

RECEIVED SEPTEMBER 4, 2008,

0080171

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.: 39803

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.
<u>W05496</u>	F08-146	B1WMP7	J8I030312-1	KV8AD1AA	9KV8AD10	8247581
		B1WMP8	J8I030312-2	KV8AH1AA	9KV8AH10	8247581

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FEB 03 2009

EDMC

Certificate of Analysis

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

September 4, 2008

Attention: Steve Trent

SAF Number	:	F08-146
Date SDG Closed	:	September 3, 2008
Number of Samples	:	Two (2)
Sample Type	:	Water
SDG Number	:	W05496
Data Deliverable	:	24 Hour / 15 Day

CASE NARRATIVE

I. Introduction

On September 4, 2008 two samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned to lot J8I030312 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

<u>FH ID#</u>	<u>TALR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1WMP7	KV8AD	WATER	9/03/08
B1WMP8	KV8AH	WATER	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.

Fluor Hanford, Inc.
September 4, 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

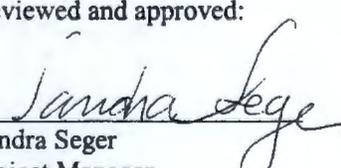
The price code listed on the COC is 7N 45Days/45Days. The price code was changed to 1A 24Hours/ 15 days (emailed dated 9/4/08 1:14PM)

The MS and MSD recovered low at 66 and 64%, respectively. The suspected cause is the amount of CrVI in the sample (B1WMP7). The sample result is 8 times higher than the amount of MS and MSD therefore the sensitivity was lost.

Except as noted, the LCS, batch blank, samples, sample duplicate (B1WMP7), sample matrix spike (B1WMP7), and matrix spike duplicate results (B1WMP7) 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, $R = \text{constants} * f(x,y,z,\dots)$. 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

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) <i>u_c - Combined Uncertainty.</i>	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, <i>u_c the combined uncertainty.</i> 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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. 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.
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%. $MDC = (4.65 * \text{Sqrt}((\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin}) + 2.71/\text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. For LSC methods the batch blank is used as a measure of the background variability.
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 = $(S-D)/[\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ 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.
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: 04-Sep-08

TestAmerica TARL

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

Report No. : 39803

SDG No: W05496

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or mDA	CRDL	RPD
8247581	7196_CR6								
	B1WMP7								
	KV8AD1AA	HEXCHROME	1.60E+00 +- 0.00E+00		mg/L	N/A	2.00E-03	3.50E-01	
	KV8AD1AE	HEXCHROME	1.61E+00 +- 0.00E+00		mg/L	N/A	2.00E-03	3.50E-01	1.1
	B1WMP8								
	KV8AH1AA	HEXCHROME	2.86E-01 +- 0.00E+00		mg/L	N/A	2.00E-03	3.50E-01	

No. of Results: 3

TestAmerica RPD - Relative Percent Difference.

rptSTLRch\SaSum
mary2 V5.1.7
A2002

QC Results Summary

Date: 04-Sep-08

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 39803

SDG No.: W05496

Batch	Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
7196_CR6									
8247581	MATRIX SPIKE, B1WMP7								
	KV8AD1AC	HEXCHROME	1.75E-01 +- 0.00E+00		mg/L	N/A	67%	-0.3	2.00E-03
	KV8AD1AD	HEXCHROME	1.69E-01 +- 0.00E+00		mg/L	N/A	64%	-0.4	2.00E-03
8247581	LCS,								
	KV8F41AC	HEXCHROME	5.06E-01 +- 0.00E+00		mg/L	N/A	101%	0.0	2.00E-03
8247581	BLANK QC,								
	KV8F41AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A			2.00E-03
No. of Results: 4									

TestAmerica Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSummary V5.1.7 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 I
SAMPLE RESULTS

Date: 04-Sep-08

Lab Name: TestAmerica
Lot-Sample No.: J8I030312-1
Client Sample ID: B1WMP7

SDG: W05496
Report No. : 39803
COC No. : F08-146-150

Collection Date: 9/3/2008 8:01:00 AM
Received Date: 9/3/2008 3:00:00 PM
Matrix: WATER

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: 8247581	7196_CR6				Work Order: KV8AD1AA		Report DB ID: 9KV8AD10					
HEXCHROME	1.60E+00			0.0E+00	2.00E-03	mg/L	N/A	(797.5)	9/3/08		100.0	
							3.50E-01	N/A			ML	

