-16

Temp 1.0 IR# 7
CF -0.2 Initials MJ
Date: 04/28/16

Sample Check-in List

Date/Time Received: 0940 28Apr16 **GM Screen Result** 15 **microR/hr**

Client: Washington Closure Hanford **SDG #:** JP1043 NA[ ] **SAF #:** RC-189 NA [ ]

Job Number: 82479 **Chain of Custody #** RC-189-314

Shipping Container ID: ERC-96-511 **Air Bill #** 7762 1093 8888

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? NA [ ] Yes [X] No [ ]
4. Cooler Temperature °C: 0.8 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [X] Dry [ ]
6. Number of samples in shipping container: 15
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   X Tape — X Hazard Labels
   X Custody Seals — X Appropriate Sample Labels
9. Samples are:
   X In Good Condition — ____ Leaking
   ____ Broken — ____ Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? NA [X] pH<2 [ ] pH>2 [ ] pH>9 [ ] **Amount HNO_3 Added** ____
11. Sample Location, Sample Collector Listed? *Y
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): ____

Sample Custodian: [signature] **Date:** 28Apr16

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ____ by ____ Person Contacted ____

[ ] No action necessary; process as is.

Project Manager Darlene Bandy Date 4-28-16

ORIGIN ID:PSCA (509) 376-7492
1162 SHIPPING
US DOE CO WCH
2355 STEVENS DR
RICHLAND, WA 99354
UNITED STATES US

SHIP DATE: 27APR16
ACTWGT: 72.00 LB
CAD: 105266502/INET3730

BILL THIRD PARTY

TO KAE YODER
TESTAMERICA
4955 YARROW ST.

ARVADA CO 80002
(303) 736-0190
INV: A131492
PO:
REF: 000N832000
DEPT:

FedEx Express

J16191602050 1uv

540J1/1042/727F

THU - 28 APR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7762 1093 8888

XH WHHA

80002
CO-US DEN

After printing this label:
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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Richland
2800 George Washington Way
Richland, WA 99352
Tel: (509)375-3131

TestAmerica Job ID: 300-2923-1
TestAmerica Sample Delivery Group: JP1043
Client Project/Site: 100N Field Remediation

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

Attn: Joan H Kessner

Authorized for release by:
5/17/2016 2:32:41 PM

Rhonda Wagar, QA Specialist
(509)375-3131
rhonda.wagar@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Job ID: 300-2923-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-2923-1
JP1043 / RC-189

Comments
The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

Receipt
The samples were received on 4/27/2016 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.2º C.

General Chemistry
Hexavalent Chromium by EPA method 7196A:
The LCS, batch blank, samples, sample duplicate and sample matrix spike results are within contractual requirements.

Detection Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8V8 — Lab Sample ID: 300-2923-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.23	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8V9 — Lab Sample ID: 300-2923-2

No Detections.

Client Sample ID: J1V8W0 — Lab Sample ID: 300-2923-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.43	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W1 — Lab Sample ID: 300-2923-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.16	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W2 — Lab Sample ID: 300-2923-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.27	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W3 — Lab Sample ID: 300-2923-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.65	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W4 — Lab Sample ID: 300-2923-7

No Detections.

Client Sample ID: J1V8W5 — Lab Sample ID: 300-2923-8

No Detections.

Client Sample ID: J1V8W6 — Lab Sample ID: 300-2923-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.29	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W7 — Lab Sample ID: 300-2923-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.46	B	2.1	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W8 — Lab Sample ID: 300-2923-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.20	B	2.2	0.17	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8W9 — Lab Sample ID: 300-2923-12

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8W9 (Continued) — Lab Sample ID: 300-2923-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.39	B	2.0	0.16	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: J1V8X0 — Lab Sample ID: 300-2923-13

No Detections.

Client Sample ID: J1V8X1 — Lab Sample ID: 300-2923-14

No Detections.

Client Sample ID: J1V8X2 — Lab Sample ID: 300-2923-15

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8V8 — Lab Sample ID: 300-2923-1

Date Collected: 04/26/16 08:10
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.23	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8V9 — Lab Sample ID: 300-2923-2

Date Collected: 04/26/16 09:37
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	U	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W0 — Lab Sample ID: 300-2923-3

Date Collected: 04/26/16 08:30
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.43	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W1 — Lab Sample ID: 300-2923-4

Date Collected: 04/26/16 08:50
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W2 — Lab Sample ID: 300-2923-5

Date Collected: 04/26/16 10:45
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.27	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W3 — Lab Sample ID: 300-2923-6

Date Collected: 04/26/16 11:00
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.65	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W4 — Lab Sample ID: 300-2923-7

Date Collected: 04/26/16 10:25
Date Received: 04/27/16 14:30
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	U	2.1	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample Results

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8W5 — Lab Sample ID: 300-2923-8

Date Collected: 04/26/16 11:15 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	U	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W6 — Lab Sample ID: 300-2923-9

Date Collected: 04/26/16 11:45 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.29	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W7 — Lab Sample ID: 300-2923-10

Date Collected: 04/26/16 11:30 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.46	B	2.1	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W8 — Lab Sample ID: 300-2923-11

Date Collected: 04/26/16 12:00 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.20	B	2.2	0.17	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8W9 — Lab Sample ID: 300-2923-12

Date Collected: 04/26/16 12:20 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.39	B	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8X0 — Lab Sample ID: 300-2923-13

Date Collected: 04/26/16 09:15 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	U	2.0	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample ID: J1V8X1 — Lab Sample ID: 300-2923-14

Date Collected: 04/26/16 10:25 — **Matrix: Solid**
Date Received: 04/27/16 14:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.16	U	2.1	0.16	mg/Kg	☼	05/03/16 09:11	05/04/16 10:48	1

Client Sample Results

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8X2

Date Collected: 04/26/16 07:40
Date Received: 04/27/16 14:30

Lab Sample ID: 300-2923-15

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.15	U	2.0	0.15	mg/Kg	☼	05/05/16 14:02	05/05/16 14:27	1

QC Sample Results

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-4000/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4024 — **Prep Batch: 4000**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.15	U	2.0	0.15	mg/Kg		05/03/16 09:11	05/04/16 10:48	1

Lab Sample ID: LCS 300-4000/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4024 — **Prep Batch: 4000**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	18.91		mg/Kg		95	85 - 115

Lab Sample ID: 300-2923-1 MS — **Client Sample ID: J1V8V8**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4024 — **Prep Batch: 4000**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.23	B	30.3	23.97		mg/Kg	☼	78	75 - 125

Lab Sample ID: 300-2923-1 MSI — **Client Sample ID: J1V8V8**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4024 — **Prep Batch: 4000**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.23	B	697	733.2		mg/Kg	☼	105	

Lab Sample ID: 300-2923-1 DU — **Client Sample ID: J1V8V8**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4024 — **Prep Batch: 4000**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.23	B	0.270	B	mg/Kg	☼	18	35

Lab Sample ID: MB 300-4063/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4064 — **Prep Batch: 4063**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.15	U	2.0	0.15	mg/Kg		05/05/16 14:00	05/05/16 14:25	1

Lab Sample ID: LCS 300-4063/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 4064 — **Prep Batch: 4063**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.41		mg/Kg		97	85 - 115

QC Association Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

General Chemistry

Prep Batch: 4000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2923-1	J1V8V8	Total/NA	Solid	3060A	
300-2923-1 DU	J1V8V8	Total/NA	Solid	3060A	
300-2923-1 MS	J1V8V8	Total/NA	Solid	3060A	
300-2923-1 MSI	J1V8V8	Total/NA	Solid	3060A	
300-2923-2	J1V8V9	Total/NA	Solid	3060A	
300-2923-3	J1V8W0	Total/NA	Solid	3060A	
300-2923-4	J1V8W1	Total/NA	Solid	3060A	
300-2923-5	J1V8W2	Total/NA	Solid	3060A	
300-2923-6	J1V8W3	Total/NA	Solid	3060A	
300-2923-7	J1V8W4	Total/NA	Solid	3060A	
300-2923-8	J1V8W5	Total/NA	Solid	3060A	
300-2923-9	J1V8W6	Total/NA	Solid	3060A	
300-2923-10	J1V8W7	Total/NA	Solid	3060A	
300-2923-11	J1V8W8	Total/NA	Solid	3060A	
300-2923-12	J1V8W9	Total/NA	Solid	3060A	
300-2923-13	J1V8X0	Total/NA	Solid	3060A	
300-2923-14	J1V8X1	Total/NA	Solid	3060A	
LCS 300-4000/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 300-4000/1-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 4024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2923-1	J1V8V8	Total/NA	Solid	7196A	4000
300-2923-1 DU	J1V8V8	Total/NA	Solid	7196A	4000
300-2923-1 MS	J1V8V8	Total/NA	Solid	7196A	4000
300-2923-1 MSI	J1V8V8	Total/NA	Solid	7196A	4000
300-2923-2	J1V8V9	Total/NA	Solid	7196A	4000
300-2923-3	J1V8W0	Total/NA	Solid	7196A	4000
300-2923-4	J1V8W1	Total/NA	Solid	7196A	4000
300-2923-5	J1V8W2	Total/NA	Solid	7196A	4000
300-2923-6	J1V8W3	Total/NA	Solid	7196A	4000
300-2923-7	J1V8W4	Total/NA	Solid	7196A	4000
300-2923-8	J1V8W5	Total/NA	Solid	7196A	4000
300-2923-9	J1V8W6	Total/NA	Solid	7196A	4000
300-2923-10	J1V8W7	Total/NA	Solid	7196A	4000
300-2923-11	J1V8W8	Total/NA	Solid	7196A	4000
300-2923-12	J1V8W9	Total/NA	Solid	7196A	4000
300-2923-13	J1V8X0	Total/NA	Solid	7196A	4000
300-2923-14	J1V8X1	Total/NA	Solid	7196A	4000
LCS 300-4000/2-A	Lab Control Sample	Total/NA	Solid	7196A	4000
MB 300-4000/1-A	Method Blank	Total/NA	Solid	7196A	4000

Prep Batch: 4063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2923-15	J1V8X2	Total/NA	Solid	3060A	
LCS 300-4063/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 300-4063/1-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 4064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2923-15	J1V8X2	Total/NA	Solid	7196A	4063

General Chemistry (Continued)

Analysis Batch: 4064 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 300-4063/2-A	Lab Control Sample	Total/NA	Solid	7196A	4063
MB 300-4063/1-A	Method Blank	Total/NA	Solid	7196A	4063

Lab Chronicle

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8V8 — Lab Sample ID: 300-2923-1

Date Collected: 04/26/16 08:10 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5013 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5013 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8V9 — Lab Sample ID: 300-2923-2

Date Collected: 04/26/16 09:37 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5029 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5029 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W0 — Lab Sample ID: 300-2923-3

Date Collected: 04/26/16 08:30 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5111 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5111 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W1 — Lab Sample ID: 300-2923-4

Date Collected: 04/26/16 08:50 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5115 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5115 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W2 — Lab Sample ID: 300-2923-5

Date Collected: 04/26/16 10:45 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5020 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5020 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W3 — Lab Sample ID: 300-2923-6

Date Collected: 04/26/16 11:00 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5008 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5008 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Lab Chronicle

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8W4 — Lab Sample ID: 300-2923-7

Date Collected: 04/26/16 10:25 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5031 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5031 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W5 — Lab Sample ID: 300-2923-8

Date Collected: 04/26/16 11:15 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5005 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5005 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W6 — Lab Sample ID: 300-2923-9

Date Collected: 04/26/16 11:45 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5042 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5042 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W7 — Lab Sample ID: 300-2923-10

Date Collected: 04/26/16 11:30 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5018 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5018 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W8 — Lab Sample ID: 300-2923-11

Date Collected: 04/26/16 12:00 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5049 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5049 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8W9 — Lab Sample ID: 300-2923-12

Date Collected: 04/26/16 12:20 — **Matrix: Solid**
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5047 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5047 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Lab Chronicle

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Client Sample ID: J1V8X0

Lab Sample ID: 300-2923-13

Date Collected: 04/26/16 09:15
Matrix: Solid
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5092 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5092 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8X1

Lab Sample ID: 300-2923-14

Date Collected: 04/26/16 10:25
Matrix: Solid
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5053 g	100 mL	4000	05/03/16 09:11	HR	TAL RCH
Total/NA	Analysis	7196A		1	2.5053 g	100 mL	4024	05/04/16 10:48	RLC	TAL RCH

Client Sample ID: J1V8X2

Lab Sample ID: 300-2923-15

Date Collected: 04/26/16 07:40
Matrix: Solid
Date Received: 04/27/16 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.5046 g	100 mL	4063	05/05/16 14:02	TDA	TAL RCH
Total/NA	Analysis	7196A		1	2.5046 g	100 mL	4064	05/05/16 14:27	RLC	TAL RCH

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Certification Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Laboratory: TestAmerica Richland

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C565	08-13-16

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Method	Method Description	Protocol	Laboratory
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

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

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Sample Summary

Client: Washington Closure Hanford
Project/Site: 100N Field Remediation

TestAmerica Job ID: 300-2923-1
SDG: JP1043

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-2923-1	J1V8V8	Solid	04/26/16 08:10	04/27/16 14:30
300-2923-2	J1V8V9	Solid	04/26/16 09:37	04/27/16 14:30
300-2923-3	J1V8W0	Solid	04/26/16 08:30	04/27/16 14:30
300-2923-4	J1V8W1	Solid	04/26/16 08:50	04/27/16 14:30
300-2923-5	J1V8W2	Solid	04/26/16 10:45	04/27/16 14:30
300-2923-6	J1V8W3	Solid	04/26/16 11:00	04/27/16 14:30
300-2923-7	J1V8W4	Solid	04/26/16 10:25	04/27/16 14:30
300-2923-8	J1V8W5	Solid	04/26/16 11:15	04/27/16 14:30
300-2923-9	J1V8W6	Solid	04/26/16 11:45	04/27/16 14:30
300-2923-10	J1V8W7	Solid	04/26/16 11:30	04/27/16 14:30
300-2923-11	J1V8W8	Solid	04/26/16 12:00	04/27/16 14:30
300-2923-12	J1V8W9	Solid	04/26/16 12:20	04/27/16 14:30
300-2923-13	J1V8X0	Solid	04/26/16 09:15	04/27/16 14:30
300-2923-14	J1V8X1	Solid	04/26/16 10:25	04/27/16 14:30
300-2923-15	J1V8X2	Solid	04/26/16 07:40	04/27/16 14:30

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector MARCHAND, EG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 Day		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-83 Verification Sampling		**SAF No.** RC-189
Ice Chest No. TNU-052	**Field Logbook No.** EL-1652-12	**COA** 000N832000	**Method of Shipment** Local Delivery
Shipped To TestAmerica Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

5/17/2016

Other Labs Shipped To
TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool as required

Preservation	Cool <=6C	None	None	None	None	None					
Type of Container	G/P	G/P	G/P	G/P	G/P	G					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	1000mL	~~125mL 60mL~~	~~125mL 60mL~~	~~125mL 60mL~~ TRE 4-26-16	60mL					
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil					

Sample No.	Matrix	Sample Date	Sample Time										
J1V8V8 M8J58	SOIL	4-26-16	0810	✓	✓	✓	✓	✓	✓				
J1V8V9 M8J59	SOIL	4-26-16	0937	✓	✓	✓	✓	✓	✓				
J1V8W0 M8J6A	SOIL	4-26-16	0830	✓	✓	✓	✓	✓	✓				
J1V8W1 M8J6C	SOIL	4-26-16	0850	✓	✓	✓	✓	✓	✓				
J1V8W2 M8J6D	SOIL	4-26-16	1045	✓	✓	✓	✓	✓	✓				

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson T.R. Edmundson	4-26-16 1230
T.R. Edmundson T.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson T.R. Edmundson	4-27-16 1000
~~T.R. Edmundson~~ WCH T.R. Edmundson	~~4-27-16~~ 4-27-16 1500	~~Fed Ex~~	~~4-27-16~~ TRE 4-27-16
T.R. Edmundson WCH T.R. Edmundson	4-27-16 1430	~~Fed Ex~~ Anderson, KARL K. Anderson	4/27/16 1430

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

J6D270416
JP1043
Due 5-4-16

#2923

JP1043

300-2923 CO

REVIEWED BY Kwpertel DATE 4-27-16

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector: MARCHAND, EG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-83 Verification Sampling		SAF No.: RC-189
Ice Chest No.: TNU-052	Field Logbook No.: EL-1652-12	COA: 000N832000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

Cool as required

Preservation	Cool <=6C	None	None	None	None	None	None				
Type of Container	G/P	G/P	G/P	G/P	G/P	G					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	1000mL	125mL ~~60mL~~	125mL ~~60mL~~	125mL ~~60mL~~	60mL					
			TRE 4-26-16								
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil					

Sample No.	Matrix	Sample Date	Sample Time										
J1V8W3 m8J6E	SOIL	4-26-16	1100	✓	✓	✓	✓	✓	✓				
J1V8W4 m8J6F	SOIL	4-26-16	1025	✓	✓	✓	✓	✓	✓				
J1V8W5 m8J6G	SOIL	4-26-16	1115	✓	✓	✓	✓	✓	✓				
J1V8W6 m8J6H	SOIL	4-26-16	1145	✓	✓	✓	✓	✓	✓				
J1V8W7 m8J6J	SOIL	4-26-16	1130	✓	✓	✓	✓	✓	✓				

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson T.R. Edmundson	4-26-16 1230
T.R. Edmundson T.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson T.R. Edmundson	4-27-16 1000
~~T.R. Edmundson T.R. Edmundson~~ WCH	~~4-27-16 1500~~	~~Fed Ex~~	~~4-27-16~~ —
T.R. Edmundson T.R. Edmundson WCH	4-27-16 1430	ANDERSON, TARL J. Anderson	4/27/16 1430

TRE 4-27-16

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

J6D270416
Due 5-4-16

REVIEWED BY KWpetel DATE 4-27-16

JP1043

WCH-EE-011

5/17/2016

Washington Closure Hanford — CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

5/17/2016

Collector: MARCHAND, EG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-83 Verification Sampling		SAF No.: RC-189
Ice Chest No.: TNU-052	Field Logbook No.: EL-1652-12	COA: 000N832000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool as required

Preservation	Cool <=6C	None	None	None	None	None	None				
Type of Container	G/P	G/P	G/P	G/P	G/P	G					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	1000mL	125mL ~~60mL~~	125mL ~~60mL~~	125mL ~~60mL~~	60mL					
				TRE 4-26-16							
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil					

Sample No.	Matrix	Sample Date	Sample Time										
J1V8W8 m8J6K	SOIL	4-26-16	1200	✓	✓	✓	✓	✓	✓				
J1V8W9 m8J6L	SOIL	4-26-16	1220	✓	✓	✓	✓	✓	✓				
J1V8X0 m8J6m	SOIL	4-26-16	0915	✓	✓	✓	✓	✓	✓				
J1V8X1 m8J6N	SOIL	4-26-16	1025	✓	✓	✓	✓	✓	✓				
J1V8X2 m8J6P	SOIL	4-26-16	0740	✓	✓	✓	✓	✓	✓				

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
~~T.R. Edmundson~~ WCH J.R. Edmundson	~~4-27-16 1500~~	~~Fred Eg~~	~~4-27-16~~ —
T.R. Edmundson WCH J.R. Edmundson	4-27-16 1430	Anderson, TARL R. Anderson	4/27/16 1430

