0074151

SAF-RC-032
100-F Remaining Sites Burial Grounds - Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Randy Coffman	X9-07	KW 10/10/07 INITIAL/DATE
Jeanette Duncan	H4-21	KW 10/10/07 INITIAL/DATE

COMMENTS:

SDG J00130 SAF-RC-032

Rad only Chem only X Rad & Chem

X Complete Partial

RECEIVED
OCT 17 2007
EDMC

Waste Site: **100-F-26:12 Shallow Zone/Verification**
100-F-26:12 BCL Soil Debris/Verification

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

RECEIVED
OCT 2007

ANALYTICAL REPORT

RC-032

Lot #: F7I130200
SDG #: J00130

Joan Kessner

Washington Closure Hanford
2620 Fermi Avenue
MSIN H4-21
Richland, WA 99354

TESTAMERICA LABORATORIES, INC.

Michael C. Franks
Project Manager

September 24, 2007

Case Narrative
LOT NUMBER: **F7I130200**
SDG: **J00130**

This report contains the analytical results for the two samples received under chain of custody by STL St. Louis on September 13, 2007. These samples are associated with your RC-032 project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances
Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

ICP Metals by SW846 6010B

The MS/MSD recovery for Aluminum and Iron is outside the established QC limits. The said analyte concentration in the original sample is greater than four times the amount spiked, making percent recovery information ineffective. Method performance is demonstrated by acceptable LCS recovery.

The MS/MSD recovery for Silicon, Antimony, Manganese, and Silver is outside the established QC limits. The RPD is within method acceptance criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recovery.

The sample was analyzed at a dilution due to high concentrations of salts. The reporting limit has been adjusted for the dilution since no analysis at a lesser dilution was performed.
Affected Samples:
F7I130200 (1): J15HY4 F7I130200 (2): J15HB9

Mercury by SW846 7471A

The CRA recovery was outside the upper QC limit (greater than 125%) for Mercury indicating a potential high bias for this analyte in the samples associated with this CRA. This analyte was not detected above the reporting limit in the associated samples.
Affected Samples:
F7I130200 (1): J15HY4 F7I130200 (2): J15HB9

METHODS SUMMARY

F7I130200

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A	SW846 7471A
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	

References:

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.

SAMPLE SUMMARY

F7I130200

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
J6QEV	001	J15HY4	09/11/07	13:00
J6QH6	002	J15HB9	09/11/07	10:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

J00130

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-032-161

Collector T. Welch-Koelling	**Company Contact** R.T. Coffman	**Telephone No.** 528-6409	**Project Coordinator** KESSNER, JH
Price Code 8 G	**Data Turnaround** 15 DAY		
Project Designation 100-F Remaining Sites Burial Grounds - Soil Full Protocol	**Sampling Location** 100-F-26:12 Shallow Zone/Verification		**SAF No.** RC-032
Ice Chest No. ED3-116	**Field Logbook No.** EFL-1174-3	**COA** R10F262000	**Method of Shipment** FED EX
Shipped To Severn Trent Incorporated, ~~Richland~~ St Louis JPD 9-4-07	**Offsite Property No.** A070315		**Bill of Lading/Air Bill No.** See OSDC

POSSIBLE SAMPLE HAZARDS/REMARKS

NA

Special Handling and/or Storage

NA

Preservation	None	Cool 4C	None	None	None	None				
Type of Container	P	P	P	P	P	P				
No. of Container(s)	1	1	1	1	1	1				
Volume	125mL	125mL	500mL	125mL	125mL	125mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions	Chromium Hex - 7196	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr	Gross Alpha; Gross Beta				

Sample No.	Matrix *	Sample Date	Sample Time										
J15HY4	SOIL	9-11-07	1300	X									5

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
[signature]	9/11/07 1430	JRDeBrigne [signature]	1430 9-11-07
JRDeBrigne [signature]	1545 9-11-07	3728/2B	1545 9-11-07
3728/2B 9-12-07	1000	KMSingleton [signature]	9-12-07 1000
KMSingleton [signature]	9-12-07 1500 WCH	FEDEX	
Pedro	9-13-07 09:45	Angela Dunnon	9-13-07 9:45

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Client 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)
(2) Gamma Spectroscopy (TCL List) {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Barium-133, Silver-108 metastable}

Sampler unavailable to relinquish samples from 3728 Ref # 2B. 3728 Custodian removed samples for shipping on 9/12/07.

Matrix *

S=Soil
SE=Sediment
SO=Solid
SL=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

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

WCH-EE-011

23

TestAmerica St. Louis

J00150

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-032-158 | Page 1 of 1

Collector: T. Welch-Koelling	Company Contact: R.T. Coffman	Telephone No.: 528-6409
Project Coordinator: KESSNER, JH	Price Code: 86	Data Turnaround: ~~15 DAY~~
Project Designation: 100-F Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 100-F-26:12 BCL Soil Debris/Verification	SAF No.: RC-032
Ice Chest No.: E03-116	Field Logbook No.: EFL-1174-3	COA: R10F262000
Method of Shipment: FED EX	Shipped To: Severn Trent Incorporated, ~~Richland~~ St. Louis JRD 8-16-07	Offsite Property No.: A070315
Bill of Lading/Air Bill No.: See OSPC		

POSSIBLE SAMPLE HAZARDS/REMARKS

NA

Special Handling and/or Storage

NA

Preservation	None	Cool 4C	None	None	None	None				
Type of Container	P	P	P	P	P	P				
No. of Container(s)	1	1	1	1	1	1				
Volume	125mL	125mL	500mL	125mL	125mL	125mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr	Gross Alpha; Gross Beta				

Sample No.	Matrix *	Sample Date	Sample Time									
15HB9	SOIL	9-11-07	1000	X								S

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
T Welch-Koelling	9/11/07 1430	JR DeBuique	9-11-07 1430
JR DeBuique	9-11-07 1545	3728/2B	9-11-07 1545
3728/2B	9-12-07 1000	KM Singleton	9-12-07 1000
KM Singleton	9-12-07 1500 WCH	FED EX	
FED EX	9-13-07 09:15		9-13-07 9:15

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Client 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)
(2) Gamma Spectroscopy (TCL List) {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Barium-133, Silver-108 metastable}

Sampler unavailable to relinquish samples from 3728 Ref # 2B. 3728 Custodian removed samples for shipping on 9/12/07.

Matrix *
S=Soil
SE=Sediment
SO=Solid
SI=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

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

WCH-EE-011

23

TestAmerica St. Louis

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): FIL130200

TestAmerica St. Louis

- 311 -

Condition Upon Receipt Form

Client: Hanford
Quote No: 71497
COC/RFA No: RC-032-161
Initiated By: MB
Date: 9-13-07
Time: 9:15

Shipping Information

Shipper Name: FE
Shipping # (s):*
1. 7987 6198 8517
2.
3.
4.
5.
6.
7.
8.
9.
10.

Multiple Packages Y (N)
Sample Temperature (s):**
1. Ambient
2.
3.
4.
5.
6.
7.
8.
9.
10.

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	(Y) N MB 9-13-07	Are there custody seals present on the cooler?	8.	(Y) N	Are there custody seals present on bottles?
2.	Y (N) N/A	Do custody seals on cooler appear to be tampered with?	9.	Y (N) N/A	Do custody seals on bottles appear to be tampered with?
3.	(Y) N	Were contents of cooler frisked after opening, but before unpacking?	10.	Y N (N/A)	Was sample received with proper pH[1]? (If not, make note below)
4.	(Y) N	Sample received with Chain of Custody?	11.	Y N	If N/A- Was pH taken by original TestAmerica lab?
5.	(Y) N N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	(Y) N	Sample received in proper containers?
6.	Y (N)	Was sample received broken?	13.	Y N (N/A)	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
7.	(Y) N	Is sample volume sufficient for analysis?	14.	Y N	Was Internal COC/Workshare received?

[1] For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:
RC-032-158, 161

Corrective Action:
☐ Client Contact Name: _____ Informed by: _____
☐ Sample(s) processed "as is"
☐ Sample(s) on hold until: _____ If released, notify: _____
Project Management Review: [signature] Date: 09-13-07

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM.

METALS

Washington Closure Hanford

Client Sample ID: J15HY4

TOTAL Metals

Lot-Sample #...: F7I130200-001
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07 **Matrix.....:** SOLID
% Moisture.....: 0.33

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7257067						
Mercury	ND	0.033	mg/kg	SW846 7471A	09/14/07	J6QEV1A6
		Dilution Factor: 1		MDL.....: 0.0067		
Prep Batch #...: 7257074						
Silver	ND	2.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QEV1A1
		Dilution Factor: 2		MDL.....: 0.73		
Aluminum	**5010**	**40.1**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1AD**
		Dilution Factor: 2		MDL.....: 10.2		
Arsenic	**1.6 B**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AF**
		Dilution Factor: 2		MDL.....: 0.48		
Barium	**42.0**	**10.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AG**
		Dilution Factor: 2		MDL.....: 0.46		
Beryllium	**0.14 B**	**1.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AH**
		Dilution Factor: 2		MDL.....: 0.14		
Boron	**7.1 B**	**20.1**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1AJ**
		Dilution Factor: 2		MDL.....: 3.0		
Calcium	**6390**	**502**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AL**
		Dilution Factor: 2		MDL.....: 60.2		
Cadmium	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QEV1AK
		Dilution Factor: 2		MDL.....: 0.12		
Cobalt	**5.8 B**	**10.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AM**
		Dilution Factor: 2		MDL.....: 0.46		
Chromium	**9.2**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1A5**
		Dilution Factor: 2		MDL.....: 0.45		
Copper	**11.1**	**5.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AN**
		Dilution Factor: 2		MDL.....: 0.80		
Iron	**13200**	**20.1**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1AP**
		Dilution Factor: 2		MDL.....: 7.5		

(Continued on next page)

Washington Closure Hanford

Client Sample ID: J15HY4

TOTAL Metals

Lot-Sample #...: F7I130200-001 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Potassium	**1280**	**1000**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1AW**
		Dilution Factor: 2		MDL.....: 301		
Magnesium	**3900**	**201**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AR**
		Dilution Factor: 2		MDL.....: 18.0		
Manganese	**249**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AT**
		Dilution Factor: 2		MDL.....: 0.80		
Molybdenum	ND	8.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QEV1AU
		Dilution Factor: 2		MDL.....: 1.8		
Sodium	**99.8 B**	**201**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1A2**
		Dilution Factor: 2		MDL.....: 24.1		
Nickel	**8.7**	**8.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AV**
		Dilution Factor: 2		MDL.....: 2.3		
Lead	**3.4**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1AQ**
		Dilution Factor: 2		MDL.....: 0.60		
Antimony	ND	2.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QEV1AE
		Dilution Factor: 2		MDL.....: 1.0		
Selenium	ND	3.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QEV1AX
		Dilution Factor: 2		MDL.....: 0.88		
Silicon	**277**	**80.3**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QEV1A0**
		Dilution Factor: 2		MDL.....: 18.1		
Vanadium	**34.4**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QEV1A3**
		Dilution Factor: 2		MDL.....: 1.1		
Zinc	**29.8 C**	**10.0**	**mg/kg**	**SW846 6010B**	**09/14-09/21/07**	**J6QEV1A4**
		Dilution Factor: 2		MDL.....: 3.0		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Washington Closure Hanford

Client Sample ID: J15HB9

TOTAL Metals

Lot-Sample #...: F7I130200-002 **Matrix.....:** SOLID
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07
% Moisture.....: 0.54

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7257067						
Mercury	**0.022 B,C**	**0.033**	**mg/kg**	**SW846 7471A**	**09/14/07**	**J6QH61AH**
		Dilution Factor: 1		MDL.....: 0.0067		
Prep Batch #...: 7257074						
Silver	ND	2.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QH61AC
		Dilution Factor: 2		MDL.....: 0.73		
Aluminum	**6200**	**40.2**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61AL**
		Dilution Factor: 2		MDL.....: 10.2		
Arsenic	**2.3**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AN**
		Dilution Factor: 2		MDL.....: 0.48		
Barium	**74.7**	**10.1**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AP**
		Dilution Factor: 2		MDL.....: 0.46		
Beryllium	**0.21 B**	**1.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AQ**
		Dilution Factor: 2		MDL.....: 0.14		
Boron	**9.2 B**	**20.1**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61AR**
		Dilution Factor: 2		MDL.....: 3.0		
Calcium	**5690**	**503**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AU**
		Dilution Factor: 2		MDL.....: 60.3		
Cadmium	**0.24 B**	**1.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AT**
		Dilution Factor: 2		MDL.....: 0.12		
Cobalt	**7.3 B**	**10.1**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AV**
		Dilution Factor: 2		MDL.....: 0.46		
Chromium	**10.5**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AG**
		Dilution Factor: 2		MDL.....: 0.46		
Copper	**11.3**	**5.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AW**
		Dilution Factor: 2		MDL.....: 0.80		
Iron	**15200**	**20.1**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61AX**
		Dilution Factor: 2		MDL.....: 7.5		

(Continued on next page)

