0078801

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

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 9/8/08
INITIAL/DATE

COMMENTS:

SDG J00192 **SAF-RC-030**

Rad only X Chem only Rad & Chem

X Complete Partial

Waste Site: 100-H-28:6

RECEIVED
SEP 29 2008
EDMC

RECEIVED
SEP 2008

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 20 Pages

Report No.: 39807

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

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
J00192	RC-030	J17H05	J8I030233-1	KV7KV1AA	9KV7KV10	8247536
		J17H06	J8I030233-2	KV7K21AA	9KV7K210	8247536

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

September 8, 2008

Attention: Joan Kessner

SAF Number	:	RC-030
Date SDG Closed	:	September 3, 2008
Number of Samples	:	Two (2)
Sample Type	:	Other Solid
SDG Number	:	J00192
Data Deliverable	:	15-Day / Summary

CASE NARRATIVE

I. Introduction

On September 3, 2008 two other solid samples were received at TestAmerica for chemistry analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TALR ID#	MATRIX	DATE OF RECEIPT
J17H05	KV7KV	OTHER SOLID	9/03/08
J17H06	KV7K2	OTHER SOLID	9/03/08

II. Sample Receipt

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

III. Analytical Results/Methodology

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

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 sample matrix spike (J17H05) recovered less than the MDL. The PDMS recovered at 85%. The insoluble matrix spike recovered at 85%. This implies possible reducing capacity in the sample, but not enough to exhaust the more copious insoluble matrix spike. Except as noted, the LCS, batch blank, samples, sample duplicate (J17H05) and sample matrix spike (J17H05) 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)**	**TestAmerica Richland's SOP No.**
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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

Date: 08-Sep-08

TestAmerica TARL

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

Report No. : 39807

SDG No: J00192

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8247536	7196_CR6								
J17H05									
	KV7KV1AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3.50E-01	3.50E-01	
	KV7KV1AE	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3.50E-01	3.50E-01	0.0
J17H06									
	KV7K21AA	HEXCHROME	6.78E-01 +- 0.00E+00		mg/kg	N/A	3.50E-01	3.50E-01	

No. of Results: 3

TestAmerica

rptSTLRchSaSummary2 V5.1.7
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

Date: 08-Sep-08

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 39807

SDG No.: J00192

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
8247536 MATRIX SPIKE, J17H05								
KV7KV1AC	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3%	-1.0	3.50E-01
8247536 LCS,								
KV78E1AC	HEXCHROME	1.89E+01 +- 0.00E+00		mg/kg	N/A	95%	-0.1	3.50E-01
8247536 BLANK QC,								
KV78E1AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A			3.50E-01

No. of Results: 3

TestAmerica

rptSTLRchQcSummary V5.1.7 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.

TESTAMERICA

FORM I

SAMPLE RESULTS

Date: 08-Sep-08

Lab Name:	**TestAmerica**	**SDG:**	J00192	**Collection Date:**	9/3/2008 9:00:00 AM
Lot-Sample No.:	**J8I030233-1**	**Report No. :**	39807	**Received Date:**	9/3/2008 11:48:00 AM
Client Sample ID:	**J17H05**	**COC No. :**	RC-030-101	**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: 8247536	7196_CR6			**Work Order:**	KV7KV1AA		**Report DB ID:**	9KV7KV10				
HEXCHROME	***3.50E-01***	U		0.0E+00	3.50E-01	mg/kg	N/A	*(1.)*	9/3/08		2.5	
							3.50E-01	*N/A*			G	

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

8

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.

TESTAMERICA

FORM I

SAMPLE RESULTS

Date: 08-Sep-08

Lab Name:	TestAmerica	SDG:	J00192	Collection Date:	9/3/2008 9:15:00 AM
Lot-Sample No.:	J8I030233-2	Report No. :	39807	Received Date:	9/3/2008 11:48:00 AM
Client Sample ID:	J17H06	COC No. :	RC-030-101	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: 8247536	7196_CR6			Work Order: KV7K21AA			Report DB ID: 9KV7K210					
HEXCHROME	*6.78E-01*			0.0E+00	3.50E-01	mg/kg	N/A	*(1.9)*	9/3/08		2.5	
							3.50E-01	*N/A*			G	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.1.7 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.

TESTAMERICA

FORM II

Date: 08-Sep-08

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	J00192	Collection Date:	9/3/2008 9:00:00 AM
Lot-Sample No.:	J8I030233-1	Report No. :	39807	Received Date:	9/3/2008 11:48:00 AM
Client Sample ID:	J17H05	COC No. :	RC-030-101	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: 8247536	7196_CR6			Work Order: KV7KV1AE		Report DB ID: 9KV7KVER			Orig Sa DB ID: 9KV7KV10			
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	9/3/08		2.5	
	3.50E-01	U	RPD 0.0			3.50E-01		N/A			G	

No. of Results: 1 Comments:

10

TestAmerica
rptSTLRchDupV5.1
.7 A2002

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

TESTAMERICA

FORM II

BLANK RESULTS

Date: 08-Sep-08

Lab Name: TestAmerica

Matrix: OTHER SOLID

SDG: J00192

Report No. : 39807

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: 8247536	7196_CR6			Work Order:	KV78E1AA		Report DB ID:	KC78E1AB				
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	9/3/08		2.5	
						3.50E-01		N/A			G	

No. of Results: 1 Comments:

11

TestAmerica
rptSTLRchBlank
V5.1.7 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.

TESTAMERICA

FORM II

LCS RESULTS

Date: 08-Sep-08

Lab Name: TestAmerica

Matrix: OTHER SOLID

SDG: J00192

Report No. : 39807

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: 8247536	7196_CR6			Work Order:	KV78E1AC		Report DB ID:	KC78E1AS					
HEXCHROME	1.89E+01			0.0E+00	3.50E-01	mg/kg	N/A	2.00E+01		95%	9/3/08	2.5	
							Rec Limits:	80	120	-0.1		G	

No. of Results: 1 Comments:

12

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

rptSTLRchLcs
V5.1.7 A2002

TESTAMERICA

FORM II

MATRIX SPIKE RESULTS

Date: 08-Sep-08

Lab Name: TestAmerica **SDG:** J00192

Lot-Sample No.: J8I030233-1, J17H05 **Report No. :** 39807 **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	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 8247536	Work Order: KV7KV1AC			Report DB ID: 9KV7KVCW			Orig Sa DB ID: 9KV7KV10					
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	2.78%	1.26E+01	9/3/08	2.5	7196_CR6
	3.50E-01										G	

Number of Results: 1

Comments:

13

TestAmerica
rptSTLRchMs
V5.1.7 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.
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.

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Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s):8247536
Lab Sample Numbers or SDG: JOO192 J8I030233 Due 9/18
Method/Test/Parameter: **Cr+6 in SOLID / RL-WC-004**

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:
The MS recovered less than MDL. The PDMS recovered at 85%. The insoluble MS recovered at 85%. This implies possible small amount of reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS. See NCM.

Analyst: _____ Date: 9/4/08

Second-Level Review: T Steger Date: 9/5/08

Clouseau
Nonconformance Memo

TestAmerica
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NCM #:	10-12943	Classification:	**Anomaly**
NCM Initiated By:	Diana Petty	Status:	**GLREVIEW**
Date Opened:	09/04/2008	Production Area:	Classical Chemistry
Date Closed:		Tests:	None
		Lot #'s (Sample #'s):	,
		QC Batches:	None.,
Nonconformance:	Other (describe in detail)		
Subcategory:	Other (explanation required)		

Problem Description / Root Cause

Name	Date	Description
Diana Petty	09/04/2008	batch #8247536 ----------The MS recovered less than MDL. The PDMS recovered at 85%. The insoluble MS recovered at 85%. This implies possible small amount of reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS.LCS recovered within llimits.

Corrective Action

Name	Date	Corrective Action
Diana Petty	09/04/2008	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: 9/4/2008

TESTAMERICA

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-030-101	Page 1 of 1
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-H-28:6		SAF No.: RC-030	
Ice Chest No.	Field Logbook No.: EL-1601-2	COA: C00H28A000	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: J8I030233 J00192 Due 09.18.08

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									
(1) J17H05	OTHER SOLID	9/3/08	0900	X		KV7KV						
(2) J17H06	OTHER SOLID	9/3/08	0915	X		KV7K2						
~~J17H07~~	OTHER SOLID											
~~J17H08~~	OTHER SOLID											
~~J17H09~~ BH 9/3/08	OTHER SOLID											

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: Tom Wilkins	9/3/08 1105	Received By/Stored In: BHUDSON B Hudson	9/3/08 1000
Relinquished By/Removed From: BHUDSON B Hudson	9/3/08 1105	Received By/Stored In: Blawrence B	9-3-08 1105
Relinquished By/Removed From: Blawrence B	9-3-08 1148	Received By/Stored In: D. Smith	09.03.08 11.48
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

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

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Sample Check-in List

Date/Time Received: 09/03/08 1148 GM Screen Result .01

Client: WCH SDG #: J00192 NA[ ] SAF #: RC-030 NA [ ]

Work Order Number: J8I030233 Chain of Custody # RC-030-101

Shipping Container ID: N/A Air Bill # N/A

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? NA [✓] Soil pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 09/03/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

9/4/2008 4:30:51 PM

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

AnalyDueDate: 09/17/2008

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:

Batch: 8247536 OTHER SOLID mg/kg **PM, Quote: SS , 27038**
SEQ Batch, Test: None

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 KV7KV-1-AA										
J8I030233-1-SAMP					2.5446					
09/03/2008 09:00		AmtRec: 60MLG	#Containers: 1				Scr:	Alpha:		Beta:
2 KV7KV-1-AC-S										
J8I030233-1-MS					2.5663					
09/03/2008 09:00		AmtRec: 60MLG	#Containers: 1				Scr:	Alpha:		Beta:
3 KV7KV-1-AD-D										
J8I030233-1-MSD	PbCrO4	10.5 mg			2.5334					
09/03/2008 09:00		AmtRec: 60MLG	#Containers: 1				Scr:	Alpha:		Beta:
4 KV7KV-1-AE-X										
J8I030233-1-DUP					2.5155					
09/03/2008 09:00		AmtRec: 60MLG	#Containers: 1				Scr:	Alpha:		Beta:
5 KV7K2-1-AA										
J8I030233-2-SAMP					2.5199					
09/03/2008 09:15		AmtRec: 60MLG	#Containers: 1				Scr:	Alpha:		Beta:
6 KV78E-1-AA-B										
J8I030000-536-BLK										
09/03/2008 09:00		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
7 KV78E-1-AC-C										
J8I030000-536-LCS										
09/03/2008 09:00		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

TestAmerica Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.34

9/4/2008 4:30:52 PM

Sample Preparation/Analysis

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

Balance Id:
Pipet #:

AnalyDueDate: 09/17/2008

Sep1 DT/Tm Tech:

Batch: 8247536 mg/kg
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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 LLC Bechtel Hanford, Inc. , SS , 27038

KV7KV1AA-SAMP Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
KV7KV1AC-MS Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KV7KV1AD-MSD:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KV78E1AA-BLK:
HEXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
KV78E1AC-LCS:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20

KV7KV1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV7KV1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV7KV1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV78E1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV78E1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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