TRE 4-27-16

FINAL SAMPLE DISPOSITION: Disposal Method | Disposed By | Date/Time

SPECIAL INSTRUCTIONS

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

J6D270416
Due 5-4-16

REVIEWED BY KW per tel
DATE 4-27-16

JP1043

WCH-EE-011

Login Sample Receipt Checklist

Client: Washington Closure Hanford

Job Number: 300-2923-1
SDG Number: JP1043

Login Number: 2923
List Number: 1
Creator: Bock, Julie A

List Source: TestAmerica Richland

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica Inc

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: TARL

Data Package Contains 91 *Pages*

Report No.: 68605

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
JP1043	RC-189	J1V8V8	J6D270416-1	M8J581AF	9M8J5810	6119022
		J1V8V8	J6D270416-1	M8J581AD	9M8J5810	6119023
		J1V8V8	J6D270416-1	M8J581AC	9M8J5810	6119024
		J1V8V8	J6D270416-1	M8J581AE	9M8J5810	6119025
		J1V8V8	J6D270416-1	M8J581AA	9M8J5810	6119026
		J1V8V9	J6D270416-2	M8J591AF	9M8J5910	6119022
		J1V8V9	J6D270416-2	M8J591AD	9M8J5910	6119023
		J1V8V9	J6D270416-2	M8J591AC	9M8J5910	6119024
		J1V8V9	J6D270416-2	M8J591AE	9M8J5910	6119025
		J1V8V9	J6D270416-2	M8J591AA	9M8J5910	6119026
		J1V8W0	J6D270416-3	M8J6A1AF	9M8J6A10	6119022
		J1V8W0	J6D270416-3	M8J6A1AD	9M8J6A10	6119023
		J1V8W0	J6D270416-3	M8J6A1AC	9M8J6A10	6119024
		J1V8W0	J6D270416-3	M8J6A1AE	9M8J6A10	6119025
		J1V8W0	J6D270416-3	M8J6A1AA	9M8J6A10	6119026
		J1V8W1	J6D270416-4	M8J6C1AF	9M8J6C10	6119022
		J1V8W1	J6D270416-4	M8J6C1AD	9M8J6C10	6119023
		J1V8W1	J6D270416-4	M8J6C1AC	9M8J6C10	6119024
		J1V8W1	J6D270416-4	M8J6C1AE	9M8J6C10	6119025
		J1V8W1	J6D270416-4	M8J6C1AA	9M8J6C10	6119026
		J1V8W2	J6D270416-5	M8J6D1AF	9M8J6D10	6119022
		J1V8W2	J6D270416-5	M8J6D1AD	9M8J6D10	6119023
		J1V8W2	J6D270416-5	M8J6D1AC	9M8J6D10	6119024
		J1V8W2	J6D270416-5	M8J6D1AE	9M8J6D10	6119025
		J1V8W2	J6D270416-5	M8J6D1AA	9M8J6D10	6119026
		J1V8W3	J6D270416-6	M8J6E1AF	9M8J6E10	6119022

Report No.: 68605

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
JP1043	RC-189	J1V8W3	J6D270416-6	M8J6E1AD	9M8J6E10	6119023
		J1V8W3	J6D270416-6	M8J6E1AC	9M8J6E10	6119024
		J1V8W3	J6D270416-6	M8J6E1AE	9M8J6E10	6119025
		J1V8W3	J6D270416-6	M8J6E1AA	9M8J6E10	6119026
		J1V8W4	J6D270416-7	M8J6F1AF	9M8J6F10	6119022
		J1V8W4	J6D270416-7	M8J6F1AD	9M8J6F10	6119023
		J1V8W4	J6D270416-7	M8J6F1AC	9M8J6F10	6119024
		J1V8W4	J6D270416-7	M8J6F1AE	9M8J6F10	6119025
		J1V8W4	J6D270416-7	M8J6F1AA	9M8J6F10	6119026
		J1V8W5	J6D270416-8	M8J6G1AF	9M8J6G10	6119022
		J1V8W5	J6D270416-8	M8J6G1AD	9M8J6G10	6119023
		J1V8W5	J6D270416-8	M8J6G1AC	9M8J6G10	6119024
		J1V8W5	J6D270416-8	M8J6G1AE	9M8J6G10	6119025
		J1V8W5	J6D270416-8	M8J6G1AA	9M8J6G10	6119026
		J1V8W6	J6D270416-9	M8J6H1AF	9M8J6H10	6119022
		J1V8W6	J6D270416-9	M8J6H1AD	9M8J6H10	6119023
		J1V8W6	J6D270416-9	M8J6H1AC	9M8J6H10	6119024
		J1V8W6	J6D270416-9	M8J6H1AE	9M8J6H10	6119025
		J1V8W6	J6D270416-9	M8J6H1AA	9M8J6H10	6119026
		J1V8W7	J6D270416-10	M8J6J1AF	9M8J6J10	6119022
		J1V8W7	J6D270416-10	M8J6J1AD	9M8J6J10	6119023
		J1V8W7	J6D270416-10	M8J6J1AC	9M8J6J10	6119024
		J1V8W7	J6D270416-10	M8J6J1AE	9M8J6J10	6119025
		J1V8W7	J6D270416-10	M8J6J1AA	9M8J6J10	6119026
	RC-189	J1V8W8	J6D270416-11	M8J6K1AF	9M8J6K10	6119022
		J1V8W8	J6D270416-11	M8J6K1AD	9M8J6K10	6119023
		J1V8W8	J6D270416-11	M8J6K1AC	9M8J6K10	6119024
		J1V8W8	J6D270416-11	M8J6K1AE	9M8J6K10	6119025
		J1V8W8	J6D270416-11	M8J6K1AA	9M8J6K10	6119026
		J1V8W9	J6D270416-12	M8J6L1AF	9M8J6L10	6119022
		J1V8W9	J6D270416-12	M8J6L1AD	9M8J6L10	6119023
		J1V8W9	J6D270416-12	M8J6L1AC	9M8J6L10	6119024
		J1V8W9	J6D270416-12	M8J6L1AE	9M8J6L10	6119025
		J1V8W9	J6D270416-12	M8J6L1AA	9M8J6L10	6119026
		J1V8X0	J6D270416-13	M8J6M1AF	9M8J6M10	6119022
		J1V8X0	J6D270416-13	M8J6M1AD	9M8J6M10	6119023
		J1V8X0	J6D270416-13	M8J6M1AC	9M8J6M10	6119024
		J1V8X0	J6D270416-13	M8J6M1AE	9M8J6M10	6119025

Report No.: 68605

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
JP1043	RC-189	J1V8X0	J6D270416-13	M8J6M1AA	9M8J6M10	6119026
		J1V8X1	J6D270416-14	M8J6N1AF	9M8J6N10	6119022
		J1V8X1	J6D270416-14	M8J6N1AD	9M8J6N10	6119023
		J1V8X1	J6D270416-14	M8J6N1AC	9M8J6N10	6119024
		J1V8X1	J6D270416-14	M8J6N1AE	9M8J6N10	6119025
		J1V8X1	J6D270416-14	M8J6N1AA	9M8J6N10	6119026
		J1V8X2	J6D270416-15	M8J6P1AF	9M8J6P10	6119022
		J1V8X2	J6D270416-15	M8J6P1AD	9M8J6P10	6119023
		J1V8X2	J6D270416-15	M8J6P1AC	9M8J6P10	6119024
		J1V8X2	J6D270416-15	M8J6P1AE	9M8J6P10	6119025
		J1V8X2	J6D270416-15	M8J6P1AA	9M8J6P10	6119026

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

June 15, 2016
May 17, 2016

Attention: Joan Kessner

SAF Number	:	RC-189
Date SDG Closed	:	April 27, 2016
Number of Samples	:	Fifteen (15)
Sample Type	:	Soil
SDG Number	:	JP1043
Data Deliverable	:	7– Day / Summary

AMENDED CASE NARRATIVE

June 15, 2016: The client contacted TestAmerica on May 18, 2016 and requested the Isotopic Plutonium for sample J1V8X2 be reanalyzed. All amended information in this case narrative will be bold, underlined and italicized.

I. Introduction

On April 27, 2016, fifteen soil samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1V8V8	M8J58	SOIL	4/27/16
J1V8V9	M8J59	SOIL	4/27/16
J1V8W0	M8J6A	SOIL	4/27/16
J1V8W1	M8J6C	SOIL	4/27/16
J1V8W2	M8J6D	SOIL	4/27/16
J1V8W3	M8J6E	SOIL	4/27/16
J1V8W4	M8J6F	SOIL	4/27/16
J1V8W5	M8J6G	SOIL	4/27/16
J1V8W6	M8J6H	SOIL	4/27/16
J1V8W7	M8J6J	SOIL	4/27/16
J1V8W8	M8J6K	SOIL	4/27/16
J1V8W9	M8J6L	SOIL	4/27/16

Washington Closure Hanford
June 15, 2016
May 17, 2016

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1V8X0	M8J6M	SOIL	4/27/16
J1V8X1	M8J6N	SOIL	4/27/16
J1V8X2	M8J6P	SOIL	4/27/16

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-001
Gas Proportional Counting
Strontium-90 by method RL-GPC-010
Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Liquid Scintillation Counting
Tritium by method RL-LSC-002
Nickel-63 by method RL-LCS-017

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-001:
Sample J1V8X2 was reanalyzed and the result confirms with the original result reported. The LCS, batch blank, samples and sample duplicate (J1V8V8) results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RL-GPC-010:
The LCS, batch blank, samples and sample duplicate (J1V8W2) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001:

Washington Closure Hanford
June 15, 2016
May 17, 2016

The LCS, batch blank, samples and sample duplicate (J1V8W1) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RL-LSC-002:
The LCS, batch blank, samples and sample duplicate (J1V8W0) results are within contractual requirements.

Nickel-63 by method RL-LCS-017:
The LCS, batch blank, samples and sample duplicate (J1V8V9) results are within contractual requirements.

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

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/?n), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
CSU (#s) ***u_c Combined Standard Uncert.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, u_c *the combined standard uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119023	PUISO_IE_PRECIP_AEA								
	J1V8V8								
	M8J581AD	PU-238	-2.80E-03 +- 3.5E-02	U	pCi/g	83%	7.08E-02	1.00E+00	
		PU239/40	-6.99E-04 +- 3.5E-02	U	pCi/g	83%	5.91E-02	1.00E+00	
	J1V8V8 DUP								
	M8J581AG	PU-238	-2.04E-03 +- 3.4E-02	U	pCi/g	87%	6.57E-02	1.00E+00	-31.5
		PU239/40	1.70E-02 +- 3.4E-02	U	pCi/g	87%	5.73E-02	1.00E+00	217.2
	J1V8V9								
	M8J591AD	PU-238	9.66E-03 +- 3.0E-02	U	pCi/g	104%	6.83E-02	1.00E+00	
		PU239/40	2.84E-02 +- 4.3E-02	U	pCi/g	104%	5.60E-02	1.00E+00	
	J1V8W0								
	M8J6A1AD	PU-238	-3.43E-03 +- 2.9E-02	U	pCi/g	105%	5.89E-02	1.00E+00	
		PU239/40	5.42E-02 +- 5.8E-02	U	pCi/g	105%	5.70E-02	1.00E+00	
	J1V8W1								
	M8J6C1AD	PU-238	1.14E-02 +- 3.0E-02	U	pCi/g	96%	6.54E-02	1.00E+00	
		PU239/40	3.00E-02 +- 4.3E-02	U	pCi/g	96%	5.08E-02	1.00E+00	
	J1V8W2								
	M8J6D1AD	PU-238	-2.90E-03 +- 2.9E-02	U	pCi/g	99%	6.11E-02	1.00E+00	
		PU239/40	-1.74E-03 +- 2.9E-02	U	pCi/g	99%	5.62E-02	1.00E+00	
	J1V8W3								
	M8J6E1AD	PU-238	-5.76E-03 +- 2.9E-02	U	pCi/g	92%	6.95E-02	1.00E+00	
		PU239/40	-5.75E-04 +- 2.9E-02	U	pCi/g	92%	4.86E-02	1.00E+00	
	J1V8W4								
	M8J6F1AD	PU-238	-3.30E-03 +- 2.8E-02	U	pCi/g	102%	5.87E-02	1.00E+00	
		PU239/40	-5.50E-04 +- 2.8E-02	U	pCi/g	102%	4.56E-02	1.00E+00	
	J1V8W5								
	M8J6G1AD	PU-238	1.32E-02 +- 3.2E-02	U	pCi/g	96%	6.39E-02	1.00E+00	
		PU239/40	-1.89E-03 +- 3.2E-02	U	pCi/g	96%	6.10E-02	1.00E+00	
	J1V8W6								
	M8J6H1AD	PU-238	1.15E-02 +- 3.1E-02	U	pCi/g	88%	6.61E-02	1.00E+00	
		PU239/40	4.31E-02 +- 5.3E-02	U	pCi/g	88%	6.15E-02	1.00E+00	
	J1V8W7								
	M8J6J1AD	PU-238	1.46E-02 +- 3.0E-02	U	pCi/g	108%	4.76E-02	1.00E+00	
		PU239/40	4.37E-02 +- 5.3E-02	U	pCi/g	108%	5.45E-02	1.00E+00	
	J1V8W8								
	M8J6K1AD	PU-238	0.00E+00 +- 3.0E-02	U	pCi/g	91%	5.14E-02	1.00E+00	
		PU239/40	2.92E-02 +- 4.3E-02	U	pCi/g	91%	5.56E-02	1.00E+00	
	J1V8W9								
	M8J6L1AD	PU-238	1.50E-02 +- 3.1E-02	U	pCi/g	95%	5.28E-02	1.00E+00	

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A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119023 PUISO_IE_PRECIP_AEA									
J1V8W9									
	M8J6L1AD	PU239/40	-1.25E-03 +- 3.1E-02	U	pCi/g	95%	5.71E-02	1.00E+00	
J1V8X0									
	M8J6M1AD	PU-238	-1.31E-03 +- 3.3E-02	U	pCi/g	88%	5.99E-02	1.00E+00	
		PU239/40	1.51E-02 +- 3.3E-02	U	pCi/g	88%	5.99E-02	1.00E+00	
J1V8X1									
	M8J6N1AD	PU-238	-5.70E-04 +- 2.9E-02	U	pCi/g	97%	4.82E-02	1.00E+00	
		PU239/40	1.37E-02 +- 2.9E-02	U	pCi/g	97%	4.82E-02	1.00E+00	
J1V8X2									
	M8J6P1AD	PU-238	-1.14E-03 +- 2.8E-02	U	pCi/g	100%	5.20E-02	1.00E+00	
		PU239/40	1.34E+00 +- 3.6E-01		pCi/g	100%	4.81E-02	1.00E+00	
6119022 GAMMA_GS									
J1V8V8									
	M8J581AF	AMERICIUM 241	3.08E-02 +- 1.0E-01	U	pCi/g		1.76E-01		
		CO-60	1.43E-02 +- 1.4E-02	U	pCi/g		2.71E-02	5.00E-02	
		CS-137	1.41E-01 +- 3.1E-02		pCi/g		2.36E-02	1.00E-01	
		EU-152	2.20E-02 +- 3.3E-02	U	pCi/g		5.79E-02	1.00E-01	
		EU-154	-3.50E-02 +- 4.5E-02	U	pCi/g		7.41E-02	1.00E-01	
		EU-155	6.45E-02 +- 4.3E-02	U	pCi/g		7.39E-02	1.00E-01	
		K-40	1.41E+01 +- 1.7E+00		pCi/g		2.02E-01		
		RA-226	5.04E-01 +- 8.2E-02		pCi/g		3.84E-02		
J1V8V9									
	M8J591AF	AMERICIUM 241	3.39E-03 +- 1.8E-02	U	pCi/g		3.00E-02		
		CO-60	1.74E-02 +- 1.6E-02	U	pCi/g		3.11E-02	5.00E-02	
		CS-137	2.51E-01 +- 4.0E-02		pCi/g		2.49E-02	1.00E-01	
		EU-152	-4.63E-03 +- 2.9E-02	U	pCi/g		4.89E-02	1.00E-01	
		EU-154	3.10E-03 +- 5.0E-02	U	pCi/g		8.81E-02	1.00E-01	
		EU-155	5.97E-02 +- 2.7E-02	U	pCi/g		4.61E-02	1.00E-01	
		K-40	1.38E+01 +- 1.6E+00		pCi/g		2.42E-01		
		RA-226	4.94E-01 +- 8.1E-02		pCi/g		4.15E-02		
J1V8W0									
	M8J6A1AF	AMERICIUM 241	1.62E-04 +- 1.5E-02	U	pCi/g		2.56E-02		
		CO-60	1.16E-02 +- 1.5E-02	U	pCi/g		2.85E-02	5.00E-02	
		CS-137	1.10E-01 +- 3.2E-02		pCi/g		2.25E-02	1.00E-01	
		EU-152	3.30E-03 +- 2.8E-02	U	pCi/g		4.94E-02	1.00E-01	
		EU-154	8.00E-03 +- 4.8E-02	U	pCi/g		8.39E-02	1.00E-01	
		EU-155	2.35E-02 +- 2.5E-02	U	pCi/g		4.27E-02	1.00E-01	
		K-40	1.41E+01 +- 1.7E+00		pCi/g		2.36E-01		

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RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119022 GAMMA_GS									
J1V8W0									
	M8J6A1AF	RA-226	5.02E-01 +- 9.0E-02		pCi/g		3.66E-02		
J1V8W1									
	M8J6C1AF	AMERICIUM 241	-8.17E-03 +- 2.1E-02	U	pCi/g		3.50E-02		
		CO-60	4.04E-03 +- 1.7E-02	U	pCi/g		3.03E-02	5.00E-02	
		CS-137	7.01E-03 +- 1.5E-02	U	pCi/g		2.69E-02	1.00E-01	
		EU-152	-4.44E-02 +- 2.9E-02	U	pCi/g		4.61E-02	1.00E-01	
		EU-154	4.24E-03 +- 5.1E-02	U	pCi/g		9.05E-02	1.00E-01	
		EU-155	4.12E-02 +- 2.9E-02	U	pCi/g		5.14E-02	1.00E-01	
		K-40	1.76E+01 +- 2.1E+00		pCi/g		2.04E-01		
		RA-226	6.29E-01 +- 9.9E-02		pCi/g		4.00E-02		
J1V8W1 DUP									
	M8J6C1AG	AMERICIUM 241	8.78E-03 +- 2.1E-02	U	pCi/g		3.54E-02		5638.7
		CO-60	-9.55E-03 +- 1.5E-02	U	pCi/g		2.48E-02	5.00E-02	-493.8
		CS-137	4.63E-02 +- 1.8E-02	U	pCi/g		3.21E-02	1.00E-01	147.3
		EU-152	1.00E-02 +- 3.0E-02	U	pCi/g		5.30E-02	1.00E-01	-316.9
		EU-154	3.54E-03 +- 5.1E-02	U	pCi/g		8.86E-02	1.00E-01	18.0
		EU-155	6.14E-02 +- 3.1E-02	U	pCi/g		5.27E-02	1.00E-01	39.4
		K-40	1.75E+01 +- 2.0E+00		pCi/g		1.91E-01		0.9
		RA-226	6.18E-01 +- 9.6E-02		pCi/g		4.04E-02		1.8
J1V8W2									
	M8J6D1AF	AMERICIUM 241	9.50E-03 +- 1.1E-01	U	pCi/g		1.91E-01		
		CO-60	3.03E-03 +- 1.5E-02	U	pCi/g		2.67E-02	5.00E-02	
		CS-137	1.63E-01 +- 3.6E-02		pCi/g		2.48E-02	1.00E-01	
		EU-152	-2.10E-02 +- 3.6E-02	U	pCi/g		5.88E-02	1.00E-01	
		EU-154	-6.78E-03 +- 4.7E-02	U	pCi/g		8.24E-02	1.00E-01	
		EU-155	8.06E-02 +- 4.6E-02	U	pCi/g		7.88E-02	1.00E-01	
		K-40	1.62E+01 +- 2.0E+00		pCi/g		2.39E-01		
		RA-226	6.59E-01 +- 9.7E-02		pCi/g		4.14E-02		
J1V8W3									
	M8J6E1AF	AMERICIUM 241	8.77E-03 +- 2.1E-02	U	pCi/g		3.41E-02		
		CO-60	1.81E-02 +- 1.8E-02	U	pCi/g		3.37E-02	5.00E-02	
		CS-137	3.94E-01 +- 6.1E-02		pCi/g		2.65E-02	1.00E-01	
		EU-152	-2.65E-02 +- 3.2E-02	U	pCi/g		5.18E-02	1.00E-01	
		EU-154	-3.34E-02 +- 5.2E-02	U	pCi/g		8.76E-02	1.00E-01	
		EU-155	3.38E-02 +- 2.8E-02	U	pCi/g		4.84E-02	1.00E-01	
		K-40	1.46E+01 +- 1.7E+00		pCi/g		2.68E-01		
		RA-226	6.27E-01 +- 9.5E-02		pCi/g		4.57E-02		