Washington Closure Hanford

Client Sample ID: J15HB9

TOTAL Metals

Lot-Sample #...: F7I130200-002 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Potassium	**1240**	**1010**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61A5**
		Dilution Factor: 2		MDL.....: 302		
Magnesium	**3780**	**201**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61A1**
		Dilution Factor: 2		MDL.....: 18.0		
Manganese	**251**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61A2**
		Dilution Factor: 2		MDL.....: 0.80		
Molybdenum	ND	8.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QH61A3
		Dilution Factor: 2		MDL.....: 1.8		
Sodium	**99.6 B**	**201**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61AD**
		Dilution Factor: 2		MDL.....: 24.1		
Nickel	**11.1**	**8.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61A4**
		Dilution Factor: 2		MDL.....: 2.3		
Lead	**5.7**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61A0**
		Dilution Factor: 2		MDL.....: 0.60		
Antimony	ND	2.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QH61AM
		Dilution Factor: 2		MDL.....: 1.0		
Selenium	ND	3.0	mg/kg	SW846 6010B	09/14-09/20/07	J6QH61A6
		Dilution Factor: 2		MDL.....: 0.89		
Silicon	**425**	**80.4**	**mg/kg**	**SW846 6010B**	**09/14-09/17/07**	**J6QH61AA**
		Dilution Factor: 2		MDL.....: 18.1		
Vanadium	**35.9**	**2.0**	**mg/kg**	**SW846 6010B**	**09/14-09/20/07**	**J6QH61AE**
		Dilution Factor: 2		MDL.....: 1.1		
Zinc	**39.4 C**	**10.1**	**mg/kg**	**SW846 6010B**	**09/14-09/21/07**	**J6QH61AF**
		Dilution Factor: 2		MDL.....: 3.0		

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F7I130200 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: F7I140000-067 **Prep Batch #...:** 7257067						
Mercury	**0.013 B**	**0.033**	**mg/kg**	**SW846 7471A**	**09/14/07**	**J6TE91AA**
		Dilution Factor: 1				
MB Lot-Sample #: F7I140000-074 **Prep Batch #...:** 7257074						
Aluminum	ND	20.0	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1AA
		Dilution Factor: 1				
Antimony	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AC
		Dilution Factor: 1				
Arsenic	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AD
		Dilution Factor: 1				
Barium	ND	5.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AE
		Dilution Factor: 1				
Beryllium	ND	0.50	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AF
		Dilution Factor: 1				
Boron	ND	10.0	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1AG
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AH
		Dilution Factor: 1				
Calcium	ND	250	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AJ
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1A3
		Dilution Factor: 1				
Cobalt	ND	5.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AK
		Dilution Factor: 1				
Copper	ND	2.5	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AL
		Dilution Factor: 1				
Iron	ND	10.0	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1AM
		Dilution Factor: 1				
Lead	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AN
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: F7I130200

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	ND	100	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AP
		Dilution Factor: 1				
Manganese	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AQ
		Dilution Factor: 1				
Molybdenum	ND	4.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AR
		Dilution Factor: 1				
Nickel	ND	4.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AT
		Dilution Factor: 1				
Potassium	ND	500	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1AU
		Dilution Factor: 1				
Selenium	ND	1.5	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AV
		Dilution Factor: 1				
Silicon	ND	40.0	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1AW
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1AX
		Dilution Factor: 1				
Sodium	ND	100	mg/kg	SW846 6010B	09/14-09/17/07	J6TFP1A0
		Dilution Factor: 1				
Vanadium	ND	1.0	mg/kg	SW846 6010B	09/14-09/20/07	J6TFP1A1
		Dilution Factor: 1				
Zinc	**1.6 B**	**5.0**	**mg/kg**	**SW846 6010B**	**09/14-09/21/07**	**J6TFP1A2**
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F7I130200 **Matrix.....:** SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: F7I140000-067 **Prep Batch #...:** 7257067							
Mercury	16.9	15.8	mg/kg	94	SW846 7471A	09/14/07	J6TE91AC
			Dilution Factor: 20				
LCS Lot-Sample#: F7I140000-074 **Prep Batch #...:** 7257074							
Aluminum	6320	5270	mg/kg	83	SW846 6010B	09/14-09/17/07	J6TFP1A4
			Dilution Factor: 1				
Antimony	60.9	46.4	mg/kg	76	SW846 6010B	09/14-09/20/07	J6TFP1A5
			Dilution Factor: 1				
Arsenic	161	166	mg/kg	103	SW846 6010B	09/14-09/20/07	J6TFP1A6
			Dilution Factor: 1				
Barium	252	253	mg/kg	100	SW846 6010B	09/14-09/20/07	J6TFP1A7
			Dilution Factor: 1				
Beryllium	94.4	98.2	mg/kg	104	SW846 6010B	09/14-09/20/07	J6TFP1A8
			Dilution Factor: 1				
Boron	97.4	98.5	mg/kg	101	SW846 6010B	09/14-09/17/07	J6TFP1A9
			Dilution Factor: 1				
Cadmium	128	128	mg/kg	100	SW846 6010B	09/14-09/20/07	J6TFP1CA
			Dilution Factor: 1				
Calcium	3320	3030	mg/kg	91	SW846 6010B	09/14-09/20/07	J6TFP1CC
			Dilution Factor: 1				
Cobalt	35.2	33.5	mg/kg	95	SW846 6010B	09/14-09/20/07	J6TFP1CD
			Dilution Factor: 1				
Copper	148	145	mg/kg	98	SW846 6010B	09/14-09/20/07	J6TFP1CE
			Dilution Factor: 1				
Iron	11200	10300	mg/kg	92	SW846 6010B	09/14-09/17/07	J6TFP1CF
			Dilution Factor: 1				
Lead	142	141	mg/kg	100	SW846 6010B	09/14-09/20/07	J6TFP1CG
			Dilution Factor: 1				

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LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F7I130200

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	2040	1820	mg/kg Dilution Factor: 1	89	SW846 6010B	09/14-09/20/07	J6TFP1CH
Manganese	408	394	mg/kg Dilution Factor: 1	97	SW846 6010B	09/14-09/20/07	J6TFP1CJ
Molybdenum	84.1	83.9	mg/kg Dilution Factor: 1	100	SW846 6010B	09/14-09/20/07	J6TFP1CK
Nickel	147	145	mg/kg Dilution Factor: 1	99	SW846 6010B	09/14-09/20/07	J6TFP1CL
Potassium	1920	2010	mg/kg Dilution Factor: 1	105	SW846 6010B	09/14-09/17/07	J6TFP1CM
Selenium	64.2	63.7	mg/kg Dilution Factor: 1	99	SW846 6010B	09/14-09/20/07	J6TFP1CN
Silicon	100	84.2	mg/kg Dilution Factor: 1	84	SW846 6010B	09/14-09/17/07	J6TFP1CP
Silver	130	142	mg/kg Dilution Factor: 1	109	SW846 6010B	09/14-09/20/07	J6TFP1CQ
Sodium	445	390	mg/kg Dilution Factor: 1	88	SW846 6010B	09/14-09/17/07	J6TFP1CR
Vanadium	97.3	93.4	mg/kg Dilution Factor: 1	96	SW846 6010B	09/14-09/20/07	J6TFP1CT
Zinc	165	169	mg/kg Dilution Factor: 1	102	SW846 6010B	09/14-09/21/07	J6TFP1CU
Chromium	69.5	66.7	mg/kg Dilution Factor: 1	96	SW846 6010B	09/14-09/20/07	J6TFP1CV

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F7I130200
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07
Matrix.....: SOLID

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F7I130200-001 **Prep Batch #...:** 7257067									
% Moisture.....: 0.33									
Mercury									
	ND	0.167	0.167	mg/kg	100		SW846 7471A	09/14/07	J6QEV1CL
	ND	0.167	0.148	mg/kg	88	12	SW846 7471A	09/14/07	J6QEV1CM
Dilution Factor: 1									
MS Lot-Sample #: F7I130200-001 **Prep Batch #...:** 7257074									
% Moisture.....: 0.33									
Aluminum									
	5010	100	5700 N	mg/kg	682		SW846 6010B	09/14-09/17/07	J6QEV1CN
	5010	100	5830 N	mg/kg	816	2.3	SW846 6010B	09/14-09/17/07	J6QEV1CP
Dilution Factor: 2									
Antimony									
	ND	25.1	17.9 N	mg/kg	71		SW846 6010B	09/14-09/20/07	J6QEV1CQ
	ND	25.1	15.2 N	mg/kg	61	16	SW846 6010B	09/14-09/20/07	J6QEV1CR
Dilution Factor: 2									
Arsenic									
	1.6	100	105	mg/kg	103		SW846 6010B	09/14-09/20/07	J6QEV1CT
	1.6	100	101	mg/kg	99	4.0	SW846 6010B	09/14-09/20/07	J6QEV1CU
Dilution Factor: 2									
Barium									
	42.0	100	146	mg/kg	103		SW846 6010B	09/14-09/20/07	J6QEV1CV
	42.0	100	139	mg/kg	97	4.8	SW846 6010B	09/14-09/20/07	J6QEV1CW
Dilution Factor: 2									
Beryllium									
	0.14	2.51	2.75	mg/kg	104		SW846 6010B	09/14-09/20/07	J6QEV1CX
	0.14	2.51	2.81	mg/kg	107	2.2	SW846 6010B	09/14-09/20/07	J6QEV1C0
Dilution Factor: 2									
Boron									
	7.1	100	106	mg/kg	99		SW846 6010B	09/14-09/17/07	J6QEV1C1
	7.1	100	106	mg/kg	99	0.09	SW846 6010B	09/14-09/17/07	J6QEV1C2
Dilution Factor: 2									
Cadmium									
	ND	2.51	2.81	mg/kg	109		SW846 6010B	09/14-09/20/07	J6QEV1C3
	ND	2.51	2.55	mg/kg	99	9.6	SW846 6010B	09/14-09/20/07	J6QEV1C4
Dilution Factor: 2									

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MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F7I130200
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07 **Matrix.....:** SOLID

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Calcium									
	6390	2510	8840	mg/kg	98		SW846 6010B	09/14-09/20/07	J6QEV1C5
	6390	2510	9140	mg/kg	109	3.3	SW846 6010B	09/14-09/20/07	J6QEV1C6
			Dilution Factor: 2						
Chromium									
	9.2	10.0	20.8	mg/kg	115		SW846 6010B	09/14-09/20/07	J6QEV1CJ
	9.2	10.0	20.3	mg/kg	110	2.6	SW846 6010B	09/14-09/20/07	J6QEV1CK
			Dilution Factor: 2						
Cobalt									
	5.8	25.1	31.6	mg/kg	103		SW846 6010B	09/14-09/20/07	J6QEV1C7
	5.8	25.1	29.7	mg/kg	95	6.2	SW846 6010B	09/14-09/20/07	J6QEV1C8
			Dilution Factor: 2						
Copper									
	11.1	12.5	23.4	mg/kg	98		SW846 6010B	09/14-09/20/07	J6QEV1C9
	11.1	12.5	23.6	mg/kg	100	0.87	SW846 6010B	09/14-09/20/07	J6QEV1DA
			Dilution Factor: 2						
Iron									
	13200	50.2	12900 N	mg/kg	0.0		SW846 6010B	09/14-09/17/07	J6QEV1DC
	13200	50.2	13000 N	mg/kg	0.0	0.0	SW846 6010B	09/14-09/17/07	J6QEV1DD
			Dilution Factor: 2						
Lead									
	3.4	25.1	28.8	mg/kg	102		SW846 6010B	09/14-09/20/07	J6QEV1DE
	3.4	25.1	28.4	mg/kg	100	1.4	SW846 6010B	09/14-09/20/07	J6QEV1DF
			Dilution Factor: 2						
Magnesium									
	3900	2510	6560	mg/kg	106		SW846 6010B	09/14-09/20/07	J6QEV1DG
	3900	2510	6520	mg/kg	105	0.65	SW846 6010B	09/14-09/20/07	J6QEV1DH
			Dilution Factor: 2						
Manganese									
	249	25.1	298 N	mg/kg	193		SW846 6010B	09/14-09/20/07	J6QEV1DJ
	249	25.1	258 N	mg/kg	36	14	SW846 6010B	09/14-09/20/07	J6QEV1DK
			Dilution Factor: 2						
Molybdenum									
	ND	50.2	50.5	mg/kg	101		SW846 6010B	09/14-09/20/07	J6QEV1DL
	ND	50.2	48.7	mg/kg	97	3.7	SW846 6010B	09/14-09/20/07	J6QEV1DM
			Dilution Factor: 2						

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: F7I130200
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07
Matrix.....: SOLID