No. of Results: 1 Comments:

FORM I

Date: 04-Sep-08

SAMPLE RESULTS

Lab Name: TestAmerica

SDG: W05496

Collection Date: 9/3/2008 1:22:00 PM

Lot-Sample No.: J81030312-2

Report No. : 39803

Received Date: 9/3/2008 3:00:00 PM

Client Sample ID: B1WMP8

COC No. : F08-146-151

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	Primary Detector
Batch: 8247581	7196_CR6			Work Order: KV8AH1AA		Report DB ID: 9KV8AH10						
HEXCHROME	2.86E-01			0.0E+00	2.00E-03	mg/L	N/A	(143.)	9/3/08		100.0	
							3.50E-01	N/A			ML	

No. of Results: 1 Comments:

FORM II

Date: 04-Sep-08

DUPLICATE RESULTS

Lab Name: TestAmerica

SDG: W05496

Collection Date: 9/3/2008 8:01:00 AM

Lot-Sample No.: J8I030312-1

Report No. : 39803

Received Date: 9/3/2008 3:00:00 PM

Client Sample ID: B1WMP7

COC No. : F08-146-150

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: 8247581	7196_CR6				Work Order: KV8AD1AE	Report DB ID: KV8AD1ER			Orig Sa DB ID: 9KV8AD10			
HEXCHROME	1.61E+00			0.0E+00	2.00E-03	mg/L	N/A	(806.)	9/3/08		100.0	
	1.60E+00			RPD 1.1		3.50E-01		N/A			ML	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.
 rptSTLRchDupV5.1 MDC|MDA,Le - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 .7 A2002

FORM II
BLANK RESULTS

Date: 04-Sep-08

Lab Name: TestAmerica
Matrix: WATER

SDG: W05496
Report No. : 39803

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: 8247581		7196_CR6		Work Order: KV8F41AA		Report DB ID: KV8F41AB						
HEXCHROME	2.00E-03	U	0.0E+00	2.00E-03	mg/L	N/A	1.	9/3/08		100.0	ML	
					3.50E-01		N/A					

No. of Results: 1 Comments:

FORM II
LCS RESULTS

Date: 04-Sep-08

Lab Name: TestAmerica

SDG: W05496

Matrix: WATER

Report No. : 39803

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: 8247581	7196_CR6												
HEXCHROME	5.06E-01			0.0E+00	2.00E-03	mg/L	N/A	5.00E-01		101%	9/3/08	100.0	
							Rec Limits:	70	130	0.0		ML	

No. of Results: 1 Comments:

FORM II
MATRIX SPIKE RESULTS

Date: 04-Sep-08

Lab Name: TestAmerica

SDG: W05496

Lot-Sample No.: J8I030312-1, B1WMP7

Report No. : 39803

Matrix: WATER

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: 8247581	Work Order: KV8AD1AC			Report DB ID: KV8AD1CW		Orig Sa DB ID: 9KV8AD10						
HEXCHROME	1.75E-01			0.0E+00	2.00E-03	mg/L	N/A	66.54%	2.63E-01	9/3/08	100.0	7196_CR6
	1.60E+00										ML	
Batch: 8247581	Work Order: KV8AD1AD			Report DB ID: KV8AD1DW		Orig Sa DB ID: KV8AD1CW						
HEXCHROME	1.69E-01			0.0E+00	2.00E-03	mg/L	N/A	64.26%	2.63E-01	9/3/08	100.0	7196_CR6
	1.75E-01										ML	

Number of Results: 2

Comments:

**Richland Laboratory
 Data Review Check List
 Hexavalent Chromium**

Batch Number(s): 8247581				
Lab Sample Numbers or				
Method/Test/Parameter: Cr+6 in Water / RL-WC-003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd 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: CRDI 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 (✓)	2 nd 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:

See NCM 10-12942

Analyst: _____

BJ

Date: 9/3/08

Second-Level Review: _____

Sandra Segur

Date: _____

~~9/3/08~~
9/4/08
SKS 9/4/08

Clouseau Nonconformance Memo



NCM #: 10-12942 NCM Initiated By: Diana Petty Date Opened: 09/04/2008 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Classical Chemistry Tests: None Lot #'s (Sample #'s): , QC Batches: None.,
Nonconformance: Other (describe in detail) Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Diana Petty	09/04/2008	batch # 8247581 SDG W05496 MS and MSD recovered low at 66 and 64%, respectively. Suspect the reason is that the amount of CrVI in the sample was more than 8 times higher than the amount of the MS and MSD i.e. sensitivity was lost. LCS recovered within limits at 101%.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Diana Petty	09/04/2008	report data

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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TestAmerica Laboratories, Inc.