TestAmerica Inc

rptTALRchSaSummary2 V5.5.1 A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119022 GAMMA_GS									
J1V8W4									
	M8J6F1AF	AMERICIUM 241	-3.78E-03 +- 1.6E-02	U	pCi/g		2.78E-02		
		CO-60	-8.54E-03 +- 1.5E-02	U	pCi/g		2.61E-02	5.00E-02	
		CS-137	4.05E-02 +- 2.5E-02		pCi/g		2.35E-02	1.00E-01	
		EU-152	1.84E-02 +- 2.7E-02	U	pCi/g		4.88E-02	1.00E-01	
		EU-154	-2.19E-02 +- 4.6E-02	U	pCi/g		7.74E-02	1.00E-01	
		EU-155	2.53E-02 +- 2.5E-02	U	pCi/g		4.40E-02	1.00E-01	
		K-40	1.47E+01 +- 1.7E+00		pCi/g		2.53E-01		
		RA-226	5.96E-01 +- 9.9E-02		pCi/g		4.07E-02		
J1V8W5									
	M8J6G1AF	AMERICIUM 241	5.16E-03 +- 2.0E-02	U	pCi/g		3.42E-02		
		CO-60	3.78E-03 +- 1.4E-02	U	pCi/g		2.48E-02	5.00E-02	
		CS-137	2.33E-02 +- 1.4E-02	U	pCi/g		2.51E-02	1.00E-01	
		EU-152	-9.83E-03 +- 3.0E-02	U	pCi/g		5.15E-02	1.00E-01	
		EU-154	9.47E-03 +- 4.6E-02	U	pCi/g		8.20E-02	1.00E-01	
		EU-155	4.52E-02 +- 2.8E-02	U	pCi/g		4.94E-02	1.00E-01	
		K-40	1.44E+01 +- 1.7E+00		pCi/g		2.16E-01		
		RA-226	5.99E-01 +- 9.2E-02		pCi/g		4.07E-02		
J1V8W6									
	M8J6H1AF	AMERICIUM 241	8.85E-03 +- 2.2E-02	U	pCi/g		3.73E-02		
		CO-60	-5.70E-03 +- 1.5E-02	U	pCi/g		2.58E-02	5.00E-02	
		CS-137	4.33E-02 +- 1.8E-02	U	pCi/g		3.25E-02	1.00E-01	
		EU-152	-5.46E-04 +- 3.1E-02	U	pCi/g		5.28E-02	1.00E-01	
		EU-154	2.65E-02 +- 5.3E-02	U	pCi/g		9.49E-02	1.00E-01	
		EU-155	4.79E-02 +- 4.6E-02	U	pCi/g		5.42E-02	1.00E-01	
		K-40	1.51E+01 +- 1.8E+00		pCi/g		2.10E-01		
		RA-226	6.95E-01 +- 1.1E-01		pCi/g		4.31E-02		
J1V8W7									
	M8J6J1AF	AMERICIUM 241	-8.29E-02 +- 1.1E-01	U	pCi/g		1.81E-01		
		CO-60	3.90E-03 +- 1.5E-02	U	pCi/g		2.74E-02	5.00E-02	
		CS-137	1.50E-01 +- 3.4E-02		pCi/g		2.40E-02	1.00E-01	
		EU-152	-3.16E-02 +- 3.8E-02	U	pCi/g		6.07E-02	1.00E-01	
		EU-154	1.55E-02 +- 4.4E-02	U	pCi/g		8.06E-02	1.00E-01	
		EU-155	6.56E-02 +- 4.7E-02	U	pCi/g		7.97E-02	1.00E-01	
		K-40	1.48E+01 +- 1.8E+00		pCi/g		2.10E-01		
		RA-226	5.93E-01 +- 9.3E-02		pCi/g		4.82E-02		
J1V8W8									
	M8J6K1AF	AMERICIUM 241	-5.23E-03 +- 2.3E-02	U	pCi/g		3.77E-02		

TestAmerica Inc

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RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119022 GAMMA_GS									
J1V8W8									
	M8J6K1AF	CO-60	9.64E-02 +- 3.2E-02	U	pCi/g		4.88E-02	5.00E-02	
		CS-137	4.30E-01 +- 6.6E-02		pCi/g		3.01E-02	1.00E-01	
		EU-152	-7.29E-03 +- 3.7E-02	U	pCi/g		6.19E-02	1.00E-01	
		EU-154	8.57E-03 +- 5.9E-02	U	pCi/g		1.05E-01	1.00E-01	
		EU-155	5.10E-02 +- 3.2E-02	U	pCi/g		5.54E-02	1.00E-01	
		K-40	1.44E+01 +- 1.7E+00		pCi/g		2.42E-01		
		RA-226	7.34E-01 +- 1.2E-01		pCi/g		4.79E-02		
J1V8W9									
	M8J6L1AF	AMERICIUM 241	3.07E-03 +- 1.6E-02	U	pCi/g		2.82E-02		
		CO-60	7.65E-03 +- 1.5E-02	U	pCi/g		2.84E-02	5.00E-02	
		CS-137	3.58E-02 +- 1.7E-02	U	pCi/g		3.02E-02	1.00E-01	
		EU-152	-3.84E-03 +- 2.8E-02	U	pCi/g		4.78E-02	1.00E-01	
		EU-154	1.37E-02 +- 4.7E-02	U	pCi/g		8.44E-02	1.00E-01	
		EU-155	1.10E-02 +- 2.5E-02	U	pCi/g		4.31E-02	1.00E-01	
		K-40	1.50E+01 +- 1.8E+00		pCi/g		1.97E-01		
		RA-226	6.73E-01 +- 1.0E-01		pCi/g		4.01E-02		
J1V8X0									
	M8J6M1AF	AMERICIUM 241	3.79E-03 +- 2.3E-02	U	pCi/g		3.94E-02		
		CO-60	1.56E-01 +- 3.5E-02		pCi/g		2.63E-02	5.00E-02	
		CS-137	4.16E+00 +- 4.9E-01		pCi/g		2.65E-02	1.00E-01	
		EU-152	7.29E-03 +- 4.1E-02	U	pCi/g		7.04E-02	1.00E-01	
		EU-154	-3.88E-02 +- 5.1E-02	U	pCi/g		8.49E-02	1.00E-01	
		EU-155	4.76E-02 +- 3.4E-02	U	pCi/g		5.96E-02	1.00E-01	
		K-40	1.52E+01 +- 1.8E+00		pCi/g		1.99E-01		
		RA-226	7.21E-01 +- 1.1E-01		pCi/g		4.80E-02		
J1V8X1									
	M8J6N1AF	AMERICIUM 241	6.44E-03 +- 2.0E-02	U	pCi/g		3.37E-02		
		CO-60	6.99E-03 +- 1.4E-02	U	pCi/g		2.63E-02	5.00E-02	
		CS-137	6.34E-02 +- 2.3E-02		pCi/g		2.40E-02	1.00E-01	
		EU-152	-8.80E-03 +- 2.8E-02	U	pCi/g		4.78E-02	1.00E-01	
		EU-154	3.89E-02 +- 4.4E-02	U	pCi/g		8.26E-02	1.00E-01	
		EU-155	3.85E-02 +- 2.9E-02	U	pCi/g		5.02E-02	1.00E-01	
		K-40	1.41E+01 +- 1.7E+00		pCi/g		2.01E-01		
		RA-226	6.50E-01 +- 1.0E-01		pCi/g		3.78E-02		
J1V8X2									
	M8J6P1AF	AMERICIUM 241	1.02E-02 +- 6.6E-02	U	pCi/g		1.16E-01		
		CO-60	-5.50E-04 +- 8.7E-03	U	pCi/g		1.59E-02	5.00E-02	

TestAmerica Inc

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RPD - Relative Percent Difference.

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AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119022 GAMMA_GS									
J1V8X2									
	M8J6P1AF	CS-137	-7.24E-03 +- 8.5E-03	U	pCi/g		1.38E-02	1.00E-01	
		EU-152	-3.49E-03 +- 2.3E-02	U	pCi/g		3.83E-02	1.00E-01	
		EU-154	-2.18E-02 +- 2.8E-02	U	pCi/g		4.64E-02	1.00E-01	
		EU-155	4.41E-02 +- 2.6E-02	U	pCi/g		4.72E-02	1.00E-01	
		K-40	3.61E+00 +- 5.5E-01		pCi/g		1.11E-01		
		RA-226	1.91E-01 +- 4.2E-02		pCi/g		2.88E-02		
6119026 SRTOT_SEP_PRECIP_GPC									
J1V8V8									
	M8J581AA	STRONTIUM	8.28E+00 +- 2.0E+00		pCi/g	77%	3.99E-01	1.00E+00	
J1V8V9									
	M8J591AA	STRONTIUM	1.23E-01 +- 2.3E-01	U	pCi/g	78%	3.92E-01	1.00E+00	
J1V8W0									
	M8J6A1AA	STRONTIUM	6.43E-01 +- 3.5E-01		pCi/g	69%	4.41E-01	1.00E+00	
J1V8W1									
	M8J6C1AA	STRONTIUM	7.69E-02 +- 2.6E-01	U	pCi/g	75%	4.45E-01	1.00E+00	
J1V8W2									
	M8J6D1AA	STRONTIUM	2.10E-01 +- 2.6E-01	U	pCi/g	74%	4.10E-01	1.00E+00	
J1V8W2 DUP									
	M8J6D1AG	STRONTIUM	2.07E-01 +- 2.6E-01	U	pCi/g	71%	4.27E-01	1.00E+00	1.6
J1V8W3									
	M8J6E1AA	STRONTIUM	3.30E-01 +- 2.6E-01	U	pCi/g	79%	3.83E-01	1.00E+00	
J1V8W4									
	M8J6F1AA	STRONTIUM	-6.86E-03 +- 2.4E-01	U	pCi/g	77%	4.36E-01	1.00E+00	
J1V8W5									
	M8J6G1AA	STRONTIUM	8.90E+00 +- 2.2E+00		pCi/g	76%	4.03E-01	1.00E+00	
J1V8W6									
	M8J6H1AA	STRONTIUM	1.20E+00 +- 4.2E-01		pCi/g	79%	3.61E-01	1.00E+00	
J1V8W7									
	M8J6J1AA	STRONTIUM	3.29E-01 +- 2.6E-01	U	pCi/g	77%	3.82E-01	1.00E+00	
J1V8W8									
	M8J6K1AA	STRONTIUM	1.84E-01 +- 2.6E-01	U	pCi/g	75%	4.33E-01	1.00E+00	
J1V8W9									
	M8J6L1AA	STRONTIUM	8.48E-01 +- 3.6E-01		pCi/g	79%	3.82E-01	1.00E+00	
J1V8X0									
	M8J6M1AA	STRONTIUM	2.21E-01 +- 2.4E-01	U	pCi/g	77%	3.78E-01	1.00E+00	
J1V8X1									
	M8J6N1AA	STRONTIUM	1.52E+00 +- 4.8E-01		pCi/g	83%	3.46E-01	1.00E+00	

TestAmerica Inc

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AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119026 SRTOT_SEP_PRECIP_GPC									
J1V8X2									
	M8J6P1AA	STRONTIUM	5.15E-01 +- 3.1E-01		pCi/g	76%	4.26E-01	1.00E+00	
6119024 NI63_LSC									
J1V8V8									
	M8J581AC	NI-63	4.56E-01 +- 5.7E+00	U	pCi/g	96%	6.86E+00	3.00E+01	
J1V8V9									
	M8J591AC	NI-63	1.93E-01 +- 3.9E+00	U	pCi/g	95%	6.50E+00	3.00E+01	
J1V8V9 DUP									
	M8J591AG	NI-63	5.69E-02 +- 7.9E+00	U	pCi/g	84%	7.92E+00	3.00E+01	108.8
J1V8W0									
	M8J6A1AC	NI-63	1.97E-01 +- 5.1E+00	U	pCi/g	83%	7.29E+00	3.00E+01	
J1V8W1									
	M8J6C1AC	NI-63	-2.09E+00 +- 4.8E+00	U	pCi/g	99%	6.47E+00	3.00E+01	
J1V8W2									
	M8J6D1AC	NI-63	-4.52E-01 +- 5.2E+00	U	pCi/g	92%	6.70E+00	3.00E+01	
J1V8W3									
	M8J6E1AC	NI-63	1.06E+01 +- 2.0E+01		pCi/g	98%	6.42E+00	3.00E+01	
J1V8W4									
	M8J6F1AC	NI-63	1.61E+00 +- 4.5E+00	U	pCi/g	94%	6.68E+00	3.00E+01	
J1V8W5									
	M8J6G1AC	NI-63	4.17E-01 +- 3.0E+00	U	pCi/g	100%	6.05E+00	3.00E+01	
J1V8W6									
	M8J6H1AC	NI-63	1.33E+00 +- 5.8E+00	U	pCi/g	99%	6.82E+00	3.00E+01	
J1V8W7									
	M8J6J1AC	NI-63	4.78E-01 +- 6.5E+00	U	pCi/g	100%	6.02E+00	3.00E+01	
J1V8W8									
	M8J6K1AC	NI-63	1.06E+00 +- 4.5E+00	U	pCi/g	97%	6.46E+00	3.00E+01	
J1V8W9									
	M8J6L1AC	NI-63	-2.68E+00 +- 5.0E+00	U	pCi/g	92%	7.42E+00	3.00E+01	
J1V8X0									
	M8J6M1AC	NI-63	1.02E+00 +- 3.8E+00	U	pCi/g	98%	6.31E+00	3.00E+01	
J1V8X1									
	M8J6N1AC	NI-63	7.32E-01 +- 6.8E+00	U	pCi/g	91%	7.52E+00	3.00E+01	
J1V8X2									
	M8J6P1AC	NI-63	6.94E-01 +- 3.3E+00	U	pCi/g	91%	6.66E+00	3.00E+01	
6119025 TRITIUM_DIST_LSC									
J1V8V8									
	M8J581AE	H-3	6.60E-03 +- 1.2E-01	U	pCi/g	100%	2.95E-01	1.00E+01	
J1V8V9									

TestAmerica Inc

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AMENDED DATA

Sample Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 68605 **SDG No:** JP1043

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6119025 TRITIUM_DIST_LSC									
	J1V8V9								
	M8J591AE	H-3	1.51E-01 +- 1.4E-01	U	pCi/g	100%	3.04E-01	1.00E+01	
	J1V8W0								
	M8J6A1AE	H-3	-5.37E-02 +- 1.3E-01	U	pCi/g	100%	3.21E-01	1.00E+01	
	J1V8W0 DUP								
	M8J6A1AG	H-3	-5.13E-02 +- 1.3E-01	U	pCi/g	100%	3.22E-01	1.00E+01	-4.5
	J1V8W1								
	M8J6C1AE	H-3	8.81E-02 +- 1.4E-01	U	pCi/g	100%	3.25E-01	1.00E+01	
	J1V8W2								
	M8J6D1AE	H-3	1.71E-01 +- 1.5E-01	U	pCi/g	100%	3.23E-01	1.00E+01	
	J1V8W3								
	M8J6E1AE	H-3	6.61E-02 +- 1.4E-01	U	pCi/g	100%	3.21E-01	1.00E+01	
	J1V8W4								
	M8J6F1AE	H-3	1.05E-01 +- 1.6E-01	U	pCi/g	100%	3.68E-01	1.00E+01	
	J1V8W5								
	M8J6G1AE	H-3	-1.05E-01 +- 1.3E-01	U	pCi/g	100%	3.39E-01	1.00E+01	
	J1V8W6								
	M8J6H1AE	H-3	4.01E-02 +- 1.4E-01	U	pCi/g	100%	3.31E-01	1.00E+01	
	J1V8W7								
	M8J6J1AE	H-3	-3.88E-02 +- 1.4E-01	U	pCi/g	100%	3.53E-01	1.00E+01	
	J1V8W8								
	M8J6K1AE	H-3	2.24E-01 +- 1.8E-01	U	pCi/g	100%	3.81E-01	1.00E+01	
	J1V8W9								
	M8J6L1AE	H-3	1.77E-01 +- 1.5E-01	U	pCi/g	100%	3.33E-01	1.00E+01	
	J1V8X0								
	M8J6M1AE	H-3	7.74E-02 +- 1.5E-01	U	pCi/g	100%	3.44E-01	1.00E+01	
	J1V8X1								
	M8J6N1AE	H-3	1.41E-01 +- 1.6E-01	U	pCi/g	100%	3.53E-01	1.00E+01	
	J1V8X2								
	M8J6P1AE	H-3	5.34E-02 +- 1.2E-01	U	pCi/g	100%	2.82E-01	1.00E+01	

No. of Results: 208

TestAmerica Inc

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A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

AMENDED DATA

QC Results Summary

Date: 17-May-16

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 68605 **SDG No.:** JP1043

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
PUISO_IE_PRECIP_AEA								
6119023 BLANK QC,								
M8J9R1AA	PU-238	-2.72E-03 +- 2.7E-02	U	pCi/g	112%			5.11E-02
	PU239/40	7.59E-03 +- 2.7E-02	U	pCi/g	112%			5.99E-02
6119023 LCS,								
M8J9R1AC	PU239/40	4.18E+00 +- 9.8E-01		pCi/g	86%	91%	-0.1	7.64E-02
GAMMA_GS								
6119022 BLANK QC,								
M8J9Q1AA	AMERICIUM 241	-3.64E-03 +- 7.1E-03	U	pCi/g				1.20E-02
	CO-60	-1.75E-03 +- 8.3E-03	U	pCi/g				1.54E-02
	CS-137	-3.44E-03 +- 8.0E-03	U	pCi/g				1.25E-02
	EU-152	-9.14E-03 +- 1.7E-02	U	pCi/g				2.86E-02
	EU-154	1.28E-02 +- 2.3E-02	U	pCi/g				4.64E-02
	EU-155	-1.46E-02 +- 1.3E-02	U	pCi/g				1.86E-02
	K-40	-4.30E-02 +- 1.5E-01	U	pCi/g				3.08E-01
	RA-226	6.58E-02 +- 3.3E-02	U	pCi/g				4.44E-02
6119022 LCS,								
M8J9Q1AC	CS-137	9.22E-01 +- 1.2E-01		pCi/g		96%	0.0	2.50E-02
	RA-226	9.05E-01 +- 1.3E-01		pCi/g		80%	-0.2	3.63E-02
SRTOT_SEP_PRECIP_GPC								
6119026 BLANK QC,								
M8J9W1AA	STRONTIUM	-8.10E-02 +- 2.1E-01	U	pCi/g	77%			3.99E-01
6119026 LCS,								
M8J9W1AC	STRONTIUM	3.62E+00 +- 9.4E-01		pCi/g	82%	107%	0.1	3.25E-01
NI63_LSC								
6119024 BLANK QC,								
M8J9T1AA	NI-63	1.77E+00 +- 6.4E+00	U	pCi/g	87%			7.06E+00
6119024 LCS,								
M8J9T1AC	NI-63	2.68E+02 +- 3.8E+02		pCi/g	86%	83%	-0.2	8.08E+00
TRITIUM_DIST_LSC								
6119025 BLANK QC,								
M8J9V1AA	H-3	-3.11E-02 +- 7.6E-02	U	pCi/g	100%			1.90E-01
6119025 LCS,								
M8J9V1AC	H-3	8.21E-01 +- 1.3E-01		pCi/g	100%	101%	0.0	1.92E-01

No. of Results: 19

TestAmerica Inc
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Bias - (Result/Expected)-1 as defined by ANSI N13.30.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:10:00 AM
Lot-Sample No.:	J6D270416-1	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8V8	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J581AF		**Report DB ID:** 9M8J5810						
AMERICIUM 241	3.08E-02	U	1.0E-01	1.0E-01	1.76E-01	pCi/g		*0.17*	5/9/16 10:45 a		363.9	GER11$1
						8.82E-02		*0.61*			g	
CO-60	1.43E-02	U	1.4E-02	1.4E-02	2.71E-02	pCi/g		*0.53*	5/9/16 10:45 a		363.9	GER11$1
						1.36E-02	5.00E-02	*(2.)*			g	
CS-137	1.41E-01		3.1E-02	3.1E-02	2.36E-02	pCi/g		*(6.)*	5/9/16 10:45 a		363.9	GER11$1
						1.18E-02	1.00E-01	*(9.1)*			g	
EU-152	2.20E-02	U	3.3E-02	3.3E-02	5.79E-02	pCi/g		*0.38*	5/9/16 10:45 a		363.9	GER11$1
						2.89E-02	1.00E-01	*(1.3)*			g	
EU-154	-3.50E-02	U	4.5E-02	4.5E-02	7.41E-02	pCi/g		*-0.47*	5/9/16 10:45 a		363.9	GER11$1
						3.71E-02	1.00E-01	*-(1.6)*			g	
EU-155	6.45E-02	U	4.3E-02	4.3E-02	7.39E-02	pCi/g		*0.87*	5/9/16 10:45 a		363.9	GER11$1
						3.68E-02	1.00E-01	*(3.)*			g	
K-40	1.41E+01		1.7E+00	1.7E+00	2.02E-01	pCi/g		*(69.8)*	5/9/16 10:45 a		363.9	GER11$1
						1.02E-01		*(16.2)*			g	
RA-226	5.04E-01		8.2E-02	8.2E-02	3.84E-02	pCi/g		*(13.1)*	5/9/16 10:45 a		363.9	GER11$1
						1.92E-02		*(12.2)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J581AD		**Report DB ID:** 9M8J5810						
PU-238	-2.80E-03	U	3.5E-02	3.5E-02	7.08E-02	pCi/g	83%	*-0.04*	5/10/16 07:49 p		1.01	ALP409
						1.79E-02	1.00E+00	*-0.16*			g	
PU239/40	-6.99E-04	U	3.5E-02	3.5E-02	5.91E-02	pCi/g	83%	*-0.01*	5/10/16 07:49 p		1.01	ALP409
						1.25E-02	1.00E+00	*-0.04*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:10:00 AM
Lot-Sample No.:	**J6D270416-1**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8V8**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:** M8J581AC			**Report DB ID:** 9M8J5810					
NI-63	**4.56E-01**	U	2.7E+00	5.7E+00	6.86E+00	pCi/g	96%	*0.07*	5/12/16 02:57 a		0.5	LSC4
						3.21E+00	3.00E+01	*0.16*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:** M8J581AE			**Report DB ID:** 9M8J5810					
H-3	**6.60E-03**	U	1.2E-01	1.2E-01	2.95E-01	pCi/g	100%	*0.02*	5/15/16 12:50 a		22.9	LSC9
						1.34E-01	1.00E+01	*0.11*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J581AA			**Report DB ID:** 9M8J5810					
STRONTIUM	**8.28E+00**		7.1E-01	2.0E+00	3.99E-01	pCi/g	77%	*(20.7)*	5/12/16 12:52 p		2.05	GPC32A
						1.81E-01	1.00E+00	*(8.2)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Laboratories, Inc.