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Nickel									
	8.7	25.1	35.3	mg/kg	106		SW846 6010B	09/14-09/20/07	J6QEV1DN
	8.7	25.1	34.9	mg/kg	105	0.94	SW846 6010B	09/14-09/20/07	J6QEV1DP
			Dilution Factor: 2						
Potassium									
	1280	2510	3560	mg/kg	91		SW846 6010B	09/14-09/17/07	J6QEV1DQ
	1280	2510	3550	mg/kg	91	0.18	SW846 6010B	09/14-09/17/07	J6QEV1DR
			Dilution Factor: 2						
Selenium									
	ND	100	99.5	mg/kg	99		SW846 6010B	09/14-09/20/07	J6QEV1DT
	ND	100	97.3	mg/kg	97	2.2	SW846 6010B	09/14-09/20/07	J6QEV1DU
			Dilution Factor: 2						
Silicon									
	277	502	467 N	mg/kg	38		SW846 6010B	09/14-09/17/07	J6QEV1A7
	277	502	442 N	mg/kg	33	5.6	SW846 6010B	09/14-09/17/07	J6QEV1A8
			Dilution Factor: 2						
Silver									
	ND	2.51	3.18 N	mg/kg	127		SW846 6010B	09/14-09/20/07	J6QEV1A9
	ND	2.51	2.42	mg/kg	96	27	SW846 6010B	09/14-09/20/07	J6QEV1CA
			Dilution Factor: 2						
Sodium									
	99.8	2510	2630	mg/kg	101		SW846 6010B	09/14-09/17/07	J6QEV1CC
	99.8	2510	2620	mg/kg	100	0.47	SW846 6010B	09/14-09/17/07	J6QEV1CD
			Dilution Factor: 2						
Vanadium									
	34.4	25.1	60.4	mg/kg	104		SW846 6010B	09/14-09/20/07	J6QEV1CE
	34.4	25.1	57.2	mg/kg	91	5.4	SW846 6010B	09/14-09/20/07	J6QEV1CF
			Dilution Factor: 2						
Zinc									
	29.8	25.1	56.1	mg/kg	105		SW846 6010B	09/14-09/21/07	J6QEV1CG
	29.8	25.1	58.4	mg/kg	114	4.0	SW846 6010B	09/14-09/21/07	J6QEV1CH
			Dilution Factor: 2						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

WET CHEMISTRY

Washington Closure Hanford

Client Sample ID: J15HY4

General Chemistry

Lot-Sample #...: F7I130200-001 **Work Order #...:** J6QEV **Matrix.....:** SOLID
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07
% Moisture.....: 0.33

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.33	0.10	%	MCAWW 160.3 MOD	09/17-09/18/07	7260035

Dilution Factor: 1 MDL.....:

Washington Closure Hanford

Client Sample ID: J15HB9

General Chemistry

Lot-Sample #...: F7I130200-002 **Work Order #...:** J6QH6 **Matrix.....:** SOLID
Date Sampled...: 09/11/07 **Date Received..:** 09/13/07
% Moisture.....: 0.54

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	0.54	0.10	%	MCAWW 160.3 MOD	09/17-09/18/07	7260035

Dilution Factor: 1 MDL.....:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F7I130200 **Work Order #...:** J6KK4-SMP J6KK4-DUP **Matrix.....:** SOLID

Date Sampled...: 09/07/07 **Date Received..:** 09/11/07

% Moisture.....: 4.8

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture						SD Lot-Sample #:	F7I110279-002	
	4.8	4.8	%	0.21	(0-30)	MCAWW 160.3 MOD	09/17-09/18/07	7260035

Dilution Factor: 1

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED SEP 2007

Radiochemical Analysis By

TAL Richland

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

Assigned Laboratory Code: STLRL

Data Package Contains 108 *Pages*

Report No.: 36919

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
J00130	RC-032	J15HB9	J7I120257-1	J6M9M1AJ	9J6M9M10	7255454
		J15HB9	J7I120257-1	J6M9M1AG	9J6M9M10	7255455
		J15HB9	J7I120257-1	J6M9M1AD	9J6M9M10	7255456
		J15HB9	J7I120257-1	J6M9M1AE	9J6M9M10	7255457
		J15HB9	J7I120257-1	J6M9M1AF	9J6M9M10	7255458
		J15HB9	J7I120257-1	J6M9M1AH	9J6M9M10	7255461
		J15HB9	J7I120257-1	J6M9M1AC	9J6M9M10	7255462
		J15HB9	J7I120257-1	J6M9M1AA	9J6M9M10	7255464
		J15HY4	J7I120257-2	J6M921AJ	9J6M9210	7255454
		J15HY4	J7I120257-2	J6M921AG	9J6M9210	7255455
		J15HY4	J7I120257-2	J6M921AD	9J6M9210	7255456
		J15HY4	J7I120257-2	J6M921AE	9J6M9210	7255457
		J15HY4	J7I120257-2	J6M922AF	9J6M9220	7255458
		J15HY4	J7I120257-2	J6M921AH	9J6M9210	7255461
		J15HY4	J7I120257-2	J6M921AC	9J6M9210	7255462
		J15HY4	J7I120257-2	J6M921AA	9J6M9210	7255464

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

September 29, 2007

Attention: Joan Kessner

SAF Number	:	RC-032
Date SDG Closed	:	September 12, 2007
Number of Samples	:	Two (2)
Sample Type	:	Soil
SDG Number	:	J00130
Data Deliverable	:	15 Day / Summary

CASE NARRATIVE

I. Introduction

On September 12, 2007two soil samples were received at TestAmerica Richland (TARL) for radiochemical and chemistry analysis. Upon receipt, the samples were assigned the following laboratory IDs number to correspond with the Washington Closure Hanford (WCH) specific IDs:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J15HB9	J6M9M	SOIL	9/12/07
J15HY4	J6M92	SOIL	9/12/07

II. Sample Receipt

The sample was 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:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Total Strontium by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017
Liquid Scintillation Counter
Carbon-14 by method RICH-RC-5022
Nickel-63 by method RICH-RC-5069
Tritium by method RICH-RC-5007
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

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

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (J15HY4) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The sample and sample duplicate were recounted to verify activity. The LCS, batch blank, samples and sample duplicate (J15HY4) results are within contractual requirements.

Total Strontium by method RICH-RC-5006:
The LCS, batch blank, sample and sample duplicate (J15HB9) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017:
There was insufficient sample to prepare a duplicate. The sample aliquot was recounted on a different detector to achieve duplicate results. The LCS, batch blank, sample and sample duplicate (J15HY4) results are within contractual requirements.

Liquid Scintillation Counter

Carbon-14 by method RICH-RC-5022:

The LCS, batch blank, sample and sample duplicate (J15HB9) results are within contractual requirements.

Nickel-63 by method RICH-RC-5069:

The LCS, batch blank, sample and sample duplicate (J15HB9) results are within contractual requirements.

Tritium by method RICH-RC-5007

The LCS, batch blank, sample and sample duplicate (J15HY4) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A:

The matrix spike recovery was low. An insoluble matrix spike was analyzed and was acceptable. Except as noted, the LCS, batch blank, sample, sample duplicate (J15HB9) and sample matrix spike (J15HB9) 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:

for Sandra Seger
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Uncertainty Estimation

Test America 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 STL Richland.
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.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	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 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 STL Richland "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 STL Richland 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.

Sample Results Summary

TAL Richland STLRL

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

Date: 29-Sep-07

Report No. : 36919

SDG No: J00130

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
7255461 GAMMA_GS									
J15HB9									
	J6M9M1AH	AG-108M	5.91E-04 +- 5.90E-03	U	pCi/g		1.01E-02		
		BA-133	7.63E-03 +- 1.01E-02	U	pCi/g		1.48E-02		
		CO-60	7.23E-04 +- 9.57E-03	U	pCi/g		1.65E-02	5.00E-02	
		CS-137	2.62E-02 +- 1.55E-02		pCi/g		1.60E-02	1.00E-01	
		EU-152	3.14E-03 +- 2.13E-02	U	pCi/g		3.35E-02	1.00E-01	
		EU-154	-2.18E-02 +- 2.88E-02	U	pCi/g		4.71E-02	1.00E-01	
		EU-155	3.87E-02 +- 2.28E-02	U	pCi/g		3.83E-02	1.00E-01	
J15HY4									
	J6M921AH	AG-108M	2.30E-03 +- 6.50E-03	U	pCi/g		1.13E-02		
		BA-133	5.15E-03 +- 1.07E-02	U	pCi/g		1.55E-02		
		CO-60	5.21E-03 +- 8.75E-03	U	pCi/g		1.59E-02	5.00E-02	
		CS-137	-7.80E-03 +- 9.03E-03	U	pCi/g		1.46E-02	1.00E-01	
		EU-152	-1.42E-02 +- 2.16E-02	U	pCi/g		3.51E-02	1.00E-01	
		EU-154	-3.49E-04 +- 2.93E-02	U	pCi/g		5.08E-02	1.00E-01	
		EU-155	1.39E-02 +- 2.41E-02	U	pCi/g		4.03E-02	1.00E-01	
J15HY4 DUP									
	J6M921AM	AG-108M	1.26E-04 +- 6.38E-03	U	pCi/g		1.10E-02		
		BA-133	-5.18E-03 +- 1.09E-02	U	pCi/g		1.53E-02		
		CO-60	-4.47E-04 +- 9.55E-03	U	pCi/g		1.65E-02	5.00E-02	
		CS-137	-1.03E-02 +- 9.38E-03	U	pCi/g		1.51E-02	1.00E-01	
		EU-152	-1.72E-02 +- 2.13E-02	U	pCi/g		3.51E-02	1.00E-01	
		EU-154	-5.57E-03 +- 3.47E-02	U	pCi/g		5.93E-02	1.00E-01	
		EU-155	3.83E-02 +- 2.72E-02	U	pCi/g		4.55E-02	1.00E-01	
7255457 9310_ALPHABETA_GPC									
J15HB9									
	J6M9M1AE	ALPHA	6.58E+00 +- 7.14E+00	U	pCi/g	100%	7.38E+00	1.00E+01	
J15HY4									
	J6M921AE	ALPHA	1.71E-01 +- 3.10E+00	U	pCi/g	100%	8.97E+00	1.00E+01	
J15HY4 DUP									
	J6M921AK	ALPHA	4.76E+00 +- 5.90E+00	U	pCi/g	100%	8.15E+00	1.00E+01	186.1
7255458 9310_ALPHABETA_GPC									
J15HB9									
	J6M9M1AF	BETA	1.74E+01 +- 4.99E+00		pCi/g	100%	4.19E+00	1.50E+01	
J15HY4									
	J6M922AF	BETA	1.92E+01 +- 5.08E+00		pCi/g	100%	4.16E+00	1.50E+01	
J15HY4 DUP									
	J6M922AL	BETA	1.86E+01 +- 4.52E+00		pCi/g	100%	4.40E+00	1.50E+01	2.7

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A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

Sample Results Summary

TAL Richland STLRL

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

Date: 29-Sep-07

Report No. : 36919

SDG No: J00130

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
7255462 SRTOT_SEP_PRECIP_GPC									
J15HB9									
	J6M9M1AC	STRONTIUM	7.61E-02 +- 7.37E-02	U	pCi/g	87%	1.48E-01		
J15HB9 DUP									
	J6M9M1AN	STRONTIUM	6.92E-02 +- 7.01E-02	U	pCi/g	95%	1.42E-01		9.4
J15HY4									
	J6M921AC	STRONTIUM	3.24E-01 +- 1.23E-01		pCi/g	93%	1.36E-01		
7255454 C14_CHEM_LSC									
J15HB9									
	J6M9M1AJ	C-14	4.78E-02 +- 2.72E-01	U	pCi/g	100%	3.27E-01	5.00E+01	
J15HB9 DUP									
	J6M9M1AK	C-14	4.37E-02 +- 2.71E-01	U	pCi/g	100%	3.28E-01	5.00E+01	8.9
J15HY4									
	J6M921AJ	C-14	2.64E-01 +- 2.93E-01	U	pCi/g	100%	3.28E-01	5.00E+01	
7255455 906.0_H3_LSC									
J15HB9									
	J6M9M1AG	H-3	8.32E-03 +- 7.52E-03	U	pCi/g	100%	1.49E-02	4.00E+02	
J15HY4									
	J6M921AG	H-3	5.58E-03 +- 7.37E-03	U	pCi/g	100%	1.47E-02	4.00E+02	
J15HY4 DUP									
	J6M921AN	H-3	-6.29E-04 +- 7.12E-03	U	pCi/g	100%	1.48E-02	4.00E+02	250.8
7255456 NI63_LSC									
J15HB9									
	J6M9M1AD	NI-63	1.27E+01 +- 5.11E+00		pCi/g	92%	5.93E+00	3.00E+01	
J15HB9 DUP									
	J6M9M1AM	NI-63	1.74E+00 +- 4.70E+00	U	pCi/g	86%	6.45E+00	3.00E+01	151.6
J15HY4									
	J6M921AD	NI-63	-2.11E+00 +- 4.27E+00	U	pCi/g	83%	6.09E+00	3.00E+01	
7255464 7196_CR6									
J15HB9									
	J6M9M1AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A		3.50E-01	
J15HB9 DUP									
	J6M9M1AE	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A			0.0
J15HY4									
	J6M921AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A		3.50E-01	

No. of Results: 42

TAL Richland

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A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

QC Results Summary
TAL Richland STLRL

Date: 29-Sep-07

Ordered by Method, Batch No, QC Type,.

