0076350

SAF-RC-030
Remaining Sites Confirmation Sampling - Other Solid
FINAL DATA PACKAGE

RECEIVED
FEB 26 2008
EDMC

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 1/31/08
INITIAL/DATE

COMMENTS:

SDG J00157 **SAF-RC-030**

Rad only X Chem only Rad & Chem

X Complete Partial

Waste Site: 100-F-57

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
JAN 2008

Radiochemical Analysis By

TAL Richland

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

Assigned Laboratory Code: STLRL

Data Package Contains 19 ***Pages***

Report No.: 38216

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
J00157	RC-030	J168V8	J8A210194-1	KFWED1AA	9KFWED10	8022407
		J168V9	J8A210194-2	KFWEF1AA	9KFWEF10	8022407

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

January 31, 2008

Attention: Joan Kessner

SAF Number	:	RC-030
Date SDG Closed	:	January 21, 2008
Number of Samples	:	Two (2)
Sample Type	:	Other Solid
SDG Number	:	J00157
Data Deliverable	:	15 – Day / Summary

CASE NARRATIVE

I. Introduction

On January 21, 2008 two other solid samples were received at STL Richland (STLR) for chemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
J168V8	KFWED	OTHER SOLID	1/21/08
J168V9	KFWEF	OTHER SOLID	1/21/08

I. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

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

Chemical Analysis

Hexavalent Chromium by EPA method 7196A:

The LCS, batch blank, sample, sample duplicate (J168V8) and sample matrix spike (J168V8) 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:

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

Date: 31-Jan-08

TAL Richland STLRL

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

Report No. : 38216

SDG No: J00157

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8022407	7196_CR6								
	J168V8								
	KFWED1AA	HEXCHROME	1.29E+00 +- 0.00E+00		mg/kg	N/A	3.50E-01	3.50E-01	
	J168V8 DUP								
	KFWED1AE	HEXCHROME	1.06E+00 +- 0.00E+00		mg/kg	N/A	3.50E-01		19.5
	J168V9								
	KFWEF1AA	HEXCHROME	1.97E+00 +- 0.00E+00		mg/kg	N/A	3.50E-01	3.50E-01	

No. of Results: 3

TAL Richland RPD - Relative Percent Difference.

rptSTLRchSaSum
mary2 V5.1.5
A2002

QC Results Summary

TAL Richland STLRL

Ordered by Method, Batch No, QC Type,.

Date: 31-Jan-08

Report No. : 38216

SDG No.: J00157

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
8022407 MATRIX SPIKE, J168V8 MS								
KFWED1AC	HEXCHROME	9.18E+00 +- 0.00E+00		mg/kg	N/A	84%	-0.2	3.50E-01
8022407 LCS,								
KFXR51AC	HEXCHROME	1.64E+01 +- 0.00E+00		mg/kg	N/A	82%	-0.2	3.50E-01
8022407 BLANK QC,								
KFXR51AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A			3.50E-01

No. of Results: 3

TAL Richland

rptSTLRchQcSummary V5.1.5 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: 31-Jan-08

Lab Name:	TA Richland	SDG:	J00157	Collection Date:	1/21/2008 1:32:00 PM
Lot-Sample No.:	J8A210194-1	Report No. :	38216	Received Date:	1/21/2008 4:00:00 PM
Client Sample ID:	J168V8	COC No. :	RC-030-063	Matrix:	OTHER SOLI OTHERSOLID

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
Batch: 8022407	7196_CR6			Work Order: KFWED1AA			Report DB ID: 9KFWED10					
HEXCHROME	*1.29E+00*			0.0E+00	3.50E-01	mg/kg	N/A	*(3.7)*	1/22/08		2.5	
							3.50E-01	*N/A*			G	

No. of Results: 1 Comments:

TAL Richland
rptSTLRchSample
V5.1.5 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: 31-Jan-08

Lab Name:	TA Richland	SDG:	J00157	Collection Date:	1/21/2008 1:34:00 PM
Lot-Sample No.:	J8A210194-2	Report No. :	38216	Received Date:	1/21/2008 4:00:00 PM
Client Sample ID:	J168V9	COC No. :	RC-030-063	Matrix:	OTHER SOLI OTHERSOLID

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
Batch: 8022407	7196_CR6			Work Order:	KFWEF1AA		Report DB ID:	9KFWEF10				
HEXCHROME	*1.97E+00*			0.0E+00	3.50E-01	mg/kg	N/A	*(5.6)*	1/22/08		2.5	
							3.50E-01	*N/A*			G	

No. of Results: 1 Comments:

TAL Richland
rptSTLRchSample
V5.1.5 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: 31-Jan-08

DUPLICATE RESULTS

Lab Name:	TA Richland	SDG:	J00157	Collection Date:	1/21/2008 1:32:00 PM
Lot-Sample No.:	J8A210194-1	Report No. :	38216	Received Date:	1/21/2008 4:00:00 PM
Client Sample ID:	J168V8 DUP	COC No. :	RC-030-063	Matrix:	OTHER SOLI OTHERSOLID

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
Batch: 8022407	7196_CR6			Work Order: KFWED1AE		Report DB ID: KFWED1ER			Orig Sa DB ID: 9KFWED10			
HEXCHROME	1.06E+00			0.0E+00	3.50E-01	mg/kg	N/A	(3.)	1/22/08		2.5	
	1.29E+00		RPD	19.5				N/A			G	

No. of Results: 1 Comments:

RPD - Relative Percent Difference.