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TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 9:37:00 AM
Lot-Sample No.:	**J6D270416-2**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8V9**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J591AF		**Report DB ID:** 9M8J5910						
AMERICIUM 241	**3.39E-03**	U	1.8E-02	1.8E-02	3.00E-02	pCi/g		*0.11*	5/9/16 10:47 a		387.6	GER16$1
						1.50E-02		*0.37*			g	
CO-60	**1.74E-02**	U	1.6E-02	1.6E-02	3.11E-02	pCi/g		*0.56*	5/9/16 10:47 a		387.6	GER16$1
						1.55E-02	5.00E-02	*(2.1)*			g	
CS-137	**2.51E-01**		4.0E-02	4.0E-02	2.49E-02	pCi/g		*(10.1)*	5/9/16 10:47 a		387.6	GER16$1
						1.25E-02	1.00E-01	*(12.5)*			g	
EU-152	**-4.63E-03**	U	2.9E-02	2.9E-02	4.89E-02	pCi/g		*-0.09*	5/9/16 10:47 a		387.6	GER16$1
						2.45E-02	1.00E-01	*-0.32*			g	
EU-154	**3.10E-03**	U	5.0E-02	5.0E-02	8.81E-02	pCi/g		*0.04*	5/9/16 10:47 a		387.6	GER16$1
						4.40E-02	1.00E-01	*0.12*			g	
EU-155	**5.97E-02**	U	2.7E-02	2.7E-02	4.61E-02	pCi/g		*(1.3)*	5/9/16 10:47 a		387.6	GER16$1
						2.30E-02	1.00E-01	*(4.5)*			g	
K-40	**1.38E+01**		1.6E+00	1.6E+00	2.42E-01	pCi/g		*(56.9)*	5/9/16 10:47 a		387.6	GER16$1
						1.22E-01		*(16.8)*			g	
RA-226	**4.94E-01**		8.1E-02	8.1E-02	4.15E-02	pCi/g		*(11.9)*	5/9/16 10:47 a		387.6	GER16$1
						2.08E-02		*(12.2)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J591AD		**Report DB ID:** 9M8J5910						
PU-238	**9.66E-03**	U	3.0E-02	3.0E-02	6.83E-02	pCi/g	104%	*0.14*	5/10/16 07:50 p		1.01	ALP413
						2.03E-02	1.00E+00	*0.63*			g	
PU239/40	**2.84E-02**	U	4.3E-02	4.3E-02	5.60E-02	pCi/g	104%	*0.51*	5/10/16 07:50 p		1.01	ALP413
						1.42E-02	1.00E+00	*(1.3)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 9:37:00 AM
Lot-Sample No.:	**J6D270416-2**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8V9**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:** M8J591AC			**Report DB ID:** 9M8J5910					
NI-63	**1.93E-01**	U	2.6E+00	3.9E+00	6.50E+00	pCi/g	95%	*0.03*	5/12/16 03:20 a		0.53	LSC4
						3.04E+00	3.00E+01	*0.1*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:** M8J591AE			**Report DB ID:** 9M8J5910					
H-3	**1.51E-01**	U	1.3E-01	1.4E-01	3.04E-01	pCi/g	100%	*0.5*	5/15/16 01:12 a		22.5	LSC9
						1.38E-01	1.00E+01	*(2.2)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J591AA			**Report DB ID:** 9M8J5910					
STRONTIUM	**1.23E-01**	U	2.3E-01	2.3E-01	3.92E-01	pCi/g	78%	*0.31*	5/12/16 12:52 p		2.04	GPC32B
						1.78E-01	1.00E+00	*(1.1)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:30:00 AM
Lot-Sample No.:	J6D270416-3	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W0	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6A1AF			**Report DB ID:** 9M8J6A10					
AMERICIUM 241	**1.62E-04**	U	1.5E-02	1.5E-02	2.56E-02	pCi/g		*0.01*	5/9/16 10:49 a		367.5	GER17$1
						1.28E-02		*0.02*			g	
CO-60	**1.16E-02**	U	1.5E-02	1.5E-02	2.85E-02	pCi/g		*0.41*	5/9/16 10:49 a		367.5	GER17$1
						1.42E-02	5.00E-02	*(1.6)*			g	
CS-137	**1.10E-01**		3.2E-02	3.2E-02	2.25E-02	pCi/g		*(4.9)*	5/9/16 10:49 a		367.5	GER17$1
						1.13E-02	1.00E-01	*(6.9)*			g	
EU-152	**3.30E-03**	U	2.8E-02	2.8E-02	4.94E-02	pCi/g		*0.07*	5/9/16 10:49 a		367.5	GER17$1
						2.47E-02	1.00E-01	*0.23*			g	
EU-154	**8.00E-03**	U	4.8E-02	4.8E-02	8.39E-02	pCi/g		*0.1*	5/9/16 10:49 a		367.5	GER17$1
						4.20E-02	1.00E-01	*0.34*			g	
EU-155	**2.35E-02**	U	2.5E-02	2.5E-02	4.27E-02	pCi/g		*0.55*	5/9/16 10:49 a		367.5	GER17$1
						2.12E-02	1.00E-01	*(1.9)*			g	
K-40	**1.41E+01**		1.7E+00	1.7E+00	2.36E-01	pCi/g		*(59.8)*	5/9/16 10:49 a		367.5	GER17$1
						1.18E-01		*(16.8)*			g	
RA-226	**5.02E-01**		9.0E-02	9.0E-02	3.66E-02	pCi/g		*(13.7)*	5/9/16 10:49 a		367.5	GER17$1
						1.84E-02		*(11.2)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6A1AD			**Report DB ID:** 9M8J6A10					
PU-238	**-3.43E-03**	U	2.9E-02	2.9E-02	5.89E-02	pCi/g	105%	*-0.06*	5/10/16 07:51 p		1.03	ALP414
						1.67E-02	1.00E+00	*-0.24*			g	
PU239/40	**5.42E-02**	U	5.7E-02	5.8E-02	5.70E-02	pCi/g	105%	*0.95*	5/10/16 07:51 p		1.03	ALP414
						1.57E-02	1.00E+00	*(1.9)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-3
Client Sample ID: J1V8W0

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 8:30:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6A1AC		**Report DB ID:**	9M8J6A10				
NI-63	1.97E-01	U	2.9E+00	5.1E+00	7.29E+00	pCi/g	83%	*0.03*	5/12/16 04:06 a		0.54	LSC4
						3.41E+00	3.00E+01	*0.08*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6A1AE		**Report DB ID:**	9M8J6A10				
H-3	-5.37E-02	U	1.2E-01	1.3E-01	3.21E-01	pCi/g	100%	*-0.17*	5/15/16 01:34 a		21.6	LSC9
						1.46E-01	1.00E+01	*-0.83*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6A1AA		**Report DB ID:**	9M8J6A10				
STRONTIUM	6.43E-01		3.1E-01	3.5E-01	4.41E-01	pCi/g	69%	*(1.5)*	5/12/16 12:52 p		2.0	GPC32C
						2.00E-01	1.00E+00	*(3.7)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:50:00 AM
Lot-Sample No.:	**J6D270416-4**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W1**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6C1AF		**Report DB ID:** 9M8J6C10						
AMERICIUM 241	**-8.17E-03**	U	2.1E-02	2.1E-02	3.50E-02	pCi/g		*-0.23*	5/9/16 10:50 a		364.8	GER18$1
						1.75E-02		*-0.77*			g	
CO-60	**4.04E-03**	U	1.7E-02	1.7E-02	3.03E-02	pCi/g		*0.13*	5/9/16 10:50 a		364.8	GER18$1
						1.51E-02	5.00E-02	*0.48*			g	
CS-137	**7.01E-03**	U	1.5E-02	1.5E-02	2.69E-02	pCi/g		*0.26*	5/9/16 10:50 a		364.8	GER18$1
						1.35E-02	1.00E-01	*0.91*			g	
EU-152	**-4.44E-02**	U	2.9E-02	2.9E-02	4.61E-02	pCi/g		*-0.96*	5/9/16 10:50 a		364.8	GER18$1
						2.30E-02	1.00E-01	*-(3.1)*			g	
EU-154	**4.24E-03**	U	5.1E-02	5.1E-02	9.05E-02	pCi/g		*0.05*	5/9/16 10:50 a		364.8	GER18$1
						4.52E-02	1.00E-01	*0.17*			g	
EU-155	**4.12E-02**	U	2.9E-02	2.9E-02	5.14E-02	pCi/g		*0.8*	5/9/16 10:50 a		364.8	GER18$1
						2.56E-02	1.00E-01	*(2.8)*			g	
K-40	**1.76E+01**		2.1E+00	2.1E+00	2.04E-01	pCi/g		*(86.6)*	5/9/16 10:50 a		364.8	GER18$1
						1.02E-01		*(17.2)*			g	
RA-226	**6.29E-01**		9.9E-02	9.9E-02	4.00E-02	pCi/g		*(15.7)*	5/9/16 10:50 a		364.8	GER18$1
						2.00E-02		*(12.7)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6C1AD		**Report DB ID:** 9M8J6C10						
PU-238	**1.14E-02**	U	3.0E-02	3.0E-02	6.54E-02	pCi/g	96%	*0.17*	5/10/16 07:51 p		1.02	ALP419
						1.75E-02	1.00E+00	*0.75*			g	
PU239/40	**3.00E-02**	U	4.2E-02	4.3E-02	5.08E-02	pCi/g	96%	*0.59*	5/10/16 07:51 p		1.02	ALP419
						1.08E-02	1.00E+00	*(1.4)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:50:00 AM
Lot-Sample No.:	J6D270416-4	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W1	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6C1AC		**Report DB ID:**	9M8J6C10				
NI-63	**-2.09E+00**	U	2.4E+00	4.8E+00	6.47E+00	pCi/g	99%	*-0.32*	5/12/16 04:29 a		0.51	LSC4
						3.02E+00	3.00E+01	*-0.87*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6C1AE		**Report DB ID:**	9M8J6C10				
H-3	**8.81E-02**	U	1.3E-01	1.4E-01	3.25E-01	pCi/g	100%	*0.27*	5/15/16 02:17 a		21.2	LSC9
						1.48E-01	1.00E+01	*(1.2)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6C1AA		**Report DB ID:**	9M8J6C10				
STRONTIUM	**7.69E-02**	U	2.6E-01	2.6E-01	4.45E-01	pCi/g	75%	*0.17*	5/12/16 12:52 p		2.03	GPC32D
						2.03E-01	1.00E+00	*0.6*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-5
Client Sample ID: J1V8W2

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 10:45:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6D1AF			**Report DB ID:** 9M8J6D10					
AMERICIUM 241	9.50E-03	U	1.1E-01	1.1E-01	1.91E-01	pCi/g		*0.05*	5/9/16 02:35 p		365.5	GER11$1
						9.57E-02		*0.17*			g	
CO-60	3.03E-03	U	1.5E-02	1.5E-02	2.67E-02	pCi/g		*0.11*	5/9/16 02:35 p		365.5	GER11$1
						1.33E-02	5.00E-02	*0.41*			g	
CS-137	1.63E-01		3.6E-02	3.6E-02	2.48E-02	pCi/g		*(6.5)*	5/9/16 02:35 p		365.5	GER11$1
						1.24E-02	1.00E-01	*(9.)*			g	
EU-152	-2.10E-02	U	3.6E-02	3.6E-02	5.88E-02	pCi/g		*-0.36*	5/9/16 02:35 p		365.5	GER11$1
						2.94E-02	1.00E-01	*-(1.2)*			g	
EU-154	-6.78E-03	U	4.7E-02	4.7E-02	8.24E-02	pCi/g		*-0.08*	5/9/16 02:35 p		365.5	GER11$1
						4.12E-02	1.00E-01	*-0.29*			g	
EU-155	8.06E-02	U	4.6E-02	4.6E-02	7.88E-02	pCi/g		*(1.)*	5/9/16 02:35 p		365.5	GER11$1
						3.92E-02	1.00E-01	*(3.5)*			g	
K-40	1.62E+01		2.0E+00	2.0E+00	2.39E-01	pCi/g		*(67.9)*	5/9/16 02:35 p		365.5	GER11$1
						1.20E-01		*(16.4)*			g	
RA-226	6.59E-01		9.7E-02	9.7E-02	4.14E-02	pCi/g		*(15.9)*	5/9/16 02:35 p		365.5	GER11$1
						2.07E-02		*(13.6)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6D1AD			**Report DB ID:** 9M8J6D10					
PU-238	-2.90E-03	U	2.9E-02	2.9E-02	6.11E-02	pCi/g	99%	*-0.05*	5/10/16 07:52 p		1.0	ALP420
						1.60E-02	1.00E+00	*-0.2*			g	
PU239/40	-1.74E-03	U	2.9E-02	2.9E-02	5.62E-02	pCi/g	99%	*-0.03*	5/10/16 07:52 p		1.0	ALP420
						1.36E-02	1.00E+00	*-0.12*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 10:45:00 AM
Lot-Sample No.:	**J6D270416-5**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W2**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6D1AC		**Report DB ID:**	9M8J6D10				
NI-63	**-4.52E-01**	U	2.6E+00	5.2E+00	6.70E+00	pCi/g	92%	*-0.07*	5/12/16 04:52 a		0.53	LSC4
						3.13E+00	3.00E+01	*-0.17*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6D1AE		**Report DB ID:**	9M8J6D10				
H-3	**1.71E-01**	U	1.4E-01	1.5E-01	3.23E-01	pCi/g	100%	*0.53*	5/15/16 02:38 a		20.8	LSC9
						1.47E-01	1.00E+01	*(2.3)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6D1AA		**Report DB ID:**	9M8J6D10				
STRONTIUM	**2.10E-01**	U	2.5E-01	2.6E-01	4.10E-01	pCi/g	74%	*0.51*	5/12/16 01:51 p		2.06	GPC32A
						1.86E-01	1.00E+00	*(1.6)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-6
Client Sample ID: J1V8W3

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 11:00:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6E1AF		**Report DB ID:** 9M8J6E10						
AMERICIUM 241	**8.77E-03**	U	2.1E-02	2.1E-02	3.41E-02	pCi/g		*0.26*	5/9/16 02:36 p		371.6	GER16$1
						1.71E-02		*0.85*			g	
CO-60	**1.81E-02**	U	1.8E-02	1.8E-02	3.37E-02	pCi/g		*0.54*	5/9/16 02:36 p		371.6	GER16$1
						1.68E-02	5.00E-02	*(2.)*			g	
CS-137	**3.94E-01**		6.1E-02	6.1E-02	2.65E-02	pCi/g		*(14.9)*	5/9/16 02:36 p		371.6	GER16$1
						1.32E-02	1.00E-01	*(13.)*			g	
EU-152	**-2.65E-02**	U	3.2E-02	3.2E-02	5.18E-02	pCi/g		*-0.51*	5/9/16 02:36 p		371.6	GER16$1
						2.59E-02	1.00E-01	*-(1.7)*			g	
EU-154	**-3.34E-02**	U	5.2E-02	5.2E-02	8.76E-02	pCi/g		*-0.38*	5/9/16 02:36 p		371.6	GER16$1
						4.38E-02	1.00E-01	*-(1.3)*			g	
EU-155	**3.38E-02**	U	2.8E-02	2.8E-02	4.84E-02	pCi/g		*0.7*	5/9/16 02:36 p		371.6	GER16$1
						2.41E-02	1.00E-01	*(2.4)*			g	
K-40	**1.46E+01**		1.7E+00	1.7E+00	2.68E-01	pCi/g		*(54.5)*	5/9/16 02:36 p		371.6	GER16$1
						1.35E-01		*(16.7)*			g	
RA-226	**6.27E-01**		9.5E-02	9.5E-02	4.57E-02	pCi/g		*(13.7)*	5/9/16 02:36 p		371.6	GER16$1
						2.29E-02		*(13.2)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6E1AD		**Report DB ID:** 9M8J6E10						
PU-238	**-5.76E-03**	U	2.9E-02	2.9E-02	6.95E-02	pCi/g	92%	*-0.08*	5/10/16 07:53 p		1.05	ALP421
						2.02E-02	1.00E+00	*-0.4*			g	
PU239/40	**-5.75E-04**	U	2.9E-02	2.9E-02	4.86E-02	pCi/g	92%	*-0.01*	5/10/16 07:53 p		1.05	ALP421
						1.03E-02	1.00E+00	*-0.04*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 11:00:00 AM
Lot-Sample No.:	J6D270416-6	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W3	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6E1AC		**Report DB ID:**	9M8J6E10				
NI-63	**1.06E+01**		3.1E+00	2.0E+01	6.42E+00	pCi/g	98%	*(1.7)*	5/12/16 05:16 a		0.52	LSC4
						3.00E+00	3.00E+01	*(1.1)*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6E1AE		**Report DB ID:**	9M8J6E10				
H-3	**6.61E-02**	U	1.3E-01	1.4E-01	3.21E-01	pCi/g	100%	*0.21*	5/15/16 03:00 a		21.5	LSC9
						1.46E-01	1.00E+01	*0.95*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6E1AA		**Report DB ID:**	9M8J6E10				
STRONTIUM	**3.30E-01**	U	2.5E-01	2.6E-01	3.83E-01	pCi/g	79%	*0.86*	5/12/16 01:51 p		2.01	GPC32C
						1.73E-01	1.00E+00	*(2.5)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 10:25:00 AM
Lot-Sample No.:	J6D270416-7	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W4	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6F1AF			**Report DB ID:** 9M8J6F10					
AMERICIUM 241	-3.78E-03	U	1.6E-02	1.6E-02	2.78E-02	pCi/g		-0.14	5/9/16 02:38 p		371.5	GER17$1
						1.39E-02		-0.46			g	
CO-60	-8.54E-03	U	1.5E-02	1.5E-02	2.61E-02	pCi/g		-0.33	5/9/16 02:38 p		371.5	GER17$1
						1.30E-02	5.00E-02	-(1.1)			g	
CS-137	4.05E-02		2.5E-02	2.5E-02	2.35E-02	pCi/g		(1.7)	5/9/16 02:38 p		371.5	GER17$1
						1.18E-02	1.00E-01	(3.3)			g	
EU-152	1.84E-02	U	2.7E-02	2.7E-02	4.88E-02	pCi/g		0.38	5/9/16 02:38 p		371.5	GER17$1
						2.44E-02	1.00E-01	(1.3)			g	
EU-154	-2.19E-02	U	4.6E-02	4.6E-02	7.74E-02	pCi/g		-0.28	5/9/16 02:38 p		371.5	GER17$1
						3.87E-02	1.00E-01	-0.95			g	
EU-155	2.53E-02	U	2.5E-02	2.5E-02	4.40E-02	pCi/g		0.58	5/9/16 02:38 p		371.5	GER17$1
						2.19E-02	1.00E-01	(2.)			g	
K-40	1.47E+01		1.7E+00	1.7E+00	2.53E-01	pCi/g		(57.9)	5/9/16 02:38 p		371.5	GER17$1
						1.27E-01		(16.8)			g	
RA-226	5.96E-01		9.9E-02	9.9E-02	4.07E-02	pCi/g		(14.6)	5/9/16 02:38 p		371.5	GER17$1
						2.04E-02		(12.)			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6F1AD			**Report DB ID:** 9M8J6F10					
PU-238	-3.30E-03	U	2.8E-02	2.8E-02	5.87E-02	pCi/g	102%	-0.06	5/10/16 07:53 p		1.06	ALP422
						1.61E-02	1.00E+00	-0.24			g	
PU239/40	-5.50E-04	U	2.8E-02	2.8E-02	4.56E-02	pCi/g	102%	-0.01	5/10/16 07:53 p		1.06	ALP422
						9.85E-03	1.00E+00	-0.04			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 10:25:00 AM
Lot-Sample No.:	**J6D270416-7**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W4**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:** M8J6F1AC			**Report DB ID:** 9M8J6F10					
NI-63	**1.61E+00**	U	2.7E+00	4.5E+00	6.68E+00	pCi/g	94%	*0.24*	5/12/16 05:39 a		0.52	LSC4
						3.12E+00	3.00E+01	*0.71*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:** M8J6F1AE			**Report DB ID:** 9M8J6F10					
H-3	**1.05E-01**	U	1.5E-01	1.6E-01	3.68E-01	pCi/g	100%	*0.29*	5/15/16 03:21 a		19.3	LSC9
						1.67E-01	1.00E+01	*(1.3)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J6F1AA			**Report DB ID:** 9M8J6F10					
STRONTIUM	**-6.86E-03**	U	2.4E-01	2.4E-01	4.36E-01	pCi/g	77%	*-0.02*	5/12/16 01:51 p		2.0	GPC32D
						2.00E-01	1.00E+00	*-0.06*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-8
Client Sample ID: J1V8W5