Report No. : 36919 **SDG No.:** J00130

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
GAMMA_GS								
7255461 BLANK QC,								
J6NEE1AA	AG-108M	5.37E-05 +- 2.80E-03	U	pCi/g				4.97E-03
	BA-133	-1.51E-03 +- 4.85E-03	U	pCi/g				7.07E-03
	CO-60	-6.84E-04 +- 4.01E-03	U	pCi/g				7.33E-03
	CS-137	-2.39E-03 +- 3.85E-03	U	pCi/g				6.39E-03
	EU-152	-4.37E-03 +- 1.04E-02	U	pCi/g				1.78E-02
	EU-154	-5.12E-03 +- 1.18E-02	U	pCi/g				2.02E-02
	EU-155	4.32E-03 +- 1.03E-02	U	pCi/g				1.84E-02
7255461 LCS,								
J6NEE1AC	CS-137	2.58E-01 +- 4.15E-02		pCi/g		100%	0.0	2.84E-02
	K-40	1.77E+01 +- 2.22E+00		pCi/g		90%	-0.1	2.00E-01
	RA-226	8.72E-01 +- 1.24E-01		pCi/g		76%	-0.2	4.53E-02
	RA-228	1.70E+00 +- 2.40E-01		pCi/g		91%	-0.1	8.21E-02
	U-238	1.06E+00 +- 1.46E-01		pCi/g		101%	0.0	4.43E-02
9310_ALPHABETA_GPC								
7255457 BLANK QC,								
J6ND91AA	ALPHA	1.30E+00 +- 1.89E+00	U	pCi/g	100%			2.78E+00
7255457 LCS,								
J6ND91AC	ALPHA	8.73E+01 +- 6.49E+01		pCi/g	100%	97%	0.0	3.75E+00
9310_ALPHABETA_GPC								
7255458 BLANK QC,								
J6NEA1AA	BETA	8.53E-01 +- 1.64E+00	U	pCi/g	100%			3.64E+00
7255458 LCS,								
J6NEA1AC	BETA	6.36E+01 +- 1.50E+01		pCi/g	100%	94%	-0.1	3.73E+00
SRTOT_SEP_PRECIP_GPC								
7255462 BLANK QC,								
J6NEH1AA	STRONTIUM	3.20E-02 +- 7.64E-02	U	pCi/g	75%			1.72E-01
7255462 LCS,								
J6NEH1AC	STRONTIUM	1.17E+00 +- 3.35E-01		pCi/g	95%	104%	0.0	1.37E-01
C14_CHEM_LSC								
7255454 BLANK QC,								
J6ND41AA	C-14	-5.08E-02 +- 2.63E-01	U	pCi/g	100%			3.28E-01
7255454 LCS,								
J6ND41AC	C-14	7.10E+00 +- 1.01E+00		pCi/g	100%	97%	0.0	3.29E-01
906.0_H3_LSC								
7255455 BLANK QC,								
J6ND51AA	H-3	1.52E-01 +- 1.50E-01	U	pCi/g	100%			2.97E-01
7255455 LCS,								
J6ND51AC	H-3	2.60E+00 +- 2.51E-01		pCi/g	100%	96%	0.0	2.96E-01
NI63_LSC								
7255456 BLANK QC,								

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Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

QC Results Summary
TAL Richland STLRL

Date: 29-Sep-07

Ordered by Method, Batch No, QC Type,.

Report No. : 36919 **SDG No.:** J00130

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
J6ND81AA	NI-63	-5.34E-01 +- 4.18E+00	U	pCi/g	93%			5.79E+00
7255456 LCS,								
J6ND81AC	NI-63	5.09E+02 +- 5.13E+01		pCi/g	91%	84%	-0.2	5.98E+00
7196_CR6								
7255464 BLANK QC,								
J6NEP1AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A			
7255464 LCS,								
J6NEP1AC	HEXCHROME	1.71E+01 +- 0.00E+00		mg/kg	N/A	86%	-0.1	
7255464 MATRIX SPIKE, J15HB9 MS								
J6M9M1AC	HEXCHROME	7.40E+00 +- 0.00E+00		mg/kg	N/A	74%	-0.3	

No. of Results: 27

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rptSTLRchQcSummary V5.1.4 A2002

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 29-Sep-07

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 10:00:00 AM
Lot-Sample No.:	J7I120257-1	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HB9	COC No. :	RC-032-158	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
ch: 7255454	C14_CHEM_LSC			Work Order:	J6M9M1AJ		Report DB ID:	9J6M9M10				
C-14	***4.78E-02***	U	1.4E-01	2.7E-01	3.27E-01	pCi/g	100%	*0.15*	9/25/07 10:15 p		5.006	LSC4
						1.57E-01	5.00E+01	*0.35*			G	
ch: 7255455	906.0_H3_LSC			Work Order:	J6M9M1AG		Report DB ID:	9J6M9M10				
H-3	***8.32E-03***	U	6.4E-03	7.5E-03	1.49E-02	pCi/g	100%	*0.56*	9/25/07 10:23 p		100.7	LSC8
						7.08E-03	4.00E+02	*(2.2)*			G	
ch: 7255456	NI63_LSC			Work Order:	J6M9M1AD		Report DB ID:	9J6M9M10				
NI-63	***1.27E+01***		2.8E+00	5.1E+00	5.93E+00	pCi/g	92%	*(2.1)*	9/18/07 05:27 a		0.25	LSC4
						2.88E+00	3.00E+01	*(5.)*			G	
ch: 7255457	9310_ALPHABETA_GPC			Work Order:	J6M9M1AE		Report DB ID:	9J6M9M10				
ALPHA	***6.58E+00***	U	5.3E+00	7.1E+00	7.38E+00	pCi/g	100%	*0.89*	9/17/07 08:37 p		0.0503	GPC1(
						2.50E+00	1.00E+01	*(1.8)*			G	
ch: 7255458	9310_ALPHABETA_GPC			Work Order:	J6M9M1AF		Report DB ID:	9J6M9M10				
BETA	***1.74E+01***		3.3E+00	5.0E+00	4.19E+00	pCi/g	100%	*(4.2)*	9/17/07 08:28 p		0.2007	GPC2(
						1.94E+00	1.50E+01	*(7.)*			G	
ch: 7255461	GAMMA_GS			Work Order:	J6M9M1AH		Report DB ID:	9J6M9M10				
AG-108M	***5.91E-04***	U	5.9E-03	5.9E-03	1.01E-02	pCi/g		*0.06*	9/21/07 09:51 a		896.7	GER5!
								0.2			g	
BA-133	***7.63E-03***	U	1.0E-02	1.0E-02	1.48E-02	pCi/g		*0.52*	9/21/07 09:51 a		896.7	GER5!
								(1.5)			g	

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TLRchSample
.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 29-Sep-07

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 10:00:00 AM
Lot-Sample No.:	J7I120257-1	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HB9	COC No. :	RC-032-158	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detecto
CO-60	***7.23E-04***	U	9.6E-03	9.6E-03	1.65E-02	pCi/g		*0.04*	9/21/07 09:51 a		896.7	GER5
							5.00E-02	*0.15*			g	
CS-137	***2.62E-02***		1.6E-02	1.6E-02	1.60E-02	pCi/g		*(1.6)*	9/21/07 09:51 a		896.7	GER5
							1.00E-01	*(3.4)*			g	
EU-152	***3.14E-03***	U	2.1E-02	2.1E-02	3.35E-02	pCi/g		*0.09*	9/21/07 09:51 a		896.7	GER5
							1.00E-01	*0.29*			g	
EU-154	***-2.18E-02***	U	2.9E-02	2.9E-02	4.71E-02	pCi/g		*-0.46*	9/21/07 09:51 a		896.7	GER5
							1.00E-01	*-(1.5)*			g	
EU-155	***3.87E-02***	U	2.3E-02	2.3E-02	3.83E-02	pCi/g		*(1.)*	9/21/07 09:51 a		896.7	GER5
							1.00E-01	*(3.4)*			g	
ch: 7255462	SRTOT_SEP_PRECIP_GPC			Work Order:	J6M9M1AC		Report DB ID:	9J6M9M10				
STRONTIUM	***7.61E-02***	U	7.1E-02	7.4E-02	1.48E-01	pCi/g	87%	*0.51*	9/18/07 09:00 p		6.04	GPC2
						6.86E-02		*(2.1)*			G	
tch: 7255464	7196_CR6			Work Order:	J6M9M1AA		Report DB ID:	9J6M9M10				
HEXCHROME	***3.50E-01***	U		0.0E+00		mg/kg	N/A	*N/A*	9/29/07		2.5259	
							3.50E-01	*N/A*			G	

No. of Results: 14 Comments:

. Richland
STLRchSample
1.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 29-Sep-07

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 1:00:00 PM
Lot-Sample No.:	J7I120257-2	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HY4	COC No. :	RC-032-161	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
ch: 7255454	C14_CHEM_LSC			Work Order:	J6M921AJ		Report DB ID: 9J6M9210					
C-14	***2.64E-01***	U	1.4E-01	2.9E-01	3.28E-01	pCi/g	100%	*0.81*	9/25/07 11:40 p		5.005	LSC4
						1.57E-01	5.00E+01	*(1.8)*			G	
ch: 7255455	906.0_H3_LSC			Work Order:	J6M921AG		Report DB ID: 9J6M9210					
H-3	***5.58E-03***	U	6.3E-03	7.4E-03	1.47E-02	pCi/g	100%	*0.38*	9/25/07 11:45 p		100.8	LSC8
						7.01E-03	4.00E+02	*(1.5)*			G	
ch: 7255456	NI63_LSC			Work Order:	J6M921AD		Report DB ID: 9J6M9210					
NI-63	***-2.11E+00***	U	2.5E+00	4.3E+00	6.09E+00	pCi/g	83%	*-0.35*	9/18/07 08:53 a		0.27	LSC4
						2.96E+00	3.00E+01	*-0.99*			G	
ch: 7255457	9310_ALPHABETA_GPC			Work Order:	J6M921AE		Report DB ID: 9J6M9210					
ALPHA	***1.71E-01***	U	3.1E+00	3.1E+00	8.97E+00	pCi/g	100%	*0.02*	9/17/07 08:37 p		0.0501	GPC1(
						3.33E+00	1.00E+01	*0.11*			G	
ch: 7255458	9310_ALPHABETA_GPC			Work Order:	J6M922AF		Report DB ID: 9J6M9220					
BETA	***1.92E+01***		3.4E+00	5.1E+00	4.16E+00	pCi/g	100%	*(4.6)*	9/18/07 10:24 a		0.2006	GPC32
						1.92E+00	1.50E+01	*(7.5)*			G	
ch: 7255461	GAMMA_GS			Work Order:	J6M921AH		Report DB ID: 9J6M9210					
AG-108M	***2.30E-03***	U	6.5E-03	6.5E-03	1.13E-02	pCi/g		*0.2*	9/21/07 09:52 a		858.1	GER8!
								0.71			g	
BA-133	***5.15E-03***	U	1.1E-02	1.1E-02	1.55E-02	pCi/g		*0.33*	9/21/07 09:52 a		858.1	GER8!
								0.96			g	

Richland
TLRchSample
.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 29-Sep-07

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 1:00:00 PM
Lot-Sample No.:	J7I120257-2	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HY4	COC No. :	RC-032-161	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CO-60	***5.21E-03***	U	8.8E-03	8.8E-03	1.59E-02	pCi/g		*0.33*	9/21/07 09:52 a		858.1	GER8$
							5.00E-02	*(1.2)*			g	
CS-137	***-7.80E-03***	U	9.0E-03	9.0E-03	1.46E-02	pCi/g		*-0.53*	9/21/07 09:52 a		858.1	GER8$
							1.00E-01	*-(1.7)*			g	
EU-152	***-1.42E-02***	U	2.2E-02	2.2E-02	3.51E-02	pCi/g		*-0.4*	9/21/07 09:52 a		858.1	GER8$
							1.00E-01	*-(1.3)*			g	
EU-154	***-3.49E-04***	U	2.9E-02	2.9E-02	5.08E-02	pCi/g		*-0.01*	9/21/07 09:52 a		858.1	GER8$
							1.00E-01	*-0.02*			g	
EU-155	***1.39E-02***	U	2.4E-02	2.4E-02	4.03E-02	pCi/g		*0.34*	9/21/07 09:52 a		858.1	GER8$
							1.00E-01	*(1.1)*			g	
ch: 7255462	SRTOT_SEP_PRECIP_GPC			Work Order:	J6M921AC		Report DB ID:	9J6M9210				
STRONTIUM	***3.24E-01***		9.0E-02	1.2E-01	1.36E-01	pCi/g	93%	*(2.4)*	9/18/07 09:00 p		6.03	GPC27
						6.30E-02		*(5.3)*			G	
ch: 7255464	7196_CR6			Work Order:	J6M921AA		Report DB ID:	9J6M9210				
HEXCHROME	***3.50E-01***	U		0.0E+00		mg/kg	N/A	*N/A*	9/29/07		2.4848	
							3.50E-01	*N/A*			G	

lo. of Results: 14 Comments:

Richland
:TLRchSample
.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

Date: 29-Sep-07

DUPLICATE RESULTS

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 10:00:00 AM
Lot-Sample No.:	J7I120257-1	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HB9 DUP	COC No. :	RC-032-158	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
:ch: 7255454	C14_CHEM_LSC			Work Order:	J6M9M1AK	Report DB ID:	J6M9M1KR		Orig Sa DB ID:	9J6M9M10		
C-14	4.37E-02	U	1.4E-01	2.7E-01	3.28E-01	pCi/g	100%	0.13	9/25/07 10:58 p		5.003	LSC4
	4.78E-02	U	RPD	8.9		5.00E+01		0.32			G	
:ch: 7255456	NI63_LSC			Work Order:	J6M9M1AM	Report DB ID:	J6M9M1MR		Orig Sa DB ID:	9J6M9M10		
NI-63	1.74E+00	U	2.7E+00	4.7E+00	6.45E+00	pCi/g	86%	0.27	9/18/07 07:10 a		0.25	LSC4
	1.27E+01		RPD	151.6		3.00E+01		0.74			G	
:ch: 7255462	SRTOT_SEP_PRECIP_GPC			Work Order:	J6M9M1AN	Report DB ID:	J6M9M1NR		Orig Sa DB ID:	9J6M9M10		
STRONTIUM	6.92E-02	U	6.8E-02	7.0E-02	1.42E-01	pCi/g	95%	0.49	9/18/07 09:00 p		6.05	GPC27B
	7.61E-02	U	RPD	9.4				(2.)			G	
:ch: 7255464	7196_CR6			Work Order:	J6M9M1AE	Report DB ID:	J6M9M1KR		Orig Sa DB ID:	9J6M9M10		
HEXCHROME	3.50E-01	U		0.0E+00		mg/kg	N/A	N/A	9/29/07		2.5243	
	3.50E-01	U	RPD	0.0				N/A			G	

lo. of Results: 4 Comments:

. Richland RPD - Relative Percent Difference.
:TLRchDupV5.1 MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
2002 U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

Date: 29-Sep-07

DUPLICATE RESULTS

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 1:00:00 PM
Lot-Sample No.:	J7I120257-2	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HY4 DUP	COC No. :	RC-032-161	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
ch: 7255455	906.0_H3_LSC			Work Order:	J6M921AN	Report DB ID:	J6M921NR		Orig Sa DB ID:	9J6M9210		
H-3	-6.29E-04	U	6.0E-03	7.1E-03	1.48E-02	pCi/g	100%	-0.04	9/26/07 01:06 a		100.6	LSC8
	5.58E-03	U	RPD	250.8		4.00E+02		-0.18			G	
ch: 7255457	9310_ALPHABETA_GPC			Work Order:	J6M921AK	Report DB ID:	J6M921KR		Orig Sa DB ID:	9J6M9210		
ALPHA	4.76E+00	U	4.8E+00	5.9E+00	8.15E+00	pCi/g	100%	0.58	9/17/07 08:37 p		0.0506	GPC10C
	1.71E-01	U	RPD	186.1		1.00E+01		(1.6)			G	
ch: 7255458	9310_ALPHABETA_GPC			Work Order:	J6M922AL	Report DB ID:	J6M922LR		Orig Sa DB ID:	9J6M9220		
BETA	1.86E+01		3.5E+00	4.5E+00	4.40E+00	pCi/g	100%	(4.2)	9/18/07 10:24 a		0.2006	GPC32B
	1.92E+01		RPD	2.7		1.50E+01		(8.2)			G	
ch: 7255461	GAMMA_GS			Work Order:	J6M921AM	Report DB ID:	J6M921MR		Orig Sa DB ID:	9J6M9210		
AG-108M	1.26E-04	U	6.4E-03	6.4E-03	1.10E-02	pCi/g		0.01	9/21/07 01:19 p		858.1	GER4$1
	2.30E-03	U	RPD	179.2				0.04			g	
BA-133	-5.18E-03	U	1.1E-02	1.1E-02	1.53E-02	pCi/g		-0.34	9/21/07 01:19 p		858.1	GER4$1
	5.15E-03	U	RPD	-57744.5				-0.95			g	
CO-60	-4.47E-04	U	9.5E-03	9.5E-03	1.65E-02	pCi/g		-0.03	9/21/07 01:19 p		858.1	GER4$1
	5.21E-03	U	RPD	237.5		5.00E-02		-0.09			g	
CS-137	-1.03E-02	U	9.4E-03	9.4E-03	1.51E-02	pCi/g		-0.68	9/21/07 01:19 p		858.1	GER4$1
	-7.80E-03	U	RPD	-27.2		1.00E-01		-(2.2)			g	
EU-152	-1.72E-02	U	2.1E-02	2.1E-02	3.51E-02	pCi/g		-0.49	9/21/07 01:19 p		858.1	GER4$1
	-1.42E-02	U	RPD	-19.2		1.00E-01		-(1.6)			g	

Richland
TLRchDupV5.1
2002

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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

Date: 29-Sep-07

DUPLICATE RESULTS

Lab Name:	TA Richland	SDG:	J00130	Collection Date:	9/11/2007 1:00:00 PM
Lot-Sample No.:	J7I120257-2	Report No. :	36919	Received Date:	9/12/2007 12:10:00 PM
Client Sample ID:	J15HY4 DUP	COC No. :	RC-032-161	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-5.57E-03	U	3.5E-02	3.5E-02	5.93E-02	pCi/g		-0.09	9/21/07 01:19 p		858.1	GER4$1
	-3.49E-04	U	RPD -176.4			1.00E-01		-0.32			g	
EU-155	3.83E-02	U	2.7E-02	2.7E-02	4.55E-02	pCi/g		0.84	9/21/07 01:19 p		858.1	GER4$1
	1.39E-02	U	RPD 93.7			1.00E-01		(2.8)			g	

lo. of Results: 10 Comments:

. Richland RPD - Relative Percent Difference.
;TLRchDupV5.1 MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
2002 U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 29-Sep-07

Lab Name: TA Richland **SDG:** J00130

Matrix: SOIL **Report No. :** 36919

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
ch: 7255464	7196_CR6			Work Order:	J6NEP1AA		Report DB ID:	J6NEP1AB				
HEXCHROME	3.50E-01	U		0.0E+00		mg/kg	N/A	N/A	9/29/07		2.5	
						3.50E-01		N/A			G	
ch: 7255454	C14_CHEM_LSC			Work Order:	J6ND41AA		Report DB ID:	J6ND41AB				
C-14	-5.08E-02	U	1.3E-01	2.6E-01	3.28E-01	pCi/g	100%	-0.15	9/25/07 08:51 p		5.0	LSC4
					1.58E-01	5.00E+01		-0.39			G	
ch: 7255456	NI63_LSC			Work Order:	J6ND81AA		Report DB ID:	J6ND81AB				
NI-63	-5.34E-01	U	2.4E+00	4.2E+00	5.79E+00	pCi/g	93%	-0.09	9/18/07 10:35 a		0.25	LSC4
					2.81E+00	3.00E+01		-0.26			G	
ch: 7255455	906.0_H3_LSC			Work Order:	J6ND51AA		Report DB ID:	J6ND51AB				
H-3	1.52E-01	U	1.3E-01	1.5E-01	2.97E-01	pCi/g	100%	0.51	9/25/07 07:39 p		5.0	LSC8
					1.42E-01	4.00E+02		(2.)			G	
ch: 7255461	GAMMA_GS			Work Order:	J6NEE1AA		Report DB ID:	J6NEE1AB				
AG-108M	5.37E-05	U	2.8E-03	2.8E-03	4.97E-03	pCi/g		0.01	9/21/07 11:43 a		859.27	GER7$1
								0.04			g	
BA-133	-1.51E-03	U	4.9E-03	4.9E-03	7.07E-03	pCi/g		-0.21	9/21/07 11:43 a		859.27	GER7$1
								-0.62			g	
CO-60	-6.84E-04	U	4.0E-03	4.0E-03	7.33E-03	pCi/g		-0.09	9/21/07 11:43 a		859.27	GER7$1
						5.00E-02		-0.34			g	
CS-137	-2.39E-03	U	3.8E-03	3.8E-03	6.39E-03	pCi/g		-0.37	9/21/07 11:43 a		859.27	GER7$1
						1.00E-01		-(1.2)			g	
EU-152	-4.37E-03	U	1.0E-02	1.0E-02	1.78E-02	pCi/g		-0.25	9/21/07 11:43 a		859.27	GER7$1
						1.00E-01		-0.84			g	

Richland
TLRchBlank
.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 29-Sep-07

Lab Name: TA Richland

Matrix: SOIL

SDG: J00130

Report No. : 36919

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
EU-154	-5.12E-03	U	1.2E-02	1.2E-02	2.02E-02	pCi/g		-0.25	9/21/07 11:43 a		859.27	GER7$1
						1.00E-01		-0.87			g	
EU-155	4.32E-03	U	1.0E-02	1.0E-02	1.84E-02	pCi/g		0.24	9/21/07 11:43 a		859.27	GER7$1
						1.00E-01		0.84			g	
ch: 7255457	9310_ALPHABETA_GPC			Work Order:	J6ND91AA		Report DB ID:	J6ND91AB				
ALPHA	1.30E+00	U	1.6E+00	1.9E+00	2.78E+00	pCi/g	100%	0.47	9/17/07 08:37 p		0.05	GPC10F
					8.43E-01	1.00E+01		(1.4)			G	
ch: 7255458	9310_ALPHABETA_GPC			Work Order:	J6NEA1AA		Report DB ID:	J6NEA1AB				
BETA	8.53E-01	U	1.6E+00	1.6E+00	3.64E+00	pCi/g	100%	0.23	9/17/07 08:28 p		0.2	GPC27D
					1.69E+00	1.00E+01		(1.)			G	
ch: 7255462	SRTOT_SEP_PRECIP_GPC			Work Order:	J6NEH1AA		Report DB ID:	J6NEH1AB				
STRONTIUM	3.20E-02	U	7.6E-02	7.6E-02	1.72E-01	pCi/g	75%	0.19	9/18/07 09:00 p		6.0	GPC27D
					8.01E-02			0.84			G	

lo. of Results: 14 Comments:

Richland
TLRchBlank
.4 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. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 29-Sep-07

Lab Name: TA Richland

Matrix: SOIL

SDG: J00130

Report No. : 36919

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
ch: 7255464	7196_CR6			Work Order:	J6NEP1AC		Report DB ID:	J6NEP1CS					
HEXCHROME	1.71E+01			0.0E+00		mg/kg	N/A	2.00E+01		86%	9/29/07	2.5	
							Rec Limits:	80	120	-0.1		G	
ch: 7255454	C14_CHEM_LSC			Work Order:	J6ND41AC		Report DB ID:	J6ND41CS					
C-14	7.10E+00		3.0E-01	1.0E+00	3.29E-01	pCi/g	100%	7.29E+00	2.4E-01	97%	9/25/07 09:33 p	5.0	LSC4
							Rec Limits:	70	130	0.0		G	
ch: 7255456	NI63_LSC			Work Order:	J6ND81AC		Report DB ID:	J6ND81CS					
NI-63	5.09E+02		8.4E+00	5.1E+01	5.98E+00	pCi/g	91%	6.05E+02	1.7E+00	84%	9/18/07 12:17 p	0.25	LSC4
							Rec Limits:	70	130	-0.2		G	
ch: 7255455	906.0_H3_LSC			Work Order:	J6ND51AC		Report DB ID:	J6ND51CS					
H-3	2.60E+00		2.0E-01	2.5E-01	2.96E-01	pCi/g	100%	2.71E+00	8.1E-02	96%	9/25/07 09:01 p	5.0	LSC8
							Rec Limits:	70	130	0.0		G	
ch: 7255461	GAMMA_GS			Work Order:	J6NEE1AC		Report DB ID:	J6NEE1CS					
CS-137	2.58E-01		4.1E-02	4.1E-02	2.84E-02	pCi/g		2.57E-01	1.2E-02	100%	9/21/07 01:20 p	457.79	GER8$1
							Rec Limits:	70	130	0.0		g	
K-40	1.77E+01		2.2E+00	2.2E+00	2.00E-01	pCi/g		1.95E+01	1.9E+00	90%	9/21/07 01:20 p	457.79	GER8$1
							Rec Limits:	70	130	-0.1		g	
RA-226	8.72E-01		1.2E-01	1.2E-01	4.53E-02	pCi/g		1.15E+00	5.2E-02	76%	9/21/07 01:20 p	457.79	GER8$1
							Rec Limits:	70	130	-0.2		g	
RA-228	1.70E+00		2.4E-01	2.4E-01	8.21E-02	pCi/g		1.87E+00	9.6E-02	91%	9/21/07 01:20 p	457.79	GER8$1
							Rec Limits:	70	130	-0.1		g	
U-238	1.06E+00		1.5E-01	1.5E-01	4.43E-02	pCi/g		1.05E+00	5.4E-02	101%	9/21/07 01:20 p	457.79	GER8$1
							Rec Limits:	70	130	0.0		g	

Richland **Bias** - (Result/Expected)-1 as defined by ANSI N13.30.

