

RECEIVED JULY 23, 2008

Analytical Data Package Prepared For  
**Fluor Hanford Inc.**

Radiochemical Analysis By  
**TestAmerica**

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

Assigned Laboratory Code: TARK

Data Package Contains \_\_\_\_\_ Pages

Report No.: 39552

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.
W05446	F08-145	B1WC01	J8G210188-1	KRW7F1AA	9KRW7F10	8204202

**RECEIVED**  
FEB 03 2009

**EDMC**

## Certificate of Analysis

Fluor Hanford, Inc.  
1200 Jadwin Ave.  
Richland, WA 99352

July 23, 2008

Attention: Steve Trent

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SAF Number	:	F08-145
Date SDG Closed	:	July 21, 2008
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W05446
Data Deliverable	:	30/30 Day

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### CASE NARRATIVE

#### I. Introduction

On July 21, 2008 one sample was received at TestAmerica for chemical analysis. Upon receipt, the sample was assigned to lot J8G210188 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

<u>FH ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1WC01	KRW7F	WATER	7/21/08

#### 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.

Fluor Hanford, Inc.  
July 23, 2008

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**

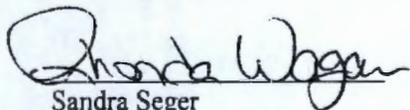
**Chemical Analysis**

Hexavalent Chromium by EPA method 7196A

The LCS, batch blank, sample, sample duplicate (B1WC01), sample matrix spike (B1WC01), and matrix spike duplicate results (B1WC01) 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,  $R = \text{constants} * f(x,y,z,...)$ . 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 ( $S/\sqrt{n}$ ), 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

<b>Action Lev</b>	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.
<b>Batch</b>	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
<b>Bias</b>	Defined by the equation $(\text{Result}/\text{Expected})-1$ as defined by ANSI N13.30.
<b>COC No</b>	Chain of Custody Number assigned by the Client or TestAmerica.
<b>Count Error (#s)</b>	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.
<b>Total Uncert (#s) <math>u_c</math> - Combined Uncertainty.</b>	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.
<b>(#s), Coverage Factor</b>	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
<b>CRDL (RL)</b>	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)
<b>Lc</b>	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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$ . 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.
<b>Lot-Sample No</b>	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.
<b>MDC MDA</b>	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%. $MDC = (4.65 * \text{Sqrt}((\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin}) + 2.71/\text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$ . For LSC methods the batch blank is used as a measure of the background variability.
<b>Primary Detector</b>	The instrument identifier associated with the analysis of the sample aliquot.
<b>Ratio U-234/U-238</b>	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.
<b>Rst/MDC</b>	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.
<b>Rst/TotUcert</b>	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.
<b>Report DB No</b>	Sample Identifier used by the report system. The number is based upon the first five digits of the <b>Work Order</b> Number.
<b>RER</b>	The equation $\text{Replicate Error Ratio} = (S-D)/[\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ 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.
<b>SDG</b>	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
<b>Sum Rpt Alpha Spec Rst(s)</b>	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.
<b>Work Order</b>	The LIMS software assign test specific identifier.
<b>Yield</b>	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: 22-Jul-08

**TestAmerica TARL**

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

Report No. : 39552

SDG No: W05446

Batch	Client Id Work Order	Parameter	Result +- Uncertainty ( 2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8204202	7196_CR6								
	B1WC01								
	KRW7F1AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A	2.00E-03		
	KRW7F1AE	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A	2.00E-03		0.0
No. of Results: 2									

TestAmerica

RPD - Relative Percent Difference.

rpt\$TLRch\$SaSum  
may2 V15.1.6  
A2002

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: 22-Jul-08

**TestAmerica TARL**

Ordered by Method, Batch No, QC Type,.

Report No. : 39552

SDG No.: W05446

Batch	Work Order	Parameter	Result +/- Uncertainty ( 2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
<b>7196_CR6</b>									
8204202	MATRIX SPIKE, B1WC01								
	KRW7F1AC	HEXCHROME	2.64E-01 +- 0.00E+00		mg/L	N/A	100%	0.0	2.00E-03
	KRW7F1AD	HEXCHROME	2.66E-01 +- 0.00E+00		mg/L	N/A	101%	0.0	2.00E-03
8204202	LCS,								
	KRXP01AC	HEXCHROME	5.05E-01 +- 0.00E+00		mg/L	N/A	101%	0.0	2.00E-03
8204202	BLANK QC,								
	KRXP01AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A			2.00E-03
<b>No. of Results: 4</b>									

TestAmerica  
rptSTLRchQcSum  
mary V5.1.6 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