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 11:15:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6G1AF			**Report DB ID:** 9M8J6G10					
AMERICIUM 241	5.16E-03	U	2.0E-02	2.0E-02	3.42E-02	pCi/g		*0.15*	5/9/16 02:39 p		378.0	GER18$1
						1.71E-02		*0.51*			g	
CO-60	3.78E-03	U	1.4E-02	1.4E-02	2.48E-02	pCi/g		*0.15*	5/9/16 02:39 p		378.0	GER18$1
						1.24E-02	5.00E-02	*0.56*			g	
CS-137	2.33E-02	U	1.4E-02	1.4E-02	2.51E-02	pCi/g		*0.93*	5/9/16 02:39 p		378.0	GER18$1
						1.26E-02	1.00E-01	*(3.4)*			g	
EU-152	-9.83E-03	U	3.0E-02	3.0E-02	5.15E-02	pCi/g		*-0.19*	5/9/16 02:39 p		378.0	GER18$1
						2.57E-02	1.00E-01	*-0.65*			g	
EU-154	9.47E-03	U	4.6E-02	4.6E-02	8.20E-02	pCi/g		*0.12*	5/9/16 02:39 p		378.0	GER18$1
						4.10E-02	1.00E-01	*0.41*			g	
EU-155	4.52E-02	U	2.8E-02	2.8E-02	4.94E-02	pCi/g		*0.92*	5/9/16 02:39 p		378.0	GER18$1
						2.46E-02	1.00E-01	*(3.2)*			g	
K-40	1.44E+01		1.7E+00	1.7E+00	2.16E-01	pCi/g		*(66.8)*	5/9/16 02:39 p		378.0	GER18$1
						1.08E-01		*(16.9)*			g	
RA-226	5.99E-01		9.2E-02	9.2E-02	4.07E-02	pCi/g		*(14.7)*	5/9/16 02:39 p		378.0	GER18$1
						2.04E-02		*(13.1)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6G1AD			**Report DB ID:** 9M8J6G10					
PU-238	1.32E-02	U	3.2E-02	3.2E-02	6.39E-02	pCi/g	96%	*0.21*	5/10/16 07:54 p		0.97	ALP423
						1.61E-02	1.00E+00	*0.83*			g	
PU239/40	-1.89E-03	U	3.2E-02	3.2E-02	6.10E-02	pCi/g	96%	*-0.03*	5/10/16 07:54 p		0.97	ALP423
						1.48E-02	1.00E+00	*-0.12*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 11:15:00 AM
Lot-Sample No.:	**J6D270416-8**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W5**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:** M8J6G1AC			**Report DB ID:** 9M8J6G10					
NI-63	**4.17E-01**	U	2.4E+00	3.0E+00	6.05E+00	pCi/g	100%	*0.07*	5/12/16 06:02 a		0.54	LSC4
						2.83E+00	3.00E+01	*0.27*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:** M8J6G1AE			**Report DB ID:** 9M8J6G10					
H-3	**-1.05E-01**	U	1.2E-01	1.3E-01	3.39E-01	pCi/g	100%	*-0.31*	5/15/16 03:43 a		20.2	LSC9
						1.54E-01	1.00E+01	*-(1.6)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J6G1AA			**Report DB ID:** 9M8J6G10					
STRONTIUM	**8.90E+00**		7.3E-01	2.2E+00	4.03E-01	pCi/g	76%	*(22.1)*	5/12/16 03:53 p		1.98	GPC32A
						1.83E-01	1.00E+00	*(8.2)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-9
Client Sample ID: J1V8W6

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 11:45:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6H1AF		**Report DB ID:** 9M8J6H10						
AMERICIUM 241	**8.85E-03**	U	2.2E-02	2.2E-02	3.73E-02	pCi/g		*0.24*	5/9/16 02:40 p		347.9	GER19$1
						1.87E-02		*0.81*			g	
CO-60	**-5.70E-03**	U	1.5E-02	1.5E-02	2.58E-02	pCi/g		*-0.22*	5/9/16 02:40 p		347.9	GER19$1
						1.29E-02	5.00E-02	*-0.75*			g	
CS-137	**4.33E-02**	U	1.8E-02	1.8E-02	3.25E-02	pCi/g		*(1.3)*	5/9/16 02:40 p		347.9	GER19$1
						1.63E-02	1.00E-01	*(4.9)*			g	
EU-152	**-5.46E-04**	U	3.1E-02	3.1E-02	5.28E-02	pCi/g		*-0.01*	5/9/16 02:40 p		347.9	GER19$1
						2.64E-02	1.00E-01	*-0.04*			g	
EU-154	**2.65E-02**	U	5.3E-02	5.3E-02	9.49E-02	pCi/g		*0.28*	5/9/16 02:40 p		347.9	GER19$1
						4.74E-02	1.00E-01	*(1.)*			g	
EU-155	**4.79E-02**	U	4.6E-02	4.6E-02	5.42E-02	pCi/g		*0.88*	5/9/16 02:40 p		347.9	GER19$1
						2.70E-02	1.00E-01	*(2.1)*			g	
K-40	**1.51E+01**		1.8E+00	1.8E+00	2.10E-01	pCi/g		*(72.)*	5/9/16 02:40 p		347.9	GER19$1
						1.06E-01		*(16.8)*			g	
RA-226	**6.95E-01**		1.1E-01	1.1E-01	4.31E-02	pCi/g		*(16.1)*	5/9/16 02:40 p		347.9	GER19$1
						2.16E-02		*(12.5)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6H1AD		**Report DB ID:** 9M8J6H10						
PU-238	**1.15E-02**	U	3.1E-02	3.1E-02	6.61E-02	pCi/g	88%	*0.17*	5/10/16 07:55 p		1.06	ALP424
						1.77E-02	1.00E+00	*0.75*			g	
PU239/40	**4.31E-02**	U	5.3E-02	5.3E-02	6.15E-02	pCi/g	88%	*0.7*	5/10/16 07:55 p		1.06	ALP424
						1.55E-02	1.00E+00	*(1.6)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-9
Client Sample ID: J1V8W6

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 11:45:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6H1AC		**Report DB ID:**	9M8J6H10				
NI-63	**1.33E+00**	U	2.8E+00	5.8E+00	6.82E+00	pCi/g	99%	*0.2*	5/12/16 06:25 a		0.48	LSC4
						3.19E+00	3.00E+01	*0.46*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6H1AE		**Report DB ID:**	9M8J6H10				
H-3	**4.01E-02**	U	1.3E-01	1.4E-01	3.31E-01	pCi/g	100%	*0.12*	5/15/16 04:04 a		20.2	LSC9
						1.51E-01	1.00E+01	*0.57*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6H1AA		**Report DB ID:**	9M8J6H10				
STRONTIUM	**1.20E+00**		3.1E-01	4.2E-01	3.61E-01	pCi/g	79%	*(3.3)*	5/12/16 03:53 p		2.09	GPC32B
						1.64E-01	1.00E+00	*(5.8)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 11:30:00 AM
Lot-Sample No.:	**J6D270416-10**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W7**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6J1AF		**Report DB ID:** 9M8J6J10						
AMERICIUM 241	**-8.29E-02**	U	1.1E-01	1.1E-01	1.81E-01	pCi/g		*-0.46*	5/9/16 06:10 p		359.6	GER11$1
						9.06E-02		*-(1.5)*			g	
CO-60	**3.90E-03**	U	1.5E-02	1.5E-02	2.74E-02	pCi/g		*0.14*	5/9/16 06:10 p		359.6	GER11$1
						1.37E-02	5.00E-02	*0.52*			g	
CS-137	**1.50E-01**		3.4E-02	3.4E-02	2.40E-02	pCi/g		*(6.2)*	5/9/16 06:10 p		359.6	GER11$1
						1.20E-02	1.00E-01	*(8.9)*			g	
EU-152	**-3.16E-02**	U	3.8E-02	3.8E-02	6.07E-02	pCi/g		*-0.52*	5/9/16 06:10 p		359.6	GER11$1
						3.03E-02	1.00E-01	*-(1.7)*			g	
EU-154	**1.55E-02**	U	4.4E-02	4.4E-02	8.06E-02	pCi/g		*0.19*	5/9/16 06:10 p		359.6	GER11$1
						4.03E-02	1.00E-01	*0.7*			g	
EU-155	**6.56E-02**	U	4.7E-02	4.7E-02	7.97E-02	pCi/g		*0.82*	5/9/16 06:10 p		359.6	GER11$1
						3.97E-02	1.00E-01	*(2.8)*			g	
K-40	**1.48E+01**		1.8E+00	1.8E+00	2.10E-01	pCi/g		*(70.5)*	5/9/16 06:10 p		359.6	GER11$1
						1.06E-01		*(16.2)*			g	
RA-226	**5.93E-01**		9.3E-02	9.3E-02	4.82E-02	pCi/g		*(12.3)*	5/9/16 06:10 p		359.6	GER11$1
						2.41E-02		*(12.7)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6J1AD		**Report DB ID:** 9M8J6J10						
PU-238	**1.46E-02**	U	3.0E-02	3.0E-02	4.76E-02	pCi/g	108%	*0.31*	5/10/16 07:55 p		0.97	ALP439
						1.09E-02	1.00E+00	*0.96*			g	
PU239/40	**4.37E-02**	U	5.3E-02	5.3E-02	5.45E-02	pCi/g	108%	*0.8*	5/10/16 07:55 p		0.97	ALP439
						1.42E-02	1.00E+00	*(1.6)*			g	

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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AMENDED DATA

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 11:30:00 AM
Lot-Sample No.:	J6D270416-10	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W7	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6J1AC		**Report DB ID:**	9M8J6J10				
NI-63	**4.78E-01**	U	2.4E+00	6.5E+00	6.02E+00	pCi/g	100%	*0.08*	5/12/16 06:48 a		0.54	LSC4
						2.81E+00	3.00E+01	*0.15*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6J1AE		**Report DB ID:**	9M8J6J10				
H-3	**-3.88E-02**	U	1.3E-01	1.4E-01	3.53E-01	pCi/g	100%	*-0.11*	5/15/16 04:26 a		20.4	LSC9
						1.61E-01	1.00E+01	*-0.54*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6J1AA		**Report DB ID:**	9M8J6J10				
STRONTIUM	**3.29E-01**	U	2.5E-01	2.6E-01	3.82E-01	pCi/g	77%	*0.86*	5/12/16 03:53 p		2.01	GPC32C
						1.73E-01	1.00E+00	*(2.5)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-11
Client Sample ID: J1V8W8

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 12:00:00 PM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:**	M8J6K1AF		**Report DB ID:**	9M8J6K10				
AMERICIUM 241	**-5.23E-03**	U	2.3E-02	2.3E-02	3.77E-02	pCi/g		*-0.14*	5/9/16 06:11 p		341.0	GER16$1
						1.89E-02		*-0.45*			g	
CO-60	**9.64E-02**	U	3.2E-02	3.2E-02	4.88E-02	pCi/g		*(2.)*	5/9/16 06:11 p		341.0	GER16$1
						2.43E-02	5.00E-02	*(6.1)*			g	
CS-137	**4.30E-01**		6.6E-02	6.6E-02	3.01E-02	pCi/g		*(14.3)*	5/9/16 06:11 p		341.0	GER16$1
						1.50E-02	1.00E-01	*(13.1)*			g	
EU-152	**-7.29E-03**	U	3.7E-02	3.7E-02	6.19E-02	pCi/g		*-0.12*	5/9/16 06:11 p		341.0	GER16$1
						3.09E-02	1.00E-01	*-0.39*			g	
EU-154	**8.57E-03**	U	5.9E-02	5.9E-02	1.05E-01	pCi/g		*0.08*	5/9/16 06:11 p		341.0	GER16$1
						5.25E-02	1.00E-01	*0.29*			g	
EU-155	**5.10E-02**	U	3.2E-02	3.2E-02	5.54E-02	pCi/g		*0.92*	5/9/16 06:11 p		341.0	GER16$1
						2.76E-02	1.00E-01	*(3.2)*			g	
K-40	**1.44E+01**		1.7E+00	1.7E+00	2.42E-01	pCi/g		*(59.4)*	5/9/16 06:11 p		341.0	GER16$1
						1.22E-01		*(16.5)*			g	
RA-226	**7.34E-01**		1.2E-01	1.2E-01	4.79E-02	pCi/g		*(15.3)*	5/9/16 06:11 p		341.0	GER16$1
						2.40E-02		*(12.3)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:**	M8J6K1AD		**Report DB ID:**	9M8J6K10				
PU-238	**0.00E+00**	U	0.0E+00	3.0E-02	5.14E-02	pCi/g	91%	*0.*	5/10/16 07:56 p		1.02	ALP441
						1.09E-02	1.00E+00	*0.*			g	
PU239/40	**2.92E-02**	U	4.3E-02	4.3E-02	5.56E-02	pCi/g	91%	*0.52*	5/10/16 07:56 p		1.02	ALP441
						1.27E-02	1.00E+00	*(1.3)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-11
Client Sample ID: J1V8W8

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 12:00:00 PM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6K1AC		**Report DB ID:**	9M8J6K10				
NI-63	1.06E+00	U	2.6E+00	4.5E+00	6.46E+00	pCi/g	97%	*0.16*	5/12/16 07:34 a		0.52	LSC4
						3.02E+00	3.00E+01	*0.47*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6K1AE		**Report DB ID:**	9M8J6K10				
H-3	2.24E-01	U	1.7E-01	1.8E-01	3.81E-01	pCi/g	100%	*0.59*	5/15/16 05:09 a		20.1	LSC9
						1.73E-01	1.00E+01	*(2.5)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6K1AA		**Report DB ID:**	9M8J6K10				
STRONTIUM	1.84E-01	U	2.6E-01	2.6E-01	4.33E-01	pCi/g	75%	*0.42*	5/12/16 03:53 p		2.01	GPC32D
						1.98E-01	1.00E+00	*(1.4)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 12:20:00 PM
Lot-Sample No.:	**J6D270416-12**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W9**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6L1AF			**Report DB ID:** 9M8J6L10					
AMERICIUM 241	**3.07E-03**	U	1.6E-02	1.6E-02	2.82E-02	pCi/g		*0.11*	5/9/16 06:12 p		367.0	GER17$1
						1.41E-02		*0.37*			g	
CO-60	**7.65E-03**	U	1.5E-02	1.5E-02	2.84E-02	pCi/g		*0.27*	5/9/16 06:12 p		367.0	GER17$1
						1.42E-02	5.00E-02	*(1.)*			g	
CS-137	**3.58E-02**	U	1.7E-02	1.7E-02	3.02E-02	pCi/g		*(1.2)*	5/9/16 06:12 p		367.0	GER17$1
						1.51E-02	1.00E-01	*(4.3)*			g	
EU-152	**-3.84E-03**	U	2.8E-02	2.8E-02	4.78E-02	pCi/g		*-0.08*	5/9/16 06:12 p		367.0	GER17$1
						2.39E-02	1.00E-01	*-0.28*			g	
EU-154	**1.37E-02**	U	4.7E-02	4.7E-02	8.44E-02	pCi/g		*0.16*	5/9/16 06:12 p		367.0	GER17$1
						4.22E-02	1.00E-01	*0.58*			g	
EU-155	**1.10E-02**	U	2.5E-02	2.5E-02	4.31E-02	pCi/g		*0.26*	5/9/16 06:12 p		367.0	GER17$1
						2.15E-02	1.00E-01	*0.88*			g	
K-40	**1.50E+01**		1.8E+00	1.8E+00	1.97E-01	pCi/g		*(75.9)*	5/9/16 06:12 p		367.0	GER17$1
						9.94E-02		*(17.)*			g	
RA-226	**6.73E-01**		1.0E-01	1.0E-01	4.01E-02	pCi/g		*(16.8)*	5/9/16 06:12 p		367.0	GER17$1
						2.01E-02		*(13.3)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6L1AD			**Report DB ID:** 9M8J6L10					
PU-238	**1.50E-02**	U	3.1E-02	3.1E-02	5.28E-02	pCi/g	95%	*0.28*	5/10/16 07:56 p		0.97	ALP442
						1.12E-02	1.00E+00	*0.96*			g	
PU239/40	**-1.25E-03**	U	3.1E-02	3.1E-02	5.71E-02	pCi/g	95%	*-0.02*	5/10/16 07:56 p		0.97	ALP442
						1.31E-02	1.00E+00	*-0.08*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 12:20:00 PM
Lot-Sample No.:	J6D270416-12	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W9	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6L1AC		**Report DB ID:**	9M8J6L10				
NI-63	**-2.68E+00**	U	2.8E+00	5.0E+00	7.42E+00	pCi/g	92%	*-0.36*	5/12/16 07:57 a		0.48	LSC4
						3.47E+00	3.00E+01	*-(1.1)*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6L1AE		**Report DB ID:**	9M8J6L10				
H-3	**1.77E-01**	U	1.4E-01	1.5E-01	3.33E-01	pCi/g	100%	*0.53*	5/15/16 05:31 a		20.9	LSC9
						1.51E-01	1.00E+01	*(2.3)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6L1AA		**Report DB ID:**	9M8J6L10				
STRONTIUM	**8.48E-01**		3.0E-01	3.6E-01	3.82E-01	pCi/g	79%	*(2.2)*	5/12/16 05:42 p		1.98	GPC32A
						1.73E-01	1.00E+00	*(4.8)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-13
Client Sample ID: J1V8X0