TLRchLcs
.4 A2002

FORM II

LCS RESULTS

Date: 29-Sep-07

Lab Name: TA Richland

Matrix: SOIL

SDG: J00130

Report No. : 36919

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
ch: 7255457	9310_ALPHABETA_GPC			Work Order:	J6ND91AC		Report DB ID:	J6ND91CS					
ALPHA	8.73E+01		1.2E+01	6.5E+01	3.75E+00	pCi/g	100%	9.00E+01	2.8E+00	97%	9/17/07 08:37 p	0.05	GPC10D
							Rec Limits:	70	130	0.0		G	
ch: 7255458	9310_ALPHABETA_GPC			Work Order:	J6NEA1AC		Report DB ID:	J6NEA1CS					
BETA	6.36E+01		5.3E+00	1.5E+01	3.73E+00	pCi/g	100%	6.75E+01	1.3E+00	94%	9/17/07 08:28 p	0.2	GPC28B
							Rec Limits:	70	130	-0.1		G	
ch: 7255462	SRTOT_SEP_PRECIP_GPC			Work Order:	J6NEH1AC		Report DB ID:	J6NEH1CS					
STRONTIUM	1.17E+00		1.4E-01	3.3E-01	1.37E-01	pCi/g	95%	1.13E+00	2.2E-02	104%	9/18/07 09:00 p	6.0	GPC28A
							Rec Limits:	70	130	0.0		G	

lo. of Results: 12 Comments:

. Richland Bias - (Result/Expected)-1 as defined by ANSI N13.30.

ITLRchLcs
1.4 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 29-Sep-07

Lab Name: TA Richland **SDG:** J00130

Lot-Sample No.: J7I120257-1, J15HB9 MS **Report No. :** 36919 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Exp-ected	Exp Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
ch: 7255464	Work Order: J6M9M1AC			Report DB ID: J6M9M1AC			Orig Sa DB ID: 9J6M9M10						
HEXCHROME	7.40E+00			0.0E+00		mg/kg	N/A	74.19%	9.97E+00		9/29/07	2.523	7196_CR6
	3.50E-01											G	

umber of Results: 1

omments:

Richland RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
TLRchMs Bias - (Result/Expected)-1 as defined by ANSI N13.30.
4 A2002

STL

Data Review Verification Checklist

RADIOCHEMISTRY, First Level Review

9/18/2007 9:24:04 AM

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255457; RALPHA-A Alpha by GPC-Am

SDG, Matrix: J00130; 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 Review John North **Date** 9-18-7

STL Richland

SEVERN TRENT **STL**

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 72554457

Review Item	Yes (√)	No (√)	N/A (√)
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 with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Jodie C Date: 9/25/07

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

9/18/2007 12:41:58 PM

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255458; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: J00130; 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:
Please see NCM#10-10860

First Level Review John Morton **Date** 9-18-7

STL Richland

SEVERN TRENT **STL**

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7255458

Review Item	Yes (√)	No (√)	N/A (√)
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 with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?	✓		✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

V.C. 9/25/07

Comments on any "No" response: _____

Second Level Review: Jodie C. Date: 9/25/07

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-10860
NCM Initiated By: John Norton
Date Opened: 09/18/2007
Date Closed:

Classification: Anomaly
Status: CHREVIEW
Production Area: Counting
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J7I120000 (458), J7I120257 (1,2),
QC Batches: 7255458,

Nonconformance: Dups not within acceptance limits
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
John Norton	09/18/2007	The results from the duplicate were not sufficiently similar to the original sample.

Corrective Action

Name	Date	Corrective Action
John Norton	09/18/2007	The sample and duplicate were both re-counted, the results from the re-count show acceptable agreement between the two.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 9/18/2007

RADIOCHEMISTRY, First Level Review

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255462; RSRTOT SrTot by GPC

SDG, Matrix: J00130; 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 Review Lisa Autonson Date 9/19/07

SEVERN TRENT **STL**

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7255462

Review Item	Yes (√)	No (√)	N/A (√)
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 with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Jodie C Date: 9/25/07

TRENT STL

RADIOCHEMISTRY, First Level Review

9/27/2007 12:25:36 PM

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255461; RGAMMA Gamma by GER

SDG, Matrix: J00130; 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:

See NCM # 10-10929 for information regarding the duplicate.

First Level Review Matt Landy **Date** 9-27-07

STL Richland

Page 1

TESTAMERICA
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 7255461

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 Non-conformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: [signature] Date: 9/27/07

LS-038B, Rev. 10, 9/07

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-10929
NCM Initiated By: Matt Lardy
Date Opened: 09/27/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7I120257 (2),
QC Batches: 7255461,

Nonconformance: Insufficient sample volume for QC
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Matt Lardy	09/27/2007	Customer: Washington Closure Hanford Insufficient sample for sample J6M921AH was available to prepare a second aliquot for a duplicate. Therefore sample J6M921AH was recounted as sample J6M921AM to serve as the duplicate.

Corrective Action

Name	Date	Corrective Action
Matt Lardy	09/27/2007	Report the results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 9/27/2007

TREND STL

RADIOCHEMISTRY, First Level Review

9/27/2007 4:36:14 PM

Lot No., Due Date:	**J7I120257; 09/27/2007**
Client, Site:	**127642; HANFORD**
QC Batch No., Method Test:	**7255454; RC14 C-14 by LSC**
SDG, Matrix:	**J00130; 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 Review Lisa Antonson **Date** 9/27/07

STL Richland

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 7255454

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 Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Jodie C. Date: 9/28/07

LS-038B, Rev. 10, 9/07

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

9/24/2007 11:36:43 AM

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255456; RNI63 Ni-63 by LSC

SDG, Matrix: J00130; 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 Review John Worstell **Date** 9-24-7

STL Richland

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 7255456

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 Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A. Adam Date: 9-25-07

LS-038B Rev. 10, 9/07

STL

Data Review Verification Checklist

RADIOCHEMISTRY, First Level Review

9/26/2007 3:55:25 PM

Lot No., Due Date: J7I120257; 09/27/2007

Client, Site: 127642; HANFORD

QC Batch No., Method Test: 7255455; RTRITIUM H-3 by LSC

SDG, Matrix: J00130; 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 Review John Morton **Date** 9-26-7

STL Richland

TESTAMERICA
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 7255455

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 Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A. Adam Date: 9-27-07

LS-038B. Rev. 10. 9/07

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **7255464**

Lab Sample Numbers or SDG:

Method/Test/Parameter: **Cr+6 in SOLID / RICH-WC-5005, Rev 8**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration 1. Performed at required frequency with required number of levels?	✓			
2. Correlation coefficient within QC limits?	✓			
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			
B. Continuing Calibration 1. CCV analyzed at required frequency and all parameters within QC limits?	✓			
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			
C. Sample Analysis 1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			
2. Were all sample holding times met?	✓			
D. QC Samples 1. All results for the preparation blank below limits?	✓			
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?		✓		
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			
4. Analytical spikes within QC limits where applicable?			✓	
5. ICP only: One serial dilution performed per SDG?			✓	
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other 1. Are all nonconformances included and noted?	✓			
2. Is the correct date and time of analysis shown?	✓			
3. Did the analyst sign and date the front page of the analytical run?	✓			
4. Correct methodology used?	✓			
5. Transcriptions checked?	✓			
6. Calculations checked at minimum frequency?	✓			
7. Units checked?	✓			

Comments on any "No" response: _____MS low at 74.1 while the insoluble MS recovered at 78.6%

Analyst: _____ Date: _____9/29//07_____

Second-Level Review: _____ Date: 9/29/07

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-10957
NCM Initiated By: Steven Wheland
Date Opened: 09/29/2007
Date Closed:

Classification: **Anomaly**
Status: **QAREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J7I120000 (464), J7I120257 (1,2),
QC Batches: 7255464,

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	09/29/2007	MS recovered just below 75% at 74.1% The insoluble MS recovered at 78.6% and the PDMS at 87%. This implies a slight reducing nature to the sample as witnessed by the < MDL sample results.

Corrective Action

Name	Date	Corrective Action
Steven Wheland	09/29/2007	Report data

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 9/29/2007

J7I120257 J00130 Due 04-08-01 DW 9/12/07

Washington Closure Hanford — CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-032-158 Page 1 of 1

Collector: T. Welch-Koelling	Company Contact: R.T. Coffman	Telephone No.: 528-6409	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7DAY		
Project Designation: 100-F Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 100-F-26:12 BCL Soil Debris/Verification		SAF No.: RC-032
Ice Chest No.: AFS-04-036	Field Logbook No.: EFL-1174-3	COA: R10F262000	Method of Shipment: ~~FED EX~~ 9-12-07
Shipped To: Severn Trent Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: na

POSSIBLE SAMPLE HAZARDS/REMARKS
NA

Special Handling and/or Storage
NA

Preservation	None	Cool 4C	None	None	None	None					
Type of Container	P	P	P	P	P	P					
No. of Container(s)	1	1	1	1	1	1					
Volume	125mL	125mL	500mL	125mL	125mL	125mL					
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 – Total Sr	Gross Alpha; Gross Beta					
Sample No. / Matrix * / Sample Date / Sample Time											
15HB9 / SOIL / 9-11-07 / 1000		x	x	x	x	x		J6	M9	M	S

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
[illegible]	9/11/07 1430	JR DeBuigne	1430 9-11-07
JR DeBuigne	9-11-07 1545	3728/2B	1545 9-11-07
3728/2B	9-12-07 1130	[illegible]	9-12-07 1130
[illegible]	9-12-07 1210	[illegible]	1210 9-12-07

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Client 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)
(2) Gamma Spectroscopy (TCL List) (Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155); Gamma Spec - Add-on (Barium-133, Silver-108 metastable)

Sampler unavailable to relinquish samples from 3728 Ref # 3B. 3728 Custodian removed samples for shipping on 9/12/07.

Matrix *: S=Soil, SE=Sediment, SO=Solid, SL=Sludge, W = Water, O=Oil, A=Air, DS=Drum Solids, DL=Drum Liquids, T=Tissue, WI=Wipe, L=Liquid, V=Vegetation, X=Other

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

VCH-EE-011

J7E120257 J00130 Due 09-28-07 KW 9/12/07

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-032-161 | Page 1 of 1

lector: . Welch-Koelling	Company Contact: R.T. Coffman	Telephone No.: 528-6409	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 DAY		
leet Designation: 00-F Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 100-F-26:12 Shallow Zone/Verification		SAF No.: RC-032
Chest No.: AFS-04-036	Field Logbook No.: EFL-1174-3	COA: R10F262000	Method of Shipment: ~~FED EX~~ NA 9-12-07
pped To: Severn Trent Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

OSSIBLE SAMPLE HAZARDS/REMARKS

ecial Handling and/or Storage

Preservation	None	Cool 4C	None	None	None	None				
Type of Container	P	P	P	P	P	P				
No. of Container(s)	1	1	1	1	1	1				
Volume	125mL	125mL	500mL	125mL	125mL	125mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr	Gross Alpha; Gross Beta				
Sample No.	Matrix *	Sample Date	Sample Time								
HY4	SOIL	9/11/07	1300		X	X	X	X	X	JGm92	5

CHAIN OF POSSESSION	Sign/Print Names		
uished By/Removed From	Date/Time 9/11/07 1430	Received By/Stored In	Date/Time 1430
uished By/Removed From	Date/Time 1545 9-11-07	Received By/Stored In 3728 RB	Date/Time 1545 9-11-07
uished By/Removed From 2B RB	Date/Time 9-12-07 1130	Received By/Stored In	Date/Time 9-12-07 1130
uished By/Removed From WCH	Date/Time 9-12-07 1210	Received By/Stored In	Date/Time 1210
uished By/Removed From	Date/Time	Received By/Stored In	Date/Time
uished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010 (Client 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)
(2) Gamma Spectroscopy (TCL List) {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}; Gamma Spec - Add-on {Barium-133, Silver-108 metastable}

Sampler unavailable to relinquish samples from 3728 Ref # 2B
3728 Custodian removed samples for shipping on 9/12/07

Matrix *
S=Soil
SE=Sediment
SO=Solid
SI=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

ORATORY ECTION	Received By	Title	Date/Time
AL SAMPLE POSITION	Disposal Method	Disposed By	Date/Time

-EE-011

TESTAMERICA RICHLAND

STL

Sample Check-in List

Date/Time Received: 09.12.07 12:10

Client: WCH SDG #: J00130 NA [ ] SAF #: RC-032 NA [ ]

Work Order Number: J7I120257 Chain of Custody # RC-032-158,161

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]

2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6. Number of samples in shipping container: 2

7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]

8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   ✓ appropriate samples labels

9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)

10. Sample pH taken? Soil NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ]

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]

13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 09.12.07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

( ) No action necessary; process as is.

Project Manager _____ Date _____

LS-023 9/03 Rev. 5

17/2007 7:50:09 PM

Sample Preparation/Analysis

Balance Id:1120373922

:7642, Washington Closure Hanford
ɔchtel Hanford, Inc.

AY Gross Alpha PrpRC5013/5020
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

ıalyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

ɜtch: 7255457 SOIL pCi/g PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

:Q Batch, Test: None

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Disp Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
J6M9M-1-AE I120257-1-SAMP [redacted] /11/2007 10:00		0.0503g,in AmtRec: 4X125ML,500ML	#Containers: 5		50.3	50	10B Scr:	2103 Alpha:	9/17/07 pD Beta:	
J6M92-1-AE I120257-2-SAMP [redacted] /11/2007 13:00		0.0501g,in AmtRec: 4X125ML,500ML	#Containers: 5		50.1		10A Scr:	Alpha:	Beta:	
J6M92-1-AK-X I120257-2-DUP [redacted] /11/2007 13:00		0.0506g,in AmtRec: 4X125ML,500ML	#Containers: 5		50.6		10C Scr:	Alpha:	Beta:	
J6ND9-1-AA-B I120000-457-BLK [redacted] /11/2007 13:00		0.05g,in AmtRec:	#Containers: 1		0.3		10F Scr:	Alpha:	Beta:	
J6ND9-1-AC-C I120000-457-LCS [redacted] /11/2007 13:00		0.05g,in AmtRec:	ASD4279 08/27/07,pd 02/09/06,r #Containers: 1		0.6		10D Scr:	Alpha:	Beta:	

Comments:

1 Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

M9M1AE-SAMP Constituent List:
ALPHA RDL:1.00E+01 pCi/g LCL: UCL: RPD:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 5
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.