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-146-150

PAGE 1 OF 1

COLLECTOR

McIntyre / Cano

COMPANY CONTACT

TRENT, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

WIDRIG, DL

PRICE CODE

7N-1A

DATA TURNAROUND

45 Days + 45 Days

SAMPLING LOCATION

C6451 I-010

PROJECT DESIGNATION

K-West Characterization - Groundwater

SAF NO.

F08-146

AIR QUALITY

24 Hour / 150 DAYS

ICE CHEST NO.

FIELD LOGBOOK NO.

HNF-N-585-10

ACTUAL SAMPLE DEPTH

143'

COA

123630ES10

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

See attached email

SKS9/4/08

SHIPPED TO

TestAmerica Incorporated, Richland

BILL OF LADING/AIR BILL NO.

MATRIX*

- A=Air
- DL=Drum
- Liquids
- DS=Drum
- Solids
- L=Liquid
- O=Oil
- S=Soil
- SE=Sediment
- T=Tissue
- V=Vegetation
- W=Water
- W1=Wipe
- X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS

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

Radioactive tie to B1WMP7
RP 9/3/08

PRESERVATION

Cool-4C

TYPE OF CONTAINER

#G

NO. OF CONTAINER(S)

1

VOLUME

500ml

SAMPLE ANALYSIS

Chromium Hex - 7196;

028946

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1WMP7

WATER

9-3-08

0801

KV8AD

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

A. McIntyre / Cano

9-3-08 1500

C. Fulton

9-3-08 1500

C. Fulton

9-3-08 1500

D. Smith S. Smith

09-03-08 1500

SPECIAL INSTRUCTIONS

** All Cr VI analyses will be on a 24 hour turnaround time. This requires a separate chain of custody for Cr VI only.

J8I 030312
W05496
Due 10-18-08
20
Rwa/4/08

TITLE

DATE/TIME

DISPOSED BY

DATE/TIME

LABORATORY SECTION

RECEIVED BY

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

TestAmerica Laboratories, Inc.

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-146-151

PAGE 1 OF 1

COLLECTOR

COMPANY CONTACT

TELEPHONE NO.

PROJECT COORDINATOR

PRICE CODE

DATA TURNAROUND

SAMPLING LOCATION

PROJECT DESIGNATION

SAF NO.

AIR QUALITY

45 Days / ~~45~~ Days

C6451 I-011

K-West Characterization - Groundwater

F08-146

ICE CHEST NO.

FIELD LOGBOOK NO.

ACTUAL SAMPLE DEPTH

COA

METHOD OF SHIPMENT

24 hr / 15 Days

SHIPPED TO

OFFSITE PROPERTY NO.

BILL OF LADING/AIR BILL NO.

GOVERNMENT VEHICLE

See attached email

8/29/08

TestAmerica Incorporated, Richland

MATRIX*

POSSIBLE SAMPLE HAZARDS/ REMARKS

A=Air
DL=Drum
L=Liquids
DS=Drum
S=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 S400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

Radioactive to B1WMP1 10/2/08

PRESERVATION

Cool-4C

TYPE OF CONTAINER

8G

NO. OF CONTAINER(S)

1

VOLUME

500mL

SAMPLE ANALYSIS

Chromium Hex - 7196;

lot #

028946

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1WMP8

WATER

9-3-08

1322

KV8AH

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

ARon Enters / [Signature]

9-3-08 1500

RECEIVED BY/STORED IN

DATE/TIME

CF Han / [Signature]

9-3-08 1500

RELINQUISHED BY/REMOVED FROM

DATE/TIME

CF Han / [Signature]

9-3-08 1500

RECEIVED BY/STORED IN

DATE/TIME

[Signature] S. Smith

09-03-08 1500

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

** All Cr VI analyses will be on a 24 hour turnaround time. This requires a separate chain of custody for Cr VI only.

J8I 030312
W05496
Due 10-18-08
20
8/24/08

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



Sample Check-in List

Date/Time Received: 09/03/08 1500 GM Screen Result .01
 Client: FLH SDG #: W05496 NA [] SAF #: F08-146 NA []
 Work Order Number: J87030312 Chain of Custody # F08-146-151, 150

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 _____ Hazard Labels
 _____ Custody Seals / _____ Appropriate Sample Labels
9. Samples are:
/ _____ In Good Condition _____ Leaking
 _____ Broken _____ Have Air Bubbles
 (Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH < 2 [] pH > 2 [] pH > 9 [] Amount HNO₃ 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): No collector's name on COC#

F08-146-151

Sample Custodian: S. Smith 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 _____

Seger, Sandra

From: Widrig, Dana L [Dana_L_Widrig@RL.gov]
Sent: Thursday, September 04, 2008 1:32 PM
To: Seger, Sandra
Subject: RE: Hex Cr Analysis

Yes it is. That was a obviously a mistake. Are the results almost ready?

Thanks,

Dana

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Thursday, September 04, 2008 1:32 PM
To: Widrig, Dana L
Subject: FW: Hex Cr Analysis

Is the price code going to be 1A 24 hour / 15 day?

From: Seger, Sandra
Sent: Thursday, September 04, 2008 1:14 PM
To: 'Widrig, Dana L'
Cc: Wagar, Rhonda
Subject: RE: Hex Cr Analysis

Dana,

The COC has a price code of 7N 45day / 45day.

Sandra

From: Widrig, Dana L [mailto:Dana_L_Widrig@RL.gov]
Sent: Thursday, September 04, 2008 12:13 PM
To: Seger, Sandra; Wagar, Rhonda
Subject: Hex Cr Analysis
Importance: High

Sandra,

Do you have the results for samples B1WMP7 and B1WMP8 yet? They need the data ASAP.

Thanks,

Dana

Confidentiality Notice: The information contained in this message is intended only for the use of the addressee, and may be confidential and/or privileged. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender immediately.

Please consider the environment before printing this e-mail.

TESTAMERICA LABORATORIES, INC.

9/4/2008 1:39:16 PM

Sample Preparation/Analysis

Balance Id:

108302, Fluor Hanford Inc
Management Federal Servi

, Waste

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

Pipet #:

AnalytDueDate: 10/20/2008

Sep1 DT/Tm Tech:

Batch: 8247581 WATER ug/L
SEQ Batch, Test: None All Tests: 8247581 88EA,

PM, Quote: SS , 29754

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:
1 KV8AD-1-AA								
J8I030312-1-SAMP								
09/03/2008 08:01		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
2 KV8AD-1-AC-S								
J8I030312-1-MS								
09/03/2008 08:01		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
3 KV8AD-1-AD-D								
J8I030312-1-MSD								
09/03/2008 08:01		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
4 KV8AD-1-AE-X								
J8I030312-1-DUP								
09/03/2008 08:01		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
5 KV8AH-1-AA								
J8I030312-2-SAMP								
09/03/2008 13:22		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
6 KV8F4-1-AA-B								
J8I030000-581-BLK								
09/03/2008 08:01		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 KV8F4-1-AC-C								
J8I030000-581-LCS								
09/03/2008 08:01		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

9/4/2008 1:39:17 PM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 10/20/2008

Sep1 DT/Tm Tech:

Batch: 8247581 ug/L
 SEQ Batch, Test: None

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

KV8AD1AA-SAMP Constituent List:					
HEXCHROME	RDL:	ug/L	LCL:85	UCL:115	RPD:20
KV8AD1AC-MS Constituent List:					
HEXCHROME	RDL:10	ug/L	LCL:85	UCL:115	RPD:20
KV8AD1AD-MSD:					
HEXCHROME	RDL:10	ug/L	LCL:85	UCL:115	RPD:20
KV8F41AA-BLK:					
HEXCHROME	RDL:	ug/L	LCL:	UCL:	RPD:
KV8F41AC-LCS:					
HEXCHROME	RDL:10	ug/L	LCL:85	UCL:115	RPD:20
KV8AD1AA-SAMP Calc Info:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KV8AD1AC-MS Calc Info:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KV8AD1AD-MSD:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KV8F41AA-BLK:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KV8F41AC-LCS:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____