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 9:15:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6M1AF		**Report DB ID:** 9M8J6M10						
AMERICIUM 241	3.79E-03	U	2.3E-02	2.3E-02	3.94E-02	pCi/g		*0.1*	5/9/16 06:13 p		357.1	GER18$1
						1.97E-02		*0.32*			g	
CO-60	1.56E-01		3.5E-02	3.5E-02	2.63E-02	pCi/g		*(5.9)*	5/9/16 06:13 p		357.1	GER18$1
						1.31E-02	5.00E-02	*(9.)*			g	
CS-137	4.16E+00		4.9E-01	4.9E-01	2.65E-02	pCi/g		*(156.9)*	5/9/16 06:13 p		357.1	GER18$1
						1.33E-02	1.00E-01	*(17.1)*			g	
EU-152	7.29E-03	U	4.1E-02	4.1E-02	7.04E-02	pCi/g		*0.1*	5/9/16 06:13 p		357.1	GER18$1
						3.52E-02	1.00E-01	*0.36*			g	
EU-154	-3.88E-02	U	5.1E-02	5.1E-02	8.49E-02	pCi/g		*-0.46*	5/9/16 06:13 p		357.1	GER18$1
						4.24E-02	1.00E-01	*-(1.5)*			g	
EU-155	4.76E-02	U	3.4E-02	3.4E-02	5.96E-02	pCi/g		*0.8*	5/9/16 06:13 p		357.1	GER18$1
						2.96E-02	1.00E-01	*(2.8)*			g	
K-40	1.52E+01		1.8E+00	1.8E+00	1.99E-01	pCi/g		*(76.4)*	5/9/16 06:13 p		357.1	GER18$1
						1.00E-01		*(16.9)*			g	
RA-226	7.21E-01		1.1E-01	1.1E-01	4.80E-02	pCi/g		*(15.)*	5/9/16 06:13 p		357.1	GER18$1
						2.41E-02		*(13.5)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6M1AD		**Report DB ID:** 9M8J6M10						
PU-238	-1.31E-03	U	3.3E-02	3.3E-02	5.99E-02	pCi/g	88%	*-0.02*	5/10/16 07:56 p		1.01	ALP443
						1.37E-02	1.00E+00	*-0.08*			g	
PU239/40	1.51E-02	U	3.3E-02	3.3E-02	5.99E-02	pCi/g	88%	*0.25*	5/10/16 07:56 p		1.01	ALP443
						1.37E-02	1.00E+00	*0.92*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 9:15:00 AM
Lot-Sample No.:	J6D270416-13	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8X0	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6M1AC		**Report DB ID:**	9M8J6M10				
NI-63	**1.02E+00**	U	2.6E+00	3.8E+00	6.31E+00	pCi/g	98%	*0.16*	5/12/16 08:20 a		0.53	LSC4
						2.95E+00	3.00E+01	*0.55*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6M1AE		**Report DB ID:**	9M8J6M10				
H-3	**7.74E-02**	U	1.4E-01	1.5E-01	3.44E-01	pCi/g	100%	*0.22*	5/15/16 05:52 a		20.3	LSC9
						1.56E-01	1.00E+01	*(1.)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6M1AA		**Report DB ID:**	9M8J6M10				
STRONTIUM	**2.21E-01**	U	2.3E-01	2.4E-01	3.78E-01	pCi/g	77%	*0.59*	5/12/16 05:42 p		2.02	GPC32B
						1.72E-01	1.00E+00	*(1.8)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-14
Client Sample ID: J1V8X1

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 10:25:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6N1AF			**Report DB ID:** 9M8J6N10					
AMERICIUM 241	6.44E-03	U	2.0E-02	2.0E-02	3.37E-02	pCi/g		*0.19*	5/9/16 06:14 p		378.8	GER19$1
						1.68E-02		*0.66*			g	
CO-60	6.99E-03	U	1.4E-02	1.4E-02	2.63E-02	pCi/g		*0.27*	5/9/16 06:14 p		378.8	GER19$1
						1.31E-02	5.00E-02	*0.98*			g	
CS-137	6.34E-02		2.3E-02	2.3E-02	2.40E-02	pCi/g		*(2.6)*	5/9/16 06:14 p		378.8	GER19$1
						1.20E-02	1.00E-01	*(5.5)*			g	
EU-152	-8.80E-03	U	2.8E-02	2.8E-02	4.78E-02	pCi/g		*-0.18*	5/9/16 06:14 p		378.8	GER19$1
						2.39E-02	1.00E-01	*-0.62*			g	
EU-154	3.89E-02	U	4.4E-02	4.4E-02	8.26E-02	pCi/g		*0.47*	5/9/16 06:14 p		378.8	GER19$1
						4.13E-02	1.00E-01	*(1.8)*			g	
EU-155	3.85E-02	U	2.9E-02	2.9E-02	5.02E-02	pCi/g		*0.77*	5/9/16 06:14 p		378.8	GER19$1
						2.50E-02	1.00E-01	*(2.6)*			g	
K-40	1.41E+01		1.7E+00	1.7E+00	2.01E-01	pCi/g		*(70.)*	5/9/16 06:14 p		378.8	GER19$1
						1.01E-01		*(16.9)*			g	
RA-226	6.50E-01		1.0E-01	1.0E-01	3.78E-02	pCi/g		*(17.2)*	5/9/16 06:14 p		378.8	GER19$1
						1.89E-02		*(12.6)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6N1AD			**Report DB ID:** 9M8J6N10					
PU-238	-5.70E-04	U	2.9E-02	2.9E-02	4.82E-02	pCi/g	97%	*-0.01*	5/10/16 07:57 p		1.02	ALP445
						1.02E-02	1.00E+00	*-0.04*			g	
PU239/40	1.37E-02	U	2.9E-02	2.9E-02	4.82E-02	pCi/g	97%	*0.28*	5/10/16 07:57 p		1.02	ALP445
						1.02E-02	1.00E+00	*0.96*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-14
Client Sample ID: J1V8X1

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 10:25:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6N1AC		**Report DB ID:**	9M8J6N10				
NI-63	7.32E-01	U	3.0E+00	6.8E+00	7.52E+00	pCi/g	91%	*0.1*	5/12/16 08:43 a		0.48	LSC4
						3.51E+00	3.00E+01	*0.22*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6N1AE		**Report DB ID:**	9M8J6N10				
H-3	1.41E-01	U	1.5E-01	1.6E-01	3.53E-01	pCi/g	100%	*0.4*	5/15/16 06:14 a		20.6	LSC9
						1.60E-01	1.00E+01	*(1.8)*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6N1AA		**Report DB ID:**	9M8J6N10				
STRONTIUM	1.52E+00		3.3E-01	4.8E-01	3.46E-01	pCi/g	83%	*(4.4)*	5/12/16 05:42 p		2.02	GPC32C
						1.56E-01	1.00E+00	*(6.3)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6D270416-15
Client Sample ID: J1V8X2

SDG: JP1043
Report No. : 68605
COC No. : RC-189-314

Collection Date: 4/26/2016 7:40:00 AM
Received Date: 4/27/2016 2:30:00 PM
Matrix: SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:** M8J6P1AF			**Report DB ID:** 9M8J6P10					
AMERICIUM 241	1.02E-02	U	6.6E-02	6.6E-02	1.16E-01	pCi/g		*0.09*	5/9/16 09:40 p		408.4	GER11$1
						5.79E-02		*0.31*			g	
CO-60	-5.50E-04	U	8.7E-03	8.7E-03	1.59E-02	pCi/g		*-0.03*	5/9/16 09:40 p		408.4	GER11$1
						7.96E-03	5.00E-02	*-0.13*			g	
CS-137	-7.24E-03	U	8.5E-03	8.5E-03	1.38E-02	pCi/g		*-0.52*	5/9/16 09:40 p		408.4	GER11$1
						6.92E-03	1.00E-01	*-(1.7)*			g	
EU-152	-3.49E-03	U	2.3E-02	2.3E-02	3.83E-02	pCi/g		*-0.09*	5/9/16 09:40 p		408.4	GER11$1
						1.92E-02	1.00E-01	*-0.31*			g	
EU-154	-2.18E-02	U	2.8E-02	2.8E-02	4.64E-02	pCi/g		*-0.47*	5/9/16 09:40 p		408.4	GER11$1
						2.33E-02	1.00E-01	*-(1.6)*			g	
EU-155	4.41E-02	U	2.6E-02	2.6E-02	4.72E-02	pCi/g		*0.93*	5/9/16 09:40 p		408.4	GER11$1
						2.35E-02	1.00E-01	*(3.3)*			g	
K-40	3.61E+00		5.5E-01	5.5E-01	1.11E-01	pCi/g		*(32.6)*	5/9/16 09:40 p		408.4	GER11$1
						5.63E-02		*(13.2)*			g	
RA-226	1.91E-01		4.2E-02	4.2E-02	2.88E-02	pCi/g		*(6.6)*	5/9/16 09:40 p		408.4	GER11$1
						1.44E-02		*(9.2)*			g	
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J6P1AD			**Report DB ID:** 9M8J6P10					
PU-238	-1.14E-03	U	2.8E-02	2.8E-02	5.20E-02	pCi/g	100%	*-0.02*	5/10/16 07:58 p		0.99	ALP446
						1.19E-02	1.00E+00	*-0.08*			g	
PU239/40	1.34E+00		2.8E-01	3.6E-01	4.81E-02	pCi/g	100%	*(27.8)*	5/10/16 07:58 p		0.99	ALP446
						1.02E-02	1.00E+00	*(7.4)*			g	

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 17-May-16

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 7:40:00 AM
Lot-Sample No.:	**J6D270416-15**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8X2**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:**	M8J6P1AC		**Report DB ID:**	9M8J6P10				
NI-63	**6.94E-01**	U	2.7E+00	3.3E+00	6.66E+00	pCi/g	91%	*0.1*	5/12/16 09:06 a		0.54	LSC4
						3.11E+00	3.00E+01	*0.43*			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J6P1AE		**Report DB ID:**	9M8J6P10				
H-3	**5.34E-02**	U	1.1E-01	1.2E-01	2.82E-01	pCi/g	100%	*0.19*	5/15/16 06:35 a		23.1	LSC9
						1.28E-01	1.00E+01	*0.88*			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J6P1AA		**Report DB ID:**	9M8J6P10				
STRONTIUM	**5.15E-01**		2.9E-01	3.1E-01	4.26E-01	pCi/g	76%	*(1.2)*	5/12/16 05:42 p		1.98	GPC32D
						1.95E-01	1.00E+00	*(3.3)*			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 17-May-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:10:00 AM
Lot-Sample No.:	**J6D270416-1**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8V8 DUP**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:** M8J581AG		**Report DB ID:** M8J581GR			**Orig Sa DB ID:** 9M8J5810			
PU-238	-2.04E-03	U	3.4E-02	3.4E-02	6.57E-02	pCi/g	87%	-0.03	5/10/16 07:49 p		1.0	ALP410
	-2.80E-03	U	**RPD**	**-31.5**		1.00E+00		-0.12			g	
PU239/40	1.70E-02	U	3.4E-02	3.4E-02	5.73E-02	pCi/g	87%	0.3	5/10/16 07:49 p		1.0	ALP410
	-6.99E-04	U	**RPD**	**217.2**		1.00E+00		1.			g	

Alpha Spec Result Sum = 1.5E-02

No. of Results: 2 **Comments:**

AMENDED DATA

TestAmerica Laboratories, Inc.

48

TestAmerica Inc
rptSTLRchDupV5.
5.1 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 17-May-16

DUPLICATE RESULTS

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 9:37:00 AM
Lot-Sample No.:	J6D270416-2	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8V9 DUP	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119024	NI63_LSC			**Work Order:** M8J591AG		**Report DB ID:** M8J591GR			**Orig Sa DB ID:** 9M8J5910			
NI-63	5.69E-02	U	3.1E+00	7.9E+00	7.92E+00	pCi/g	84%	0.01	5/12/16 03:43 a		0.49	LSC4
	1.93E-01	U	**RPD**	**108.8**		3.00E+01		0.01			g	

No. of Results: 1 **Comments:**

AMENDED DATA

TestAmerica Inc
rptSTLRchDupV5.5.1 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 17-May-16

DUPLICATE RESULTS

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:30:00 AM
Lot-Sample No.:	J6D270416-3	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W0 DUP	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:** M8J6A1AG		**Report DB ID:** M8J6A1GR			**Orig Sa DB ID:** 9M8J6A10			
H-3	-5.13E-02	U	1.2E-01	1.3E-01	3.22E-01	pCi/g	100%	-0.16	5/15/16 01:55 a		21.8	LSC9
	-5.37E-02	U	**RPD**	**-4.5**		1.00E+01		-0.79			g	

No. of Results: 1 **Comments:**

AMENDED DATA

TestAmerica Inc

rptSTLRchDupV5.5.1 A2002

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 17-May-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	JP1043	**Collection Date:**	4/26/2016 8:50:00 AM
Lot-Sample No.:	**J6D270416-4**	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	**J1V8W1 DUP**	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119022	GAMMA_GS			**Work Order:**	M8J6C1AG	**Report DB ID:**	M8J6C1GR		**Orig Sa DB ID:** 9M8J6C10			
AMERICIUM 241	8.78E-03	U	2.1E-02	2.1E-02	3.54E-02	pCi/g		0.25	5/9/16 10:51 a		364.3	GER19$1
	-8.17E-03	U	**RPD**	**5638.7**				0.85			g	
CO-60	-9.55E-03	U	1.5E-02	1.5E-02	2.48E-02	pCi/g		-0.39	5/9/16 10:51 a		364.3	GER19$1
	4.04E-03	U	**RPD**	**-493.8**		5.00E-02		-(1.3)			g	
CS-137	4.63E-02	U	1.8E-02	1.8E-02	3.21E-02	pCi/g		(1.4)	5/9/16 10:51 a		364.3	GER19$1
	7.01E-03	U	**RPD**	**147.3**		1.00E-01		(5.3)			g	
EU-152	1.00E-02	U	3.0E-02	3.0E-02	5.30E-02	pCi/g		0.19	5/9/16 10:51 a		364.3	GER19$1
	-4.44E-02	U	**RPD**	**-316.9**		1.00E-01		0.66			g	
EU-154	3.54E-03	U	5.1E-02	5.1E-02	8.86E-02	pCi/g		0.04	5/9/16 10:51 a		364.3	GER19$1
	4.24E-03	U	**RPD**	**18.0**		1.00E-01		0.14			g	
EU-155	6.14E-02	U	3.1E-02	3.1E-02	5.27E-02	pCi/g		(1.2)	5/9/16 10:51 a		364.3	GER19$1
	4.12E-02	U	**RPD**	**39.4**		1.00E-01		(4.)			g	
K-40	1.75E+01		2.0E+00	2.0E+00	1.91E-01	pCi/g		(91.4)	5/9/16 10:51 a		364.3	GER19$1
	1.76E+01		**RPD**	**0.9**				(17.1)			g	
RA-226	6.18E-01		9.6E-02	9.6E-02	4.04E-02	pCi/g		(15.3)	5/9/16 10:51 a		364.3	GER19$1
	6.29E-01		**RPD**	**1.8**				(12.8)			g	

No. of Results: 8 **Comments:**

AMENDED DATA

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 17-May-16

DUPLICATE RESULTS

Lab Name:	TestAmerica Inc	**SDG:**	JP1043	**Collection Date:**	4/26/2016 10:45:00 AM
Lot-Sample No.:	J6D270416-5	**Report No. :**	68605	**Received Date:**	4/27/2016 2:30:00 PM
Client Sample ID:	J1V8W2 DUP	**COC No. :**	RC-189-314	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J6D1AG		**Report DB ID:** M8J6D1GR			**Orig Sa DB ID:** 9M8J6D10			
STRONTIUM	2.07E-01	U	2.6E-01	2.6E-01	4.27E-01	pCi/g	71%	0.48	5/12/16 01:51 p		2.02	GPC32B
	2.10E-01	U	**RPD**	**1.6**		1.00E+00		(1.6)			g	

No. of Results: 1 **Comments:**

AMENDED DATA

TestAmerica Inc

rptSTLRchDupV5.5.1 A2002

RPD - Relative Percent Difference.

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: JP1043

Report No. : 68605

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:**	M8J9R1AA		**Report DB ID:**	M8J9R1AB				
PU-238	-2.72E-03	U	2.7E-02	2.7E-02	5.11E-02	pCi/g	112%	-0.05	5/10/16 07:59 p		1.04	ALP43
					1.49E-02	1.00E+00		-0.2			g	
PU239/40	7.59E-03	U	2.7E-02	2.7E-02	5.99E-02	pCi/g	112%	0.13	5/10/16 07:59 p		1.04	ALP43
					1.97E-02	1.00E+00		0.55			g	
Batch: 6119024	NI63_LSC			**Work Order:**	M8J9T1AA		**Report DB ID:**	M8J9T1AB				
NI-63	1.77E+00	U	2.9E+00	6.4E+00	7.06E+00	pCi/g	87%	0.25	5/12/16 09:29 a		0.53	LSC4
					3.30E+00	3.00E+01		0.55			g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J9V1AA		**Report DB ID:**	M8J9V1AB				
H-3	-3.11E-02	U	7.1E-02	7.6E-02	1.90E-01	pCi/g	100%	-0.16	5/15/16 06:57 a		33.8	LSC9
					8.65E-02	1.00E+01		-0.81			g	
Batch: 6119022	GAMMA_GS			**Work Order:**	M8J9Q1AA		**Report DB ID:**	M8J9Q1AB				
AMERICIUM 241	-3.64E-03	U	7.1E-03	7.1E-03	1.20E-02	pCi/g		-0.3	5/9/16 09:41 p		348.0	GER17$1
					6.04E-03			-(1.)			g	
CO-60	-1.75E-03	U	8.3E-03	8.3E-03	1.54E-02	pCi/g		-0.11	5/9/16 09:41 p		348.0	GER17$1
					7.76E-03	5.00E-02		-0.42			g	
CS-137	-3.44E-03	U	8.0E-03	8.0E-03	1.25E-02	pCi/g		-0.27	5/9/16 09:41 p		348.0	GER17$1
					6.31E-03	1.00E-01		-0.86			g	
EU-152	-9.14E-03	U	1.7E-02	1.7E-02	2.86E-02	pCi/g		-0.32	5/9/16 09:41 p		348.0	GER17$1
					1.44E-02	1.00E-01		-(1.1)			g	
EU-154	1.28E-02	U	2.3E-02	2.3E-02	4.64E-02	pCi/g		0.28	5/9/16 09:41 p		348.0	GER17$1
					2.34E-02	1.00E-01		(1.1)			g	
EU-155	-1.46E-02	U	1.3E-02	1.3E-02	1.86E-02	pCi/g		-0.78	5/9/16 09:41 p		348.0	GER17$1
					9.31E-03	1.00E-01		-(2.3)			g	

AMENDED DATA

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: JP1043

Report No. : 68605

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
K-40	-4.30E-02	U	1.5E-01	1.5E-01	3.08E-01	pCi/g		-0.14	5/9/16 09:41 p		348.0	GER17$1
					1.54E-01			-0.57			g	
RA-226	6.58E-02	U	3.3E-02	3.3E-02	4.44E-02	pCi/g		(1.5)	5/9/16 09:41 p		348.0	GER17$1
					2.22E-02			(4.)			g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:** M8J9W1AA		**Report DB ID:** M8J9W1AB						
STRONTIUM	-8.10E-02	U	2.1E-01	2.1E-01	3.99E-01	pCi/g	77%	-0.2	5/12/16 05:42 p		1.97	GPC31A
					1.82E-01	1.00E+00		-0.76			g	

No. of Results: 13 **Comments:**

AMENDED DATA

TestAmerica Inc

rptSTLRchBlank
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 17-May-16

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: JP1043

Report No. : 68605

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 6119023	PUISO_IE_PRECIP_AEA			**Work Order:**	M8J9R1AC		**Report DB ID:**	M8J9R1CS					
PU239/40	4.18E+00		5.7E-01	9.8E-01	7.64E-02	pCi/g	86%	4.59E+00	5.4E-02	91%	5/10/16 07:59 p	0.99	ALP44
							Rec Limits:	70	130	-0.1		g	
Batch: 6119024	NI63_LSC			**Work Order:**	M8J9T1AC		**Report DB ID:**	M8J9T1CS					
NI-63	2.68E+02		1.1E+01	3.8E+02	8.08E+00	pCi/g	86%	3.25E+02	5.3E-01	83%	5/12/16 09:52 a	0.47	LSC4
							Rec Limits:	70	130	-0.2		g	
Batch: 6119025	TRITIUM_DIST_LSC			**Work Order:**	M8J9V1AC		**Report DB ID:**	M8J9V1CS					
H-3	8.21E-01		1.3E-01	1.3E-01	1.92E-01	pCi/g	100%	8.15E-01	2.4E-02	101%	5/15/16 07:18 a	33.6	LSC9
							Rec Limits:	70	130	0.0		g	
Batch: 6119022	GAMMA_GS			**Work Order:**	M8J9Q1AC		**Report DB ID:**	M8J9Q1CS					
CS-137	9.22E-01		1.2E-01	1.2E-01	2.50E-02	pCi/g		9.65E-01	9.9E-03	96%	5/9/16 09:42 p	350.1	GER16$1
							Rec Limits:	70	130	0.0		g	
RA-226	9.05E-01		1.3E-01	1.3E-01	3.63E-02	pCi/g		1.14E+00	1.2E-02	80%	5/9/16 09:42 p	350.1	GER16$1
							Rec Limits:	70	130	-0.2		g	
Batch: 6119026	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8J9W1AC		**Report DB ID:**	M8J9W1CS					
STRONTIUM	3.62E+00		4.5E-01	9.4E-01	3.25E-01	pCi/g	82%	3.37E+00	2.4E-02	107%	5/12/16 05:42 p	2.01	GPC31B
							Rec Limits:	70	130	0.1		g	

No. of Results: 6 **Comments:**

AMENDED DATA

TestAmerica Inc **Bias** - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V5.5.1 A2002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

AMES 5/11/2016 10:21:16 AM

Lot No., Due Date: J6D270416; 05/04/2016
Client, Site: 127642; S00W235B00 HANFORD
QC Batch No., Method Test: 6119023; RPUISO Pulso by ALP
SDG, Matrix: JP1043; SOIL

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level [signature] **Date** 5/11/16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

AMENDED DATA

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 6119023

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances (NCM) included and noted?			✓
2. Was the correct methodology used?	✓		
3. Were units checked?	✓		

Comments on any "No" response: CRDL = 1.0 pCi/g

Second Level Review: [signature] Date: 5/11/16

DR-001, Rev. 01, 10/30/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

AMENDED 5/16/2016 12:28:50 PM

Lot No., Due Date: J6D270416; 05/04/2016
Client, Site: 127642; S00W235B00 HANFORD
QC Batch No., Method Test: 6119026; RSRTOT SrTot by GPC
SDG, Matrix: JP1043; SOIL

1.0 COC	
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓ No N/A
2.0 QC Batch	
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓ No N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓ No N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓ No N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓ No N/A
3.0 QC & Samples	
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓ No N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓ No N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes No N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓ No N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓ No N/A
4.0 Raw Data	
4.1 Were results calculated in the correct units?	Yes ✓ No N/A
4.2 Were analysis volumes entered correctly?	Yes ✓ No N/A
4.3 Were Yields entered correctly?	Yes ✓ No N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes No N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓ No N/A
5.0 Other	
5.1 Are all nonconformances included and noted?	Yes No N/A ✓
5.2 Are all required forms filled out?	Yes ✓ No N/A
5.3 Was the correct methodology used?	Yes ✓ No N/A
5.4 Was transcription checked?	Yes ✓ No N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓ No N/A
5.6 Are worksheet entries complete and correct?	Yes ✓ No N/A
6.0 Comments on any No response:	

First Level Jodie **Date** 5/13/16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

AMENDED DATA

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 6119026

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances (NCM) included and noted?			✓
2. Was the correct methodology used?	✓		
3. Were units checked?	✓		

Comments on any "No" response: CRDL= 1.0 pCi/g

Second Level Review: [signature] Date: 5/13/16

DR-001, Rev. 01, 10/30/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

AMENDED 5/12/2016 3:46:11 PM

Lot No., Due Date: J6D270416; 05/04/2016
Client, Site: 127642; S00W235B00 HANFORD
QC Batch No., Method Test: 6119022; RGAMMA Gamma by GER
SDG, Matrix: JP1043; SOIL

1.0 COC	
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓ No N/A
2.0 QC Batch	
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓ No N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓ No N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓ No N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes No N/A ✓
3.0 QC & Samples	
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓ No N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓ No N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes No N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓ No N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓ No N/A
4.0 Raw Data	
4.1 Were results calculated in the correct units?	Yes ✓ No N/A
4.2 Were analysis volumes entered correctly?	Yes ✓ No N/A
4.3 Were Yields entered correctly?	Yes No N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓ No N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓ No N/A
5.0 Other	
5.1 Are all nonconformances included and noted?	Yes No N/A ✓
5.2 Are all required forms filled out?	Yes ✓ No N/A
5.3 Was the correct methodology used?	Yes ✓ No N/A
5.4 Was transcription checked?	Yes ✓ No N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓ No N/A
5.6 Are worksheet entries complete and correct?	Yes ✓ No N/A
6.0 Comments on any No response:	

First Level Jodie C **Date** 5/13/14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

AMENDED DATA

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 6119022

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances (NCM) included and noted?			✓
2. Was the correct methodology used?	✓		
3. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Brenda Wyatt Date: 5/13/16

DR-001, Rev. 01, 10/30/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

AMENDED 5/16/2016 2:13:49 PM

Lot No., Due Date: J6D270416; 05/04/2016
Client, Site: 127642; S00W235B00 HANFORD
QC Batch No., Method Test: 6119025; RTRITIUM H-3 by LSC
SDG, Matrix: JP1043; SOIL

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Ina Anderson **Date** 5/16/16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

AMENDED DATA

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 6119025

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances (NCM) included and noted?			✓
2. Was the correct methodology used?	✓		
3. Were units checked?	✓		

Comments on any "No" response: CRDL= 10.0 pCi/g

Second Level Review: Rhonda Wyse Date: 5/17/16

DR-001, Rev. 01, 10/30/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

AMENDED 5/17/2016 1:43:07 PM

Lot No., Due Date: J6D270416; 05/04/2016
Client, Site: 127642; S00W235B00 HANFORD
QC Batch No., Method Test: 6119024; RNI63 Ni-63 by LSC
SDG, Matrix: JP1043; SOIL

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level [signature] **Date** 5/17/16

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 6119024

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances (NCM) included and noted?			✓
2. Was the correct methodology used?	✓		
3. Were units checked?	✓		

Comments on any "No" response:
CRDL = 30.0 pCi/g

Second Level Review: Rhonda Wfer Date: 5/17/18

DR-001, Rev. 01, 10/30/2013

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector: MARCHAND, EG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-83 Verification Sampling		SAF No.: RC-189
Ice Chest No.: TNU-052	Field Logbook No.: EL-1652-12	COA: 000N832000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

Cool as required

Preservation	Cool <=6C	None	None	None	None	None	None				
Type of Container	G/P	G/P	G/P	G/P	G/P	G					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	1000mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL	60mL					
			TRE 4-26-16								
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil					

Sample No.	Matrix	Sample Date	Sample Time										
J1V8V8 M8J58	SOIL	4-26-16	0810	✓	✓	✓	✓	✓	✓				
J1V8V9 M8J59	SOIL	4-26-16	0937	✓	✓	✓	✓	✓	✓				
J1V8W0 M8J6A	SOIL	4-26-16	0830	✓	✓	✓	✓	✓	✓				
J1V8W1 M8J6C	SOIL	4-26-16	0850	✓	✓	✓	✓	✓	✓				
J1V8W2 M8J6D	SOIL	4-26-16	1045	✓	✓	✓	✓	✓	✓				

CHAIN OF POSSESSION

Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
~~T.R. Edmundson J.R. Edmundson~~ WCH	~~4-27-16 1500~~	~~Fed Ex~~	~~4-27-16~~
T.R. Edmundson J.R. Edmundson WCH	4-27-16 1430	Anderson, TARL R Anderson	4/27/16 1430

TRE 4-27-16

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

J6D270416
JP1043
Due 5-4-16

#2923

JP1043

300-2923 CO

REVIEWED BY Kwperte DATE 4-27-16

AMENDED DATA

WCH-EE-011

TestAmerica Laboratories, Inc.

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector MARCHAND, EG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100N Field Remediation	**Sampling Location** 100-N-83 Verification Sampling		**SAF No.** RC-189
Ice Chest No. TNU-052	**Field Logbook No.** EL-1652-12	**COA** 000N832000	**Method of Shipment** Local Delivery
Shipped To TestAmerica Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

Price Code 8B

Data Turnaround 7 Day

Other Labs Shipped To TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool as required

Preservation	Cool <=6C	None	None	None	None	None					
Type of Container	G/P	G/P	G/P	G/P	G/P	G					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	1000mL	~~60mL~~ 125mL	~~60mL~~ 125mL TRE 4-26-16	~~60mL~~ 125mL	60mL					
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil					

Sample No.	Matrix	Sample Date	Sample Time										
J1V8W3 m8J6E	SOIL	4-26-16	1100	✓	✓	✓	✓	✓	✓				
J1V8W4 m8J6F	SOIL	4-26-16	1025	✓	✓	✓	✓	✓	✓				
J1V8W5 m8J6G	SOIL	4-26-16	1115	✓	✓	✓	✓	✓	✓				
J1V8W6 m8J6H	SOIL	4-26-16	1145	✓	✓	✓	✓	✓	✓				
J1V8W7 m8J6J	SOIL	4-26-16	1130	✓	✓	✓	✓	✓	✓				

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
~~T.R. Edmundson J.R. Edmundson~~ WCH	~~4-27-16 1500~~	~~Fed Ex~~ TRE 4-27-16	~~4-27-16~~ —
T.R. Edmundson J.R. Edmundson WCH	4-27-16 1430	J. Anderson J. Anderson TARL	4/27/16 1430

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

SPECIAL INSTRUCTIONS
(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

$2923

JL0270416
Due 5-4-16

TRE 4-27-16

REVIEWED BY KWpetel DATE 4-27-16

AMENDED DATA

JP1043

TestAmerica Laboratories, Inc.

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-314

Collector: MARCHAND, EG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-83 Verification Sampling		SAF No.: RC-189
Ice Chest No.: TNU-052	Field Logbook No.: EL-1652-12	COA: 000N832000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

Cool as required

Preservation	Cool <=6C	None	None	None	None	None				
Type of Container	G/P	G/P	G/P	G/P	G/P	G				
No. of Container(s)	1	1	1	1	1	1				
Volume	125mL	1000mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL	60mL				
Sample Analysis	Chromium Hex - 7196	See item (2) in Special Instructions	Isotopic Plutonium	Strontium-89,90 – Total Sr	Nickel-63	Tritium - H3 Low Level Soil				

TRE 4-26-16

Sample No.	Matrix	Sample Date	Sample Time										
J1V8W8 m8J6K	SOIL	4-26-16	1200	✓	✓	✓	✓	✓	✓				
J1V8W9 m8J6L	SOIL	4-26-16	1220	✓	✓	✓	✓	✓	✓				
J1V8X0 m8J6M	SOIL	4-26-16	0915	✓	✓	✓	✓	✓	✓				
J1V8X1 m8J6N	SOIL	4-26-16	1025	✓	✓	✓	✓	✓	✓				
J1V8X2 m8J6P	SOIL	4-26-16	0740	✓	✓	✓	✓	✓	✓				

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Ed Marchand Ed Marchand	1230 26 Apr 2016	T.R. Edmundson J.R. Edmundson	4-26-16 1230
T.R. Edmundson J.R. Edmundson	4-26-16 1330	1060 Refer #3	4-26-16 1330
1060 Refer #3	4-27-16 1000	T.R. Edmundson J.R. Edmundson	4-27-16 1000
~~T.R. Edmundson~~ WCH J.R. Edmundson	~~4-27-16~~ 1500	~~Fred Cx~~	~~4-27-16~~ —
T.R. Edmundson WCH J.R. Edmundson	4-27-16 1430	Anderson, TARL J. Anderson	4/27/16 1430

TRE 4-27-16

SPECIAL INSTRUCTIONS

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

#2923

JED270416
Due 5-4-16

REVIEWED BY KWperter DATE 4-27-16

AMENDED

JP1043

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica Laboratories, Inc.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

AMENDED DATA

Date/Time Received: 4/27/16 1430 Container GM Screen Result: (Airlock) 0 cpm Initials[LA]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials[LA]

Client: WCH SDG #: JP1043 SAF #: RC-189 NA [ ]

Lot Number: JL6D270416

Chain of Custody # RC-189-314

Shipping Container ID or Air Bill Number : _____ NA [LA]

Samples received inside shipping container/cooler/box Yes [LA] 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 [LA]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [LA]
3. Cooler temperature: 6.8 °C Ice NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [LA]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [LA] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 15
7. Containers received: 15x60mLAG; 60x125mLP; 15xLP
8. Sample holding times exceeded? NA [ ] Yes [ ] No [LA]
9. Samples have: ____tape ____hazard labels LA custody seals LA appropriate sample labels
10. Matrix: LA A (FLT, Wipe, Solid, Soil) ____I (Water) ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
LA 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 [LA]
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO_3 added and pH after addition on table)
13. Were any anomalies identified in sample receipt? Yes [ ] No [LA]
14. Description of anomalies (include sample numbers): NA [LA] _____
15. Sample Location, Sample Collector Listed on COC? * Yes [LA] No [ ]
*For documentation only. No corrective action needed.
16. Additional Information: N/A

[ ] Client/Courier denied temperature check. [LA] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: J. Anderson Date: 4/27/16

Client Notification needed? Yes [ ] No [X] Date: _____
By: _____
Person contacted: _____

[X] No action necessary; process as is

Project Manager [signature] Date 4/28/16

LS-023 Rev. 17, 05/13 Page 1 of 1

5/5/2016 7:10:54 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119023 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6119022 AXTA, 6119023 6ASO, 6119024 AFS4, 6119025 ATS6, 6119026 CHTH,

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M8J58-1-AD J6D270416-1-SAMP 04/26/2016 08:10			1.01g,in	1.01g	PUTC14392 10/22/15,pd 01/01/10,r					409	5/10/16 2024		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
2 M8J58-1-AG-X J6D270416-1-DUP 04/26/2016 08:10			1.00g,in	1.00g	PUTC14393 10/22/15,pd 01/01/10,r					410			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
3 M8J59-1-AD J6D270416-2-SAMP 04/26/2016 09:37			1.01g,in	1.01g	PUTC14394 10/22/15,pd 01/01/10,r					413			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
4 M8J6A-1-AD J6D270416-3-SAMP 04/26/2016 08:30			1.03g,in	1.03g	PUTC14395 10/22/15,pd 01/01/10,r					414			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
5 M8J6C-1-AD J6D270416-4-SAMP 04/26/2016 08:50			1.02g,in	1.02g	PUTC14396 10/22/15,pd 01/01/10,r					419			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
6 M8J6D-1-AD J6D270416-5-SAMP 04/26/2016 10:45			1.00g,in	1.00g	PUTC14397 10/22/15,pd 01/01/10,r					420			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
7 M8J6E-1-AD J6D270416-6-SAMP 04/26/2016 11:00			1.05g,in	1.05g	PUTC14453 04/06/16,pd 01/01/10,r					421			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	

AMENDED DATA

TestAmerica Laboratories, Inc.

70

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.69

5/5/2016 7:10:56 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119023 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M8J6F-1-AD J6D270416-7-SAMP 04/26/2016 10:25			1.06g,in	1.06g	PUTC14454 04/06/16,pd 01/01/10,r					422	3/10/16 2029		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
9 M8J6G-1-AD J6D270416-8-SAMP 04/26/2016 11:15			0.97g,in	0.97g	PUTC14451 04/06/16,pd 01/01/10,r					423			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
10 M8J6H-1-AD J6D270416-9-SAMP 04/26/2016 11:45			1.06g,in	1.06g	PUTC14452 04/06/16,pd 01/01/10,r					424 ~~425~~ 3/10/16			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
11 M8J6J-1-AD J6D270416-10-SAMP 04/26/2016 11:30			0.97g,in	0.97g	PUTC14455 04/06/16,pd 01/01/10,r					439			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
12 M8J6K-1-AD J6D270416-11-SAMP 04/26/2016 12:00			1.02g,in	1.02g	PUTC14456 05/02/16,pd 01/01/10,r					441			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
13 M8J6L-1-AD J6D270416-12-SAMP 04/26/2016 12:20			0.97g,in	0.97g	PUTC14457 05/02/16,pd 01/01/10,r					442			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	
14 M8J6M-1-AD J6D270416-13-SAMP 04/26/2016 09:15			1.01g,in	1.01g	PUTC14458 05/02/16,pd 01/01/10,r					443			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:		Beta:	

AMENDED DATA

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 14
Prep_SamplePrep v4.8.69

5/5/2016 7:10:58 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119023 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M8J6N-1-AD J6D270416-14-SAMP 04/26/2016 10:25			1.02g,in	1.02g	PUTC14459 05/02/16,pd 01/01/10,r AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5					445	5/10/16 2029		Scr: Alpha: Beta:
16 M8J6P-1-AD J6D270416-15-SAMP 04/26/2016 07:40			0.99g,in	0.99g	PUTC14460 05/02/16,pd 01/01/10,r AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5					446			Scr: Alpha: Beta:
17 M8J9R-1-AA-B J6D280000-23-BLK 04/28/2016 09:23 pd			1.04g,in	1.04g	PUTC14461 05/02/16,pd 01/01/10,r AmtRec: #Containers: 1					43			Scr: Alpha: Beta:
18 M8J9R-1-AC-C J6D280000-23-LCS 04/28/2016 09:23 pd			0.99g,in	0.99g	PUSH0478 01/27/16,pd 01/01/10,r AmtRec: #Containers: 1					44			Scr: Alpha: Beta:

AMENDED DATA

Sample Preparation/Analysis

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120373922,,

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: WoodT

AnalyDueDate: 05/04/2016

Batch: 6119023 **pCi/g**
SEQ Batch, Test: None

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: M8J9R-BLK "Comments S-15-00203",S-15-00032,P-16-00156,P-16-00114,S-15-00102

All Clients for Batch:
127642, Washington Closure Hanford LLC Bechtel Hanford, Inc. , RW2, 27038

M8J581AD-SAMP Constituent List:

PU-238	RDL:1	pCi/g	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35
Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35						

M8J9R1AA-BLK:

PU-238	RDL:1	pCi/g	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/g	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35						

M8J9R1AC-LCS:

PU-239	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35	Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35

M8J581AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

M8J9R1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

M8J9R1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

AMENDED DATA

5/11/2016 10:20:21 AM

ICOC Fraction Transfer/Status Report

AMENDED DATA

ByDate: 5/12/2015, 5/16/2016, Batch: '6119023', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			SOPs,Reagents,Comments
6119023						
AC		**Rev1C**	**JorgensonD**	5/9/2016 6:57:06 PM		
SC			campbellsc	IsBatched	4/28/2016 9:29:59 AM	ICOC_RADCALC v4.9.0
SC			JorgensonD	Sep1C	5/9/2016 6:57:06 PM	RL-ALP-001 REVISION 6
SC			RichardsonB	Sep1C	5/10/2016 6:40:40 AM	RL-ALP-016 REV5
SC			DawkinsO	CalcC	5/11/2016 12:58:01 AM	RL-CI-008 REVISION 6
SC			antonsonl	Rev1C	5/11/2016 10:19:34 AM	RL-DR-001 Rev 7
AC			**RichardsonB**	5/10/2016 6:40:40		
AC			**DawkinsO**	5/11/2016 12:58:01		
AC			**antonsonl**	5/11/2016 10:19:34		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.9.4

5/12/2016 12:05:35 PM

Sample Preparation/Analysis

Balance Id:1120373922,B425712682

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech: 05/12/2016 09:00,NeyensA

Batch: 6119026 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6119022 AXTA, 6119023 6ASO, 6119024 AFS4, 6119025 ATS6, 6119026 CHTH,

Prep Tech: WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M8J58-1-AA J6D270416-1-SAMP 04/26/2016 08:10			2.05g,in	2.05g	SRTC5619 03/11/16			9.30mg	50	32A	1317	5/12/16D	
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5		05/12/2016 09:00,s1				Scr:	Alpha:			Beta:
2 M8J59-1-AA J6D270416-2-SAMP 04/26/2016 09:37			2.04g,in	2.04g	SRTC5655 04/08/16			9.40mg		32B			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
3 M8J6A-1-AA J6D270416-3-SAMP 04/26/2016 08:30			2.00g,in	2.00g	SRTC5656 04/08/16			8.40mg		32C			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
4 M8J6C-1-AA J6D270416-4-SAMP 04/26/2016 08:50			2.03g,in	2.03g	SRTC5657 04/08/16			9.10mg		32D			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
5 M8J6D-1-AA J6D270416-5-SAMP 04/26/2016 10:45			2.06g,in	2.06g	SRTC5658 04/08/16			8.90mg		32A	1416	5/12/16D	
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
6 M8J6D-1-AG-X J6D270416-5-DUP 04/26/2016 10:45			2.02g,in	2.02g	SRTC5659 04/08/16			8.60mg		32B			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
7 M8J6E-1-AA J6D270416-6-SAMP 04/26/2016 11:00			2.01g,in	2.01g	SRTC5660 04/08/16			9.50mg		32C			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:

AMENDED DATA

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.69

5/12/2016 12:05:36 PM

Sample Preparation/Analysis

Balance Id:1120373922,B425712682

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119026 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M8J6F-1-AA J6D270416-7-SAMP 04/26/2016 10:25			2.00g,in	2.00g	SRTC5661 04/08/16			9.30mg		32D	1416	5/12/16	
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
9 M8J6G-1-AA J6D270416-8-SAMP 04/26/2016 11:15			1.98g,in	1.98g	SRTC5662 04/08/16			9.20mg		32A	1618	5/12/16 DM	
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
10 M8J6H-1-AA J6D270416-9-SAMP 04/26/2016 11:45			2.09g,in	2.09g	SRTC5663 04/08/16			9.60mg		32B			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
11 M8J6J-1-AA J6D270416-10-SAMP 04/26/2016 11:30			2.01g,in	2.01g	SRTC5664 04/08/16			9.30mg		32C			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
12 M8J6K-1-AA J6D270416-11-SAMP 04/26/2016 12:00			2.01g,in	2.01g	SRTC5665 04/08/16			9.10mg		32D			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
13 M8J6L-1-AA J6D270416-12-SAMP 04/26/2016 12:20			1.98g,in	1.98g	SRTC5666 04/08/16			9.50mg		32A	1807	5/12/16	
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
14 M8J6M-1-AA J6D270416-13-SAMP 04/26/2016 09:15			2.02g,in	2.02g	SRTC5667 04/08/16			9.30mg		32B			
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:

AMENDED DATA

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 14

Prep_SamplePrep v4.8.69

5/12/2016 12:05:37 PM

Sample Preparation/Analysis

Balance Id:1120373922,B425712682

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119026 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M8J6N-1-AA J6D270416-14-SAMP 04/26/2016 10:25			2.02g,in	2.02g	SRTC5668 04/08/16			10.00mg		32C	1809	5/12/16 CP	
			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5					Scr:	Alpha:		Beta:
16 M8J6P-1-AA J6D270416-15-SAMP 04/26/2016 07:40			1.98g,in	1.98g	SRTC5669 04/08/16			9.20mg		32D			
			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5					Scr:	Alpha:		Beta:
17 M8J9W-1-AA-B J6D280000-26-BLK 04/28/2016 09:23 pd			1.97g,in	1.97g	SRTC5670 04/08/16			9.30mg		31A			
			AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:
18 M8J9W-1-AC-C J6D280000-26-LCS 04/28/2016 09:23 pd			2.01g,in	2.01g	STSF0965 04/08/16			9.90mg		31B	6		
			AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:

AMENDED DATA

5/13/2016 12:25:01 PM

ICOC Fraction Transfer/Status Report

AMENDED DATA

ByDate: 5/14/2015, 5/18/2016, Batch: '6119026', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			SOPs,Reagents,Comments
6119026						
AC		**Rev1C**	**ManisD**	5/12/2016 12:07:57		
SC			campbellsc	IsBatched	4/28/2016 9:30:12 AM	ICOC_RADCALC v4.9.0
SC			ManisD	InCnt1	5/12/2016 12:07:57 PM	RL-CI-006 REVISION 6
SC			FussnerC	Sep1C	5/12/2016 2:20:23 PM	RL-GPC-010 REVISION 5
SC			NeyensA	Sep1C	5/12/2016 2:20:39 PM	RL-GPC-010 REVISION 5
SC			DawkinsO	CalcC	5/13/2016 12:20:14 AM	RL-CI-006 REVISION 6
SC			carnesj	Rev1C	5/13/2016 12:24:31 PM	RL-DR-001 Rev 7
AC			**FussnerC**	5/12/2016 2:20:23 PM		
AC			**NeyensA**	5/12/2016 2:20:39 PM		
AC			**DawkinsO**	5/13/2016 12:20:14		
AC			**carnesj**	5/13/2016 12:24:31		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.9.4

5/6/2016 11:29:31 AM

Sample Preparation/Analysis

Balance Id:1120421763,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

BHI Soil

P

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119022 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6119022 AXTA, 6119023 6ASO, 6119024 AFS4, 6119025 ATS6, 6119026 CHTH,

Prep Tech: WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M8J58-1-AF J6D270416-1-SAMP 04/26/2016 08:10			363.90g,in 2361.90g,fi	363.90g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5				5200	200	Scr:	Alpha: G11 1405 5/9/16 DRM	Beta:	
2 M8J59-1-AF J6D270416-2-SAMP 04/26/2016 09:37			387.60g,in 2382.00g,fi	387.60g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: 14 G18 1407 DRM 5/9/16	Beta:	
3 M8J6A-1-AF J6D270416-3-SAMP 04/26/2016 08:30			367.50g,in 2286.40g,fi	367.50g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: G19 1409	Beta:	
4 M8J6C-1-AF J6D270416-4-SAMP 04/26/2016 08:50			364.80g,in 1946.60g,fi	364.80g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: G18 1410	Beta:	
5 M8J6C-1-AG-X J6D270416-4-DUP 04/26/2016 08:50			364.30g,in	364.30g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: G19 1411	Beta:	
6 M8J6D-1-AF J6D270416-5-SAMP 04/26/2016 10:45			365.50g,in 1669.90g,fi	365.50g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: G11 1455 5/9/16	Beta:	
7 M8J6E-1-AF J6D270416-6-SAMP 04/26/2016 11:00			371.60g,in 1756.80g,fi	371.60g AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha: G16 1456	Beta:	

AMENDED DATA

TestAmerica Laboratories, Inc.

79

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7 Prep_SamplePrep v4.8.69

5/6/2016 11:29:32 AM

Sample Preparation/Analysis

Balance Id:1120421763,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119022 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M8J6F-1-AF J6D270416-7-SAMP 04/26/2016 10:25			371.50g,in 1258.40g,fi	371.50g				S200	200		G17 1458 5/9/16		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
9 M8J6G-1-AF J6D270416-8-SAMP 04/26/2016 11:15			378.00g,in 2014.60g,fi	378.00g							G18 1459		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
10 M8J6H-1-AF J6D270416-9-SAMP 04/26/2016 11:45			347.90g,in 1867.40g,fi	347.90g							G19 1800		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
11 M8J6J-1-AF J6D270416-10-SAMP 04/26/2016 11:30			359.60g,in 1749.00g,fi	359.60g							G11 2130 5/9/16		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
12 M8J6K-1-AF J6D270416-11-SAMP 04/26/2016 12:00			341.00g,in 1290.40g,fi	341.00g							G16 2131 5/9/16		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
13 M8J6L-1-AF J6D270416-12-SAMP 04/26/2016 12:20			367.00g,in 1716.10g,fi	367.00g							G17 2132 5/9/16		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:
14 M8J6M-1-AF J6D270416-13-SAMP 04/26/2016 09:15			357.10g,in 2067.10g,fi	357.10g							G18 2133 5/9/16		
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5							Scr:	Alpha:		Beta:

AMENDED DATA

5/6/2016 11:29:34 AM

Sample Preparation/Analysis

Balance Id:1120421763,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119022 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M8J6N-1-AF J6D270416-14-SAMP 04/26/2016 10:25			378.80g,in 1248.80g,fi AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5	378.80g				S2000	200	G19	2134	5/9/16	Scr: Alpha: Beta:
16 M8J6P-1-AF J6D270416-15-SAMP 04/26/2016 07:40			408.40g,in 2153.00g,fi AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5	408.40g						G11	0100	5/9/16	Scr: Alpha: Beta:
17 M8J9Q-1-AA-B J6D280000-22-BLK 04/28/2016 09:23 pd			348.00g,in AmtRec:	348.00g	OSBK #Containers: 1					G17	0101	5/9/16	Scr: Alpha: Beta:
18 M8J9Q-1-AC-C J6D280000-22-LCS 04/28/2016 09:23 pd			350.10g,in AmtRec:	350.10g	QC20009 08/04/09,pd 09/01/09,r #Containers: 1					G16	0102	5/9/16	Scr: Alpha: Beta:

AMENDED DATA

5/12/2016 3:38:21 PM

ICOC Fraction Transfer/Status Report

AMENDED DATA

ByDate: 5/13/2015, 5/17/2016, Batch: '6119022', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			SOPs,Reagents,Comments
6119022						
AC		**Rev1C**	**WattN**	4/29/2016 11:26:22		
SC			campbellsc	IsBatched	4/28/2016 9:29:56 AM	ICOC_RADCALC v4.9.0
SC			WattN	InPrep	4/29/2016 11:26:22 AM	RL-PRP-003 rev-05
SC			WattN	Prep1C	4/29/2016 12:06:15 PM	RL-PRP-003 rev-05
SC			WoodT	Prep1C	5/5/2016 12:01:17 PM	RL-PRP-003 REVISION 6
SC			WoodT	Prep2C	5/5/2016 12:02:21 PM	RL-GAM-001 REVISION 5
SC			ManisD	InCnt1	5/9/2016 9:54:22 AM	RL-CI-007 REVISION 5
SC			BullJ	CalcC	5/11/2016 3:15:37 PM	RL-CI-007 REVISION 5
SC			carnesj	Rev1C	5/12/2016 3:32:01 PM	RL-DR-001 Rev 7
AC			**WattN**	4/29/2016 12:06:15		
AC			**WoodT**	5/5/2016 12:01:17 PM		
AC			**WoodT**	5/5/2016 12:02:21 PM		
AC			**ManisD**	5/9/2016 9:54:22 AM		
AC			**BullJ**	5/11/2016 3:15:37 PM		
AC			**carnesj**	5/12/2016 3:32:01 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.9.4

4/28/2016 9:23:56 AM

Sample Preparation/Analysis

Balance Id:,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 05/04/2016

Batch: 6119025 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M8J58-1-AE J6D270416-1-SAMP 04/26/2016 08:10	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
2 M8J59-1-AE J6D270416-2-SAMP 04/26/2016 09:37	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
3 M8J6A-1-AE J6D270416-3-SAMP 04/26/2016 08:30	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
4 M8J6A-1-AG-X J6D270416-3-DUP 04/26/2016 08:30	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
5 M8J6C-1-AE J6D270416-4-SAMP 04/26/2016 08:50	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
6 M8J6D-1-AE J6D270416-5-SAMP 04/26/2016 10:45	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
7 M8J6E-1-AE J6D270416-6-SAMP 04/26/2016 11:00	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:

AMENDED DATA

TestAmerica Laboratories, Inc.

4/28/2016 9:23:58 AM

Sample Preparation/Analysis

Balance Id:,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119025 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M8J6F-1-AE J6D270416-7-SAMP 04/26/2016 10:25	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
9 M8J6G-1-AE J6D270416-8-SAMP 04/26/2016 11:15	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
10 M8J6H-1-AE J6D270416-9-SAMP 04/26/2016 11:45	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
11 M8J6J-1-AE J6D270416-10-SAMP 04/26/2016 11:30	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
12 M8J6K-1-AE J6D270416-11-SAMP 04/26/2016 12:00	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
13 M8J6L-1-AE J6D270416-12-SAMP 04/26/2016 12:20	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:
14 M8J6M-1-AE J6D270416-13-SAMP 04/26/2016 09:15	AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5								Scr:		Alpha:		Beta:

AMENDED DATA

4/28/2016 9:23:59 AM

Sample Preparation/Analysis

Balance Id:,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

Sep1 DT/Tm Tech:

AnalyDueDate: 05/04/2016

Batch: 6119025 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M8J6N-1-AE													
J6D270416-14-SAMP													
04/26/2016 10:25			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5				Scr:		Alpha:		Beta:
16 M8J6P-1-AE													
J6D270416-15-SAMP													
04/26/2016 07:40			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5				Scr:		Alpha:		Beta:
17 M8J9V-1-AA-B													
J6D280000-25-BLK													
04/28/2016 09:23 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
18 M8J9V-1-AC-C													
J6D280000-25-LCS													
04/28/2016 09:23 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
19 M8J9V-1-AD-BN													
J6D280000-25-IBLK													
04/28/2016 09:23 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
20 M8J9V-1-AE-BN													
J6D280000-25-IBLK													
04/28/2016 09:23 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

AMENDED DATA

TestAmerica Laboratories, Inc.
85

Sample Preparation/Analysis

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id:,,
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/04/2016

Batch: 6119025 pCi/g

SEQ Batch, Test: None

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

All Clients for Batch:
127642, Washington Closure Hanford LLC Bechtel Hanford, Inc. , RW2, 27038

M8J581AE-SAMP Constituent List:
H-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35
M8J9V1AA-BLK:

M8J9V1AC-LCS:

M8J9V1AD-IBLK:

M8J9V1AE-IBLK:

M8J581AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M8J9V1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M8J9V1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M8J9V1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M8J9V1AE-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

AMENDED DATA

5/16/2016 2:12:46 PM

ICOC Fraction Transfer/Status Report

AMENDED DATA

ByDate: 5/17/2015, 5/21/2016, Batch: '6119025', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			SOPs,Reagents,Comments
6119025						
AC		**Rev1C**	**NortonP**	5/11/2016 4:13:12 PM		
SC			campbellsc	IsBatched	4/28/2016 9:30:08 AM	ICOC_RADCALC v4.9.0
SC			NortonP	Sep1C	5/11/2016 4:13:12 PM	RL-LSC-002 REVISION 6
SC			ManisD	InCnt1	5/12/2016 12:07:34 PM	RL-CI-005 REVISION 5
SC			DawkinsO	InCnt1	5/12/2016 5:23:01 PM	RL-CI-005 REVISION 5
SC			WoodT	CalcC	5/16/2016 10:04:45 AM	RL-CI-005 REVISION 5
SC			antonsonl	Rev1C	5/16/2016 2:12:19 PM	RL-DR-001 Rev 7
AC			**ManisD**	5/12/2016 12:07:34		
AC			**DawkinsO**	5/12/2016 5:23:01 PM		
AC			**WoodT**	5/16/2016 10:04:45		
AC			**antonsonl**	5/16/2016 2:12:19 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.9.4

5/5/2016 8:15:45 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119024 SOIL pCi/g **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M8J58-1-AC J6D270416-1-SAMP 04/26/2016 08:10			0.50g,in	0.50g	NITA16940 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
2 M8J59-1-AC J6D270416-2-SAMP 04/26/2016 09:37			0.53g,in	0.53g	NITA16957 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
3 M8J59-1-AG-X J6D270416-2-DUP 04/26/2016 09:37			0.49g,in	0.49g	NITA16942 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
4 M8J6A-1-AC J6D270416-3-SAMP 04/26/2016 08:30			0.54g,in	0.54g	NITA16943 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
5 M8J6C-1-AC J6D270416-4-SAMP 04/26/2016 08:50			0.51g,in	0.51g	NITA16944 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
6 M8J6D-1-AC J6D270416-5-SAMP 04/26/2016 10:45			0.53g,in	0.53g	NITA16945 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:
7 M8J6E-1-AC J6D270416-6-SAMP 04/26/2016 11:00			0.52g,in	0.52g	NITA16946 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:	Alpha:			Beta:

AMENDED DATA

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.69

5/5/2016 8:15:47 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119024 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M8J6F-1-AC			0.52g,in	0.52g	NITA16947 03/14/16								
J6D270416-7-SAMP 04/26/2016 10:25			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
9 M8J6G-1-AC			0.54g,in	0.54g	NITA16948 03/14/16								
J6D270416-8-SAMP 04/26/2016 11:15			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
10 M8J6H-1-AC			0.48g,in	0.48g	NITA16949 03/14/16								
J6D270416-9-SAMP 04/26/2016 11:45			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
11 M8J6J-1-AC			0.54g,in	0.54g	NITA16950 03/14/16								
J6D270416-10-SAMP 04/26/2016 11:30			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
12 M8J6K-1-AC			0.52g,in	0.52g	NITA16951 03/14/16								
J6D270416-11-SAMP 04/26/2016 12:00			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
13 M8J6L-1-AC			0.48g,in	0.48g	NITA16952 03/14/16								
J6D270416-12-SAMP 04/26/2016 12:20			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:
14 M8J6M-1-AC			0.53g,in	0.53g	NITA16953 03/14/16								
J6D270416-13-SAMP 04/26/2016 09:15			AmtRec: 1X60MLAG;3X125MLP;1XLP #Containers: 5						Scr:		Alpha:		Beta:

AMENDED DATA

5/5/2016 8:15:48 AM

Sample Preparation/Analysis

Balance Id:1120373922,,

127642, Washington Closure Hanford LLC ,
Bechtel Hanford, Inc.

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2016

Sep1 DT/Tm Tech:

Batch: 6119024 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M8J6N-1-AC J6D270416-14-SAMP 04/26/2016 10:25			0.48g,in	0.48g	NITA16954 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5				Scr:		Alpha:		Beta:
16 M8J6P-1-AC J6D270416-15-SAMP 04/26/2016 07:40			0.54g,in	0.54g	NITA16955 03/14/16								
			AmtRec: 1X60MLAG;3X125MLP;1XLP		#Containers: 5				Scr:		Alpha:		Beta:
17 M8J9T-1-AA-B J6D280000-24-BLK 04/28/2016 09:23 pd			0.53g,in	0.53g	NITA16956 03/14/16								
			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
18 M8J9T-1-AC-C J6D280000-24-LCS 04/28/2016 09:23 pd			0.47g,in	0.47g	NISA2457 12/30/15								
			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
19 M8J9T-1-AD-BN J6D280000-24-IBLK 04/28/2016 09:23 pd													
			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
20 M8J9T-1-AE-BN J6D280000-24-IBLK 04/28/2016 09:23 pd													
			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

AMENDED DATA

5/17/2016 1:42:04 PM

ICOC Fraction Transfer/Status Report

AMENDED DATA

ByDate: 5/18/2015, 5/22/2016, Batch: '6119024', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			SOPs,Reagents,Comments
6119024						
AC		**Rev1C**	**JorgensonD**	5/11/2016 4:09:43 PM		
SC			campbellsc	IsBatched	4/28/2016 9:30:04 AM	ICOC_RADCALC v4.9.0
SC			JorgensonD	Sep1C	5/11/2016 4:09:43 PM	RL-LSC-017 REVISION 6
SC			DawkinsO	InCnt1	5/11/2016 4:51:16 PM	RL-CI-005 REVISION 5
SC			WoodT	CalcC	5/17/2016 12:28:49 PM	RL-CI-005 REVISION 5
SC			antonsonl	Rev1C	5/17/2016 1:41:43 PM	RL-DR-001 Rev 7
AC			**DawkinsO**	5/11/2016 4:51:16 PM		
AC			**WoodT**	5/17/2016 12:28:49		
AC			**antonsonl**	5/17/2016 1:41:43 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.9.4