'17/2007 7:50:13 PM

Sample Preparation/Analysis

Balance Id:1120373922

AY Gross Alpha PrpRC5013/5020
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

nalyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

atch: 7255457 pCi/g

EQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
ND91AA-BLK:
ALPHA        RDL:1.00E+01    pCi/g    LCL:        UCL:        RPD:
ND91AC-LCS:
Am-241       RDL:            pCi/g    LCL:70      UCL:130     RPD:35
M9M1AE-SAMP Calc Info:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
ND91AA-BLK:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
ND91AC-LCS:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

9/18/2007 9:23:06 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/18/2006, 9/23/2007, Batch: '7255457', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255457						
AC		CalcC	WoodT	9/17/2007 7:47:40 PM		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			WoodT	InPrep	9/17/2007 7:47:40 PM	RICH-RC-5013 REVISION 7
SC			WoodT	Prep1C	9/17/2007 7:47:59 PM	RICH-RC-5013 REVISION 7
SC			WoodT	InPrep2	9/17/2007 7:48:21 PM	RICH-RC-5020 REVISION 3
SC			WoodT	Prep2C	9/17/2007 7:48:37 PM	RICH-RC-5020 REVISION 3
SC			DAWKINSO	InCnt1	9/17/2007 8:06:22 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	9/17/2007 9:30:19 PM	RICH-RD-0003 REVISION 5
AC			WoodT	9/17/2007 7:47:59 PM		
AC			WoodT	9/17/2007 7:48:21 PM		
AC			WoodT	9/17/2007 7:48:37 PM		
AC			DAWKINSO	9/17/2007 8:06:22 PM		rEVISION 5
AC			DAWKINSO	9/17/2007 9:30:19 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa

Page 1

Grp Rec Cnt: 6

8/2007 9:47:23 AM

Sample Preparation/Analysis

Balance Id:1120373922

7642, Washington Closure Hanford
chtel Hanford, Inc.

BB Gross Beta PrpRC5013/5020
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

tch: 7255458 SOIL pCi/g PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

Q Batch, Test: None All Tests: 7255454 5SS3, 7255455 ATS6, 7255456 AFS4, 7255457 AYS7, 7255458 BBS8, 7255461 AXTA, 7255462
ITH, 7255464 DWEA,

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
6M9M-1-AF 120257-1-SAMP [redacted] 11/2007 10:00		0.2007g,in AmtRec: 4X125ML,500ML	#Containers: 5					Scr:	Alpha:	Beta:
6M92-1-AF 120257-2-SAMP [redacted] 11/2007 13:00		0.2006g,in AmtRec: 4X125ML,500ML	#Containers: 5					Scr:	Alpha:	Beta:
6M92-1-AL-X 120257-2-DUP [redacted] 11/2007 13:00		0.2006g,in AmtRec: 4X125ML,500ML	#Containers: 5					Scr:	Alpha:	Beta:
6M92-2-AF 120257-2-SAMP [redacted] 11/2007 13:00	0.2006	AmtRec: 4X125ML,500ML	#Containers: 5		200.6	50		32A Scr:	1047 Alpha:	9/18/07X Beta:
6M92-2-AL-X 120257-2-DUP [redacted] 11/2007 13:00	0.2006	AmtRec: 4X125ML,500ML	#Containers: 5		200.6	50		32B Scr:	Alpha:	Beta:
6NEA-1-AA-B 120000-458-BLK [redacted] 11/2007 13:00		0.20g,in AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
6NEA-1-AC-C 120000-458-LCS [redacted] 11/2007 13:00		0.20g,in AmtRec:	BESD0890 08/06/07,pd 10/11/06,r #Containers: 1					Scr:	Alpha:	Beta:

18/2007 9:47:24 AM

Sample Preparation/Analysis

Balance Id:1120373922

BB Gross Beta PrpRC5013/5020
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

tch: 7255458 pCi/g

Q Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

omments:

Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

9M1AF-SAMP Constituent List:

ETA	RDL:1.50E+01	pCi/g	LCL:	UCL:	RPD:
EA1AA-BLK:					
ETA	RDL:1.50E+01	pCi/g	LCL:	UCL:	RPD:
EA1AC-LCS:					
r-90	RDL:	pCi/g	LCL:70	UCL:130	RPD:35

9M1AF-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
EA1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
EA1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 9-26

CUSTOMER CLOSURE

ANALYSIS B

MATRIX SOIL

LOT NUMBER J71120257

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7255458

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) J6M92 AF	DUPS OOL
2) J6M92 AL X	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	

RC-126 10/03 REV 4

9/18/2007 12:40:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/18/2006, 9/23/2007, Batch: '7255458', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255458						
AC		CalcC	WoodT	9/17/2007 7:47:28 PM		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			WoodT	InPrep	9/17/2007 7:47:28 PM	RICH-RC-5013 REVISION 7
SC			WoodT	Prep1C	9/17/2007 7:47:51 PM	RICH-RC-5013 REVISION 7
SC			WoodT	InPrep2	9/17/2007 7:48:16 PM	RICH-RC-5020 REVISION 3
SC			WoodT	Prep2C	9/17/2007 7:48:31 PM	RICH-RC-5020 REVISION 3
SC			DAWKINSO	InCnt1	9/17/2007 8:06:29 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	9/17/2007 9:29:57 PM	RICH-RD-0003 REVISION 5
SC			StringerR	InCnt1	9/18/2007 9:55:37 AM	RICH-RD-0003 REVISION 5
SC			StringerR	CalcC	9/18/2007 11:11:04 AM	RICH-RD-0003 REVISION 5
AC			WoodT	9/17/2007 7:47:51 PM		
AC			WoodT	9/17/2007 7:48:16 PM		
AC			WoodT	9/17/2007 7:48:31 PM		
AC			DAWKINSO	9/17/2007 8:06:29 PM		
AC			DAWKINSO	9/17/2007 9:29:57 PM		
AC			StringerR	9/18/2007 9:55:37		
AC			StringerR	9/18/2007 11:11:04		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 8

TESTAMERICA RICHLAND

18/2007 6:29:48 PM

Sample Preparation/Analysis

Balance Id:1120373922

7642, Washington Closure Hanford ,
chtel Hanford, Inc.

CH Sr-Total PrpRC5013, SepRC5006
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech: 09/18/2007 14:57,ManisD

tch: 7255462 SOIL pCi/g PM, Quote: SS , 27038

Q Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
J6M9M-1-AC 120257-1-SAMP		6.04g,in	SRTA17085 08/14/07,pd 05/22/07,r	1.5	86.5	50	27A	2125	9/18/07 DD	
[redacted] /11/2007 10:00		AmtRec: 4X125ML,500ML	#Containers: 5		09/18/2007 14:57,s1		Scr:	Alpha:		Beta:
J6M9M-1-AN-X I120257-1-DUP		6.05g,in	SRTA17086 08/14/07,pd 05/22/07,r	1.5	95.3	50	27B			
[redacted] /11/2007 10:00		AmtRec: 4X125ML,500ML	#Containers: 5		09/18/2007 14:57,s1		Scr:	Alpha:		Beta:
J6M92-1-AC I120257-2-SAMP		6.03g,in	SRTA17087 08/14/07,pd 05/22/07,r	1.5	93.2	50	27C			
[redacted] /11/2007 13:00		AmtRec: 4X125ML,500ML	#Containers: 5		09/18/2007 14:57,s1		Scr:	Alpha:		Beta:
J6NEH-1-AA-B I120000-462-BLK		6.00g,in	SRTA17088 08/14/07,pd 05/22/07,r	1.5	75.1	50	27D			
[redacted] /11/2007 10:00		AmtRec:	#Containers: 1		09/18/2007 14:57,s1		Scr:	Alpha:		Beta:
J6NEH-1-AC-C I120000-462-LCS		6.00g,in	STSB1245 08/14/07,pd 05/22/07,r	1.5	94.7	50	28A			
[redacted] /11/2007 10:00		AmtRec:	#Containers: 1		09/18/2007 14:57,s1		Scr:	Alpha:		Beta:

Comments:

I Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

M9M1AC-SAMP Constituent List:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35

52

18/2007 6:29:49 PM

Sample Preparation/Analysis

CH Sr-Total PrpRC5013, SepRC5006
TH Total Strontium by GPC
5i CLIENT: HANFORD

Balance Id:1120373922

Pipet #: _____

ıalyDueDate: 09/26/2007

Sep1 DT/Tm Tech: 09/18/2007 14:57,ManisD

ıtch: 7255462 pCi/g

:Q Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
NEH1AA-BLK:
Sr-90      RDL:1        pCi/g    LCL:      UCL:      RPD:
NEH1AC-LCS:
Sr-90      RDL:1        pCi/g    LCL:70    UCL:130   RPD:35
N9N1AC-SAMP Calc Info:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
NEH1AA-BLK:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
NEH1AC-LCS:
   Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

9/19/2007 3:43:57 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/19/2006, 9/24/2007, Batch: '7255462', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255462						
AC		CalcC	WoodT	9/13/2007 1:11:54 PM		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			WoodT	InPrep	9/13/2007 1:11:54 PM	RICH-RC-5013 REVISION 7
SC			WoodT	Prep1C	9/13/2007 1:12:17 PM	RICH-RC-5013 REVISION 7
SC			ManisD	InSep1	9/13/2007 1:23:25 PM	RICH-RC-5006 REV 7
SC			ManisD	Sep1C	9/18/2007 6:31:59 PM	RICH-RC-5006 REV 7
SC			DAWKINSO	InCnt1	9/18/2007 6:41:29 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	InCnt1	9/18/2007 6:41:40 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	9/18/2007 9:50:40 PM	RICH-RD-0003 REVISION 5
AC			WoodT	9/13/2007 1:12:17 PM		
AC			ManisD	9/13/2007 1:23:25 PM		
AC			ManisD	9/18/2007 6:31:59 PM		
AC			DAWKINSO	9/18/2007 6:41:29 PM		
AC			DAWKINSO	9/18/2007 6:41:40 PM		
AC			DAWKINSO	9/18/2007 9:50:40 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 7

19/2007 7:29:49 AM

Sample Preparation/Analysis

Balance Id:1120421763

:7642, Washington Closure Hanford ,
echtel Hanford, Inc.

AX Gamma PrpRC5013/5017
TA Gamma by HPGE
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

atch: 7255461 SOIL pCi/g PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

:Q Batch, Test: None All Tests: 7255454 5SS3, 7255455 ATS6, 7255456 AFS4, 7255457 AYS7, 7255458 BBS8, 7255461 AXTA, 7255462 HTH, 7255464 DWEA,

Prep Tech: ,Barcotl

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
J6M9M-1-AH 1120257-1-SAMP [redacted] /11/2007 10:00		896.70g,in AmtRec: 4X125ML,500ML	#Containers: 5		SMA	2oc	G5 Scr:	Alpha:	1311 Beta:	9/21/07 r
J6M92-1-AH 1120257-2-SAMP [redacted] /11/2007 13:00		858.10g,in AmtRec: 4X125ML,500ML	#Containers: 5				G8 Scr:	Alpha:	1312 Beta:	9/21/07
J6M92-1-AM-X 1120257-2-DUP [redacted] /11/2007 13:00		not enough Sample AmtRec: 4X125ML,500ML	#Containers: 5				G4 Scr:	Alpha:	1639 Beta:	9/21/07 r
J6NEE-1-AA-B 1120000-461-BLK [redacted] /11/2007 13:00		859.27g,in AmtRec:	CAL827 #Containers: 1		SMA	2oc	G7 Scr:	Alpha:	1503 Beta:	9/21/07 r
J6NEE-1-AC-C 1120000-461-LCS [redacted] /11/2007 13:00		457.79g,in AmtRec:	CAL816 01/01/03,pd 01/01/02,r #Containers: 1		MA		G8 Scr:	Alpha:	1640 Beta:	9/21/07 r

Comments: not enough sample for Dup please recount on Sporate Detector

1 Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

M9M1AH-SAMP Constituent List:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:70	UCL:130	RPD:35

TESTAMERICA RICHLAND
55

19/2007 7:29:50 AM

Sample Preparation/Analysis

Balance Id:1120421763

AX Gamma PrpRC5013/5017
TA Gamma by HPGE
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

ıalyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

atch: 7255461 pCi/g

Sep2 DT/Tm Tech:

:Q Batch, Test: None

Prep Tech: ,Barcotl

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Cs-137DA	RDL:1.00E-01 pCi/g	LCL:70	UCL:130	RPD:35	Eu-152	RDL:1.00E-01 pCi/g		LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01 pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01 pCi/g		LCL:	UCL:	RPD:
NEE1AA-BLK:										
Co-60	RDL:5.00E-02 pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01 pCi/g		LCL:	UCL:	RPD:
Cs-137DA	RDL:1.00E-01 pCi/g	LCL:	UCL:	RPD:	Eu-152	RDL:1.00E-01 pCi/g		LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01 pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01 pCi/g		LCL:	UCL:	RPD:
NEE1AC-LCS:										
Cs-137	RDL:0.1 pCi/g	LCL:70	UCL:130	RPD:35	Cs-137DA	RDL:0.1 pCi/g		LCL:70	UCL:130	RPD:35
K-40	RDL:-- pCi/g	LCL:70	UCL:130	RPD:35	Ra-226	RDL:0.1 pCi/g		LCL:70	UCL:130	RPD:35
RA-228	RDL:0.2 pCi/g	LCL:70	UCL:130	RPD:35	RA-228DA	RDL:0.2 pCi/g		LCL:70	UCL:130	RPD:35
U-238	RDL: pCi/g	LCL:70	UCL:130	RPD:35						

M9M1AH-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

NEE1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

NEE1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

9/27/2007 12:16:34 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/27/2006, 10/2/2007, Batch: '7255461', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255461						
AC		CalcC	WoodT	9/17/2007 2:41:59 PM		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			WoodT	InPrep	9/17/2007 2:41:59 PM	RICH-RC-5013 REVISION 7
SC			WoodT	Prep1C	9/17/2007 2:42:15 PM	RICH-RC-5013 REVISION 7
SC			BlackCL	InCnt1	9/19/2007 8:03:39 AM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	CalcC	9/21/2007 7:10:09 PM	RICH-RD-0008 REVISION 4
AC			WoodT	9/17/2007 2:42:15 PM		
AC			BlackCL	9/19/2007 8:03:39		
AC			DAWKINSO	9/21/2007 7:10:09 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 4

2/2007 1:47:59 PM

Sample Preparation/Analysis

7642, Washington Closure Hanford
chtel Hanford, Inc.