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

FORM II

BLANK RESULTS

Date: 31-Jan-08

Lab Name: TA Richland

Matrix: OTHER SOLID

SDG: J00157

Report No. : 38216

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
Batch: 8022407	7196_CR6			**Work Order:**	KFXR51AA		**Report DB ID:**	KFXR51AB				
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	1/22/08		2.5	
						3.50E-01		N/A			G	

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

TAL Richland
rptSTLRchBlank
V5.1.5 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: 31-Jan-08

Lab Name: TA Richland

Matrix: OTHER SOLID

SDG: J00157

Report No. : 38216

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
Batch: 8022407	7196_CR6			**Work Order:**	KFXR51AC		**Report DB ID:**	KFXR51AS					
HEXCHROME	1.64E+01			0.0E+00	3.50E-01	mg/kg	N/A	2.00E+01		82%	1/22/08	2.5	
							Rec Limits:	80	120	-0.2		G	

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

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

rptSTLRchLcs
V5.1.5 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 31-Jan-08

Lab Name: TA Richland SDG: J00157

Lot-Sample No.: J8A210194-1, J168V8 MS Report No. : 38216 Matrix: OTHER SOLI OTHERSOLID

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
Batch: 8022407	Work Order: KFWED1AC			Report DB ID: KFWED1CW			Orig Sa DB ID: 9KFWED10						
HEXCHROME	9.18E+00			0.0E+00	3.50E-01	mg/kg	N/A	84.14%	1.09E+01		1/22/08	2.5	7196_CR6
	1.29E+00											G	

Number of Results: 1

Comments:

TAL Richland
rptSTLRchMs
V5.1.5 A2002

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

TestAmerica

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s):8022407

Lab Sample Numbers or SDG: **J00157**

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: _____

Analyst: [signature] Date: 1/30//08

Second-Level Review: [signature] Date: 1/31/8

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-030-063	Page 2 of 2
Collector Welch-Koelling	Company Contact Matt Perrott	Telephone No. 372-9088	Project Coordinator KESSNER, JH	Price Code 9C Data Turnaround 15 Days
Project Designation Remaining Sites Confirmation Sampling - Other Solid	Sampling Location ~~100-F-44.5~~ BH 1/21/08 100-F-57		SAF No. RC-030	
Ice Chest No.	Field Logbook No. EL-1601-2	COA C00F57A000 ~~C00F44A000~~ BH 1/21/08	Method of Shipment	
Shipped To TestAmerica Incorporated, Richland	Offsite Property No.		Bill of Lading/Air Bill No.	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	Chromium Hex - 7196										

Sample No.	Matrix *	Sample Date	Sample Time										
~~J168N2~~ BH 1/21/08	OTHER SOLID												
J168V8	OTHER SOLID	1/21/08	~~1332~~ 1332	X	KFWED								
J168V9	OTHER SOLID	1/21/08	~~1334~~ 1334	X	KFWEF								
			BH 1/21/08										

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
[signature]	1/21/08 500	BHUDSON BHudson	1/21/08 1500
BHudson BHudson	1/21/08 1600	RJR LJ LANE TAL-R	1-21-08 1600

SPECIAL INSTRUCTIONS

J8A210194
J00157
DUE 2-~~6~~5-08
RW 1/22/08

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

estAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

DUE 2-6-08

Date/Time Received: 1-21-08 1600

Client: WCH SDG #: J00157 NA[ ] SAF #: RC-030 NA [ ]

Work Order Number: J8A210194 Chain of Custody # RC-030-063

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? NA [ ] 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 Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? SOIL NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: RP Date: 1-21-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

1/23/2008 10:21:41 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford
Bechtel Hanford, Inc.

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

PRIORITY

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

AnalyDueDate: 02/04/2008 J0057

Batch: 8022407 SOLID mg/kg
SEQ Batch, Test: None All Tests: 8022407 DWEA,

PM, Quote: SS , 27038

[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:
1 KFWED-1-AA J8A210194-1-SAMP [redacted] 01/21/2008 13:32		AmtRec: 60G	#Containers: 1					Scr:	Alpha:	Beta:
2 KFWED-1-AC-S J8A210194-1-MS [redacted] 01/21/2008 13:32		AmtRec: 60G	#Containers: 1					Scr:	Alpha:	Beta:
3 KFWED-1-AD-X J8A210194-1-DUP [redacted] 01/21/2008 13:32		AmtRec: 60G	#Containers: 1					Scr:	Alpha:	Beta:
4 KFWED-1-AE-S J8A210194-1-MS [redacted] 01/21/2008 13:32		AmtRec: 60G	#Containers: 1					Scr:	Alpha:	Beta:
5 KFWEF-1-AA J8A210194-2-SAMP [redacted] 01/21/2008 13:34		AmtRec: 60G	#Containers: 1					Scr:	Alpha:	Beta:
6 KFXR5-1-AA-B J8A220000-407-BLK [redacted] 01/21/2008 13:32		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
7 KFXR5-1-AC-C J8A220000-407-LCS [redacted] 01/21/2008 13:32		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

TAL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
ICOC v4.8.32

1/23/2008 10:21:41 AM

Sample Preparation/Analysis

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

PRIORITY

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

AnalyDueDate: 02/04/2008

Batch: 8022407 mg/kg
SEQ 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:

Comments:

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

KFWED1AA-SAMP Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
KFWED1AC-MS Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KFWED1AE-MS:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KFXR51AA-BLK:
HEXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
KFXR51AC-LCS:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20

KFWED1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KFWED1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KFWED1AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KFXR51AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KFXR51AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TESTAMERICA RICHLAND