Date: 22-Jul-08

## SAMPLE RESULTS

Lab Name: TestAmerica

SDG: W05446

Collection Date: 7/21/2008 10:32:00 AM

Lot-Sample No.: J8G210188-1

Report No. : 39552

Received Date: 7/21/2008 3:30:00 PM

Client Sample ID: B1WC01

COC No. : F08-145-72

Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Count 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	Primar, Detecto
Batch: 8204202	7196_CR6			Work Order: KRW7F1AA		Report DB ID: 9KRW7F10						
HEXCHROME	<b>2.00E-03</b>	U		0.0E+00	2.00E-03	mg/L	N/A	1.	7/21/08		100.0	
								N/A			ML	

No. of Results: 1

Comments:

## FORM II

Date: 22-Jul-08

## DUPLICATE RESULTS

Lab Name: TestAmerica

SDG: W05446

Collection Date: 7/21/2008 10:32:00 AM

Lot-Sample No.: J8G210188-1

Report No. : 39552

Received Date: 7/21/2008 3:30:00 PM

Client Sample ID: B1WC01

COC No. : F08-145-72

Matrix: WATER

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: 8204202	7196_CR6				Work Order: KRW7F1AE	Report DB ID: KRW7F1ER			Orig Sa DB ID: 9KRW7F10			
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1.	7/21/08		100.0	
	2.00E-03	U		RPD 0.0				N/A			ML	

No. of Results: 1    Comments:

TestAmerica    RPD - Relative Percent Difference.

rptSTLRchDupV5.1    MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

.6 A2002    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: 22-Jul-08

Lab Name: TestAmerica

SDG: W05446

Matrix: WATER

Report No. : 39552

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: 8204202	7196_CR6				Work Order: KRXP01AA			Report DB ID: KRXP01AB				
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1. N/A	7/21/08		100.0 ML	

No. of Results: 1

Comments:

FORM II  
LCS RESULTS

Date: 22-Jul-08

Lab Name: TestAmerica

SDG: W05446

Matrix: WATER

Report No.: 39552

Parameter	Result	Count Qual 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: 8204202	7196_CR6				Work Order: KRXP01AC		Report DB ID: KRXP01AS					
HEXCHROME	5.05E-01		0.0E+00	2.00E-03	mg/L	N/A	5.00E-01		101%	7/21/08	100.0	
						Rec Limits:	80	120	0.0		ML	

No. of Results: 1      Comments:

## FORM II

Date: 22-Jul-08

## MATRIX SPIKE RESULTS

Lab Name: TestAmerica

SDG: W05446

Lot-Sample No.: J8G210188-1, B1WC01

Report No. : 39552

Matrix: WATER

Parameter	SpikeResult, Orig Rst	Count Qual	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: 8204202 HEXCHROME	Work Order: KRW7F1AC 2.64E-01 2.00E-03			Report DB ID: KRW7F1CW 0.0E+00	2.00E-03	mg/L	N/A	100.38%	2.63E-01		7/21/08	100.0 ML	7196_CR6
Batch: 8204202 HEXCHROME	Work Order: KRW7F1AD 2.66E-01 2.64E-01			Report DB ID: KRW7F1DW 0.0E+00	2.00E-03	mg/L	N/A	101.14%	2.63E-01		7/21/08	100.0 ML	7196_CR6

Number of Results: 2

Comments:

Richland Laboratory  
 Data Review Check List  
 Hexavalent Chromium

Batch Number(s): 8204202				
Lab Sample Numbers or J86210188 / W05446				
Method/Test/Parameter: Cr-6 in Water / RICH-WC-5003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 <sup>nd</sup> Level Review (✓)
<b>A. Initial Calibration</b>				
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>B. Continuing Calibration</b>				
1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
<b>C. Sample Analysis</b>				
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?	✓			✓
2. Were all sample holding times met?	✓			✓
<b>D. QC Samples</b>				
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 LCS) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?	✓			✓
5. ICP only: One serial dilution performed per SDG?			✓	N/A
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	N/A
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	N/A

Review Item	Yes (✓)	No (✓)	N/A (✓)	2 <sup>nd</sup> Level Review (✓)
<b>E. Other</b>	✓			NO NCM ✓
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:

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Analyst: \_\_\_\_\_

Date: 7/22/08

Second-Level Review: \_\_\_\_\_

Date: 7/22/08

TESTAMERICA

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-145-72

PAGE 1 OF 1

COLLECTOR  
R. Ellingsworth  
SAMPLING LOCATION  
200-ZP-1  
ICE CHEST NO.