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Balance Id: 12430
Pipet #:
Sep1 DT/Tm Tech: 9-24-07 Tm
Sep2 DT/Tm Tech:
Prep Tech:

alyDueDate: 09/26/2007 J00130

tch: 7255454 SOIL pCi/g PM, Quote: SS , 27038

Q Batch, Test: None All Tests: 7255454 5SS3, 7255455 ATS6, 7255456 AFS4, 7255457 AYS7, 7255458 BBS8, 7255461 AXTA, 7255462
ITH, 7255464 DWEA,

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
6M9M-1-AJ 120257-1-SAMP [redacted] /11/2007 10:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6M9M-1-AK-X 120257-1-DUP [redacted] /11/2007 10:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6M92-1-AJ 120257-2-SAMP [redacted] /11/2007 13:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6ND4-1-AA-B 120000-454-BLK [redacted] /11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6ND4-1-AC-C 120000-454-LCS [redacted] /11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6ND4-1-AD-BN 120000-454-IBLK [redacted] /11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

12/2007 1:48:00 PM

Sample Preparation/Analysis

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Balance Id: 12430
Pipet #:
Sep1 DT/Tm Tech: 9-24-07 Tm
Sep2 DT/Tm Tech:
Prep Tech:

alyDueDate: 09/26/2007

tch: 7255454 pCi/g
Q Batch, Test: None

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

omments:

. Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

```
9M1AJ-SAMP Constituent List:
-14        RDL:50        pCi/g    LCL:70     UCL:130    RPD:35
D41AA-BLK:
-14        RDL:50        pCi/g    LCL:       UCL:       RPD:
D41AC-LCS:
-14        RDL:50        pCi/g    LCL:70     UCL:130    RPD:35
D41AD-IBLK:
-14        RDL:50        pCi/g    LCL:       UCL:       RPD:
9M1AJ-SAMP Calc Info:
  Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
D41AA-BLK:
  Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
D41AC-LCS:
  Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
D41AD-IBLK:
  Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

9/28/2007 10:59:36 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/28/2006, 10/3/2007, Batch: '7255454', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255454						
AC		Rev1C	McDowellD	9/25/2007 8:38:46		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	Sep1C	9/25/2007 8:38:46 AM	RICH-RC-5022 REVISION 3
SC			BlackCL	InCnt1	9/25/2007 11:20:48 AM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	9/26/2007 8:02:57 AM	RICH-RD-0001 REVISION 4
SC			AntonsonL	Rev1C	9/28/2007 10:58:51 AM	RICH-RC-0002 REVISION 8
AC			BlackCL	9/25/2007 11:20:48		
AC			BlackCL	9/26/2007 8:02:57		
AC			AntonsonL	9/28/2007 10:58:51		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 4

13/2007 1:10:03 PM

Sample Preparation/Analysis

Balance Id:1120373922

27642, Washington Closure Hanford
echtel Hanford, Inc.

AF Ni-63 PrpRC5013/5019, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Pipet #: _____

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

atch: 7255456 SOIL pCi/g PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

EQ Batch, Test: None

Prep Tech: ,WoodT

[redacted]

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
J6M9M-1-AD 1120257-1-SAMP [redacted] 9/11/2007 10:00		AmtRec: 4X125ML,500ML	0.25g,in #Containers: 5	0.25g	NITA2466 08/15/07	100		Scr:	Alpha:	Beta:
J6M9M-1-AM-X 1120257-1-DUP [redacted] 9/11/2007 10:00		AmtRec: 4X125ML,500ML	0.25g,in #Containers: 5	0.25g	NITA2467 08/15/07			Scr:	Alpha:	Beta:
J6M92-1-AD 1120257-2-SAMP [redacted] 9/11/2007 13:00		AmtRec: 4X125ML,500ML	0.27g,in #Containers: 5	0.27g	NITA2468 08/15/07			Scr:	Alpha:	Beta:
J6ND8-1-AA-B 1120000-456-BLK [redacted] 9/11/2007 10:00		AmtRec:	0.25g,in #Containers: 1	0.25g	NITA2469 08/15/07			Scr:	Alpha:	Beta:
J6ND8-1-AC-C 1120000-456-LCS [redacted] 9/11/2007 10:00		AmtRec:	0.25g,in #Containers: 1	0.25g	NISA0775 08/15/07			Scr:	Alpha:	Beta:
J6ND8-1-AD-BN 1120000-456-IBLK [redacted] 9/11/2007 10:00		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

'13/2007 1:10:10 PM

Sample Preparation/Analysis

AF Ni-63 PrpRC5013/5019, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

naiyDueDate: 09/26/2007

atch: 7255456 pCi/g
EQ Batch, Test: None

[redacted]

Vork Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

```
1 Clients for Batch:
  127642, Washington Closure Hanford              Bechtel Hanford, Inc.        ,  SS , 27038

M9M1AD-SAMP Constituent List:
Ni-63       RDL:30          pCi/g     LCL:70      UCL:130     RPD:35
ND81AA-BLK:
Ni-63       RDL:30          pCi/g     LCL:        UCL:        RPD:
ND81AC-LCS:
Ni-63       RDL:30          pCi/g     LCL:70      UCL:130     RPD:35
ND81AD-IBLK:
Ni-63       RDL:30          pCi/g     LCL:        UCL:        RPD:

M9M1AD-SAMP Calc Info:
   Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
ND81AA-BLK:
   Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
ND81AC-LCS:
   Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
ND81AD-IBLK:
   Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

9/24/2007 11:35:31 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/24/2006, 9/29/2007, Batch: '7255456', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255456						
AC		CalcC	WoodT	9/13/2007 1:12:08 PM		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			WoodT	InPrep	9/13/2007 1:12:08 PM	RICH-RC-5013 REVISION 7
SC			WoodT	Prep1C	9/13/2007 1:12:22 PM	RICH-RC-5013 REVISION 7
SC			FABREM	Sep1C	9/17/2007 5:49:01 PM	RICH-RC-5069 REVISION 6
SC			DAWKINSO	InCnt1	9/17/2007 6:00:09 PM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	9/19/2007 11:49:38 AM	RICH-RD-0001 REVISION 4
AC			WoodT	9/13/2007 1:12:22 PM		
AC			FABREM	9/17/2007 5:49:01 PM		
AC			DAWKINSO	9/17/2007 6:00:09 PM		
AC			BlackCL	9/19/2007 11:49:38		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 5

TESTAMERICA RICHLAND

4/2007 3:58:52 PM

Sample Preparation/Analysis

PRIORITY

Balance Id: 12430

Pipet #:

Sep1 DT/Tm Tech: 9-24-07 am

Sep2 DT/Tm Tech:

Prep Tech:

7642, Washington Closure Hanford
chtel Hanford, Inc.

AT H-3 Prp/SepRC5037
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

alyDueDate: 09/26/2007 J00130

tch: 7255455 SOIL pCi/g PM, Quote: SS , 27038

Q Batch, Test: None All Tests: 7255454 5SS3, 7255455 ATS6, 7255456 AFS4, 7255457 AYS7, 7255458 BBS8, 7255461 AXTA, 7255462 ITH, 7255464 DWEA,

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
6M9M-1-AG								
120257-1-SAMP								
[redacted]								
11/2007 10:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6M92-1-AG								
120257-2-SAMP								
[redacted]								
11/2007 13:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6M92-1-AN-X								
120257-2-DUP								
[redacted]								
11/2007 13:00		AmtRec: 4X125ML,500ML	#Containers: 5			Scr:	Alpha:	Beta:
6ND5-1-AA-B								
120000-455-BLK								
[redacted]								
11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6ND5-1-AC-C								
120000-455-LCS								
[redacted]								
11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6ND5-1-AD-BN								
120000-455-IBLK								
[redacted]								
11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

24/2007 3:58:53 PM

Sample Preparation/Analysis

AT H-3 Prp/SepRC5037
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12430
Pipet #:
Sep1 DT/Tm Tech: 9/24/07 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

alyDueDate: 09/26/2007

tch: 7255455 pCi/g
Q Batch, Test: None

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

omments:

Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

9M1AG-SAMP Constituent List:
:-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35
D51AA-BLK:
:-3 RDL:400 pCi/g LCL: UCL: RPD:
D51AC-LCS:
:-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35
D51AD-IBLK:
:-3 RDL:400 pCi/g LCL: UCL: RPD:

9M1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
D51AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
D51AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
D51AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

9/26/2007 3:54:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/26/2006, 10/1/2007, Batch: '7255455', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7255455						
AC		CalcC	McDowellD	9/25/2007 8:50:27		
SC			wagarr	IsBatched	9/12/2007 1:49:13 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	Sep1C	9/25/2007 8:50:27 AM	RICH-RC-5037 REVISION 3
SC			BlackCL	InCnt1	9/25/2007 11:20:52 AM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	9/26/2007 8:02:31 AM	RICH-RD-0001 REVISION 4
AC			BlackCL	9/25/2007 11:20:52		
AC			BlackCL	9/26/2007 8:02:31		

AC: Accepting Entry; SC: Status Change

STL Richland

Grp Rec Cnt: 3

:9/2007 9:38:19 AM

Sample Preparation/Analysis

Balance Id:

7642, Washington Closure Hanford
chtel Hanford, Inc.

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Pipet #:

alyDueDate: 09/26/2007

Sep1 DT/Tm Tech:

tch: 7255464 SOIL mg/kg PM, Quote: SS , 27038

Sep2 DT/Tm Tech:

Q Batch, Test: None All Tests: 7255454 5SS3, 7255455 ATS6, 7255456 AFS4, 7255457 AYS7, 7255458 BBS8, 7255461 AXTA, 7255462
ITH, 7255464 DWEA,

Prep Tech:

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
6M9M-1-AA 120257-1-SAMP [redacted] 11/2007 10:00		2,5259 AmtRec: 4X125ML,500ML	#Containers: 5		J15HB9			Scr:	Alpha:	Beta:
6M9M-1-AP-S 120257-1-MS [redacted] 11/2007 10:00		2,5230 AmtRec: 4X125ML,500ML	#Containers: 5					Scr:	Alpha:	Beta:
6M9M-1-AQ-X 120257-1-DUP [redacted] 11/2007 10:00		2,5243 AmtRec: 4X125ML,500ML	#Containers: 5					Scr:	Alpha:	Beta:
6M9M-1-AR-S 120257-1-MS [redacted] 11/2007 10:00		2,5345 AmtRec: 4X125ML,500ML	#Containers: 5	9.3 mg				Scr:	Alpha:	Beta:
6M92-1-AA 120257-2-SAMP [redacted] 11/2007 13:00		2,4848 AmtRec: 4X125ML,500ML	#Containers: 5		J15HV4			Scr:	Alpha:	Beta:
6NEP-1-AA-B 120000-464-BLK [redacted] 11/2007 10:00		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
6NEP-1-AC-C 120000-464-LCS [redacted] 11/2007 10:00		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

:9/2007 9:38:24 AM

Sample Preparation/Analysis

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

alyDueDate: 09/26/2007

tch: 7255464 mg/kg
Q Batch, Test: None

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

omments:

Clients for Batch:
127642, Washington Closure Hanford Bechtel Hanford, Inc. , SS , 27038

9M1AA-SAMP Constituent List:
EXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
9M1AP-MS Constituent List:
EXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
9M1AR-MS:
EXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
EP1AA-BLK:
EXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
EP1AC-LCS:
EXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20

9M1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
9M1AP-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
9M1AR-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
EP1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
EP1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____