COMPANY CONTACT  
Steve Trent  
TELEPHONE NO.  
509-373-5869  
PROJECT DESIGNATION  
200-ZP-1 Characterization Sampling and Analysis - Special Analysis  
FIELD LOGBOOK NO.  
HNF-N-506-15  
ACTUAL SAMPLE DEPTH  
OFFSITE PROPERTY NO.

PROJECT COORDINATOR  
TRENT, SJ  
SAF NO.  
F08-145  
COA

PRICE CODE 7H  
AIR QUALITY   
METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

DATA  
TURNAROUND  
30 Days / 30  
Days

SHIPPED TO  
TestAmerica Incorporated, Richland

MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS  
A=Air  
DL=Drum  
Liquids  
DS=Drum  
Solids  
L=Liquid  
O=Oil  
S=Soil  
SE=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WI=Wipe  
X=Other  
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)  
SPECIAL HANDLING AND/OR STORAGE

PRESERVATION Cool~4C  
TYPE OF CONTAINER aG  
NO. OF CONTAINER(S) 1  
VOLUME 500mL  
SAMPLE ANALYSIS Chromium Hex - 7196;

BILL OF LADING/AIR BILL NO.

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B1WC01	WATER	7-21-08	1032	✓					

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R. Ellingsworth	72108 1530	RJ LVLANE TAL	72108 1530
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
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

J86210188  
W05446  
DUE 82008  
KRWTF

LABORATORY SECTION RECEIVED BY  
FINAL SAMPLE DISPOSITION DISPOSAL METHOD

TITLE DATE/TIME  
DISPOSED BY DATE/TIME



# Sample Check-in List

Date/Time Received: 72108 1530 GM Screen Result 0.1K

Client: FLH SDG #: W05446 NA [ ] SAF #: F08-145 NA [ ]

Work Order Number: 186210188 Chain of Custody # F08-145-72

Shipping Container ID: \_\_\_\_\_ Air Bill # \_\_\_\_\_

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

Sample Custodian: [Signature] Date: 72108

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person Contacted \_\_\_\_\_

[ ] No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_

TESTAMERICA

7/22/2008 9:58:13 AM

### Sample Preparation/Analysis

Balance Id:

108302, Fluor Hanford Inc  
Management Federal Serv

Waste

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION  
EA Chromium, Hexavalent (7196A)  
01 STANDARD TEST SET

Pipet #:

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204202 WATER ug/L  
SEQ Batch. Test: None

PM, Quote: SS , 29754

Sep2 DT/Tm Tech:

Prep Tech:



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:
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1 KRWF-1-AA

J8G210188-1-SAMP

07/21/2008 10:32 AmtRec: 500G #Containers: 1

Scr: Alpha: Beta:

2 KRWF-1-AC-S

J8G210188-1-MS

07/21/2008 10:32 AmtRec: 500G #Containers: 1

Scr: Alpha: Beta:

3 KRWF-1-AD-D

J8G210188-1-MSD

07/21/2008 10:32 AmtRec: 500G #Containers: 1

Scr: Alpha: Beta:

4 KRWF-1-AE-X

J8G210188-1-DUP

07/21/2008 10:32 AmtRec: 500G #Containers: 1

Scr: Alpha: Beta:

5 KRXPO-1-AA-B

J8G220000-202-BLK

07/21/2008 10:32 AmtRec: #Containers: 1

Scr: Alpha: Beta:

6 KRXPO-1-AC-C

J8G220000-202-LCS

07/21/2008 10:32 AmtRec: #Containers: 1

Scr: Alpha: Beta:

TESTAMERICA

7/22/2008 9:58:15 AM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION  
EA Chromium, Hexavalent (7196A)  
01 STANDARD TEST SET

Pipet #:

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204202  
SEQ Batch, Test: None

ug/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	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:
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Comments:

All Clients for Batch:  
108302, Fluor Hanford Inc Waste Management Federal Servi, SS , 29754

KRW7F1AA-SAMP Constituent List:  
HEXCHROME RDL: ug/L LCL:85 UCL:115 RPD:20

KRW7F1AC-MS Constituent List:

KRW7F1AD-MSD:

KRXP01AA-BLK:

KRXP01AC-LCS:

Sample ID	Calc Info	Uncert Level (#s)	Decay to SaDt	Blk Subt.	Sci.Not.	ODRs
KRW7F1AA-SAMP	Calc Info:	2	Y	N	Y	B
KRW7F1AC-MS	Calc Info:	2	Y	N	Y	B
KRW7F1AD-MSD	Calc Info:	2	Y	N	Y	B
KRXP01AA-BLK	Calc Info:	2	Y	N	Y	B
KRXP01AC-LCS	Calc Info:	2	Y	N	Y	B

Approved By

Date: