RECEIVED MAY 8, 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: TARL

Data Package Contains _____ Pages

Report No.: 38973

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.
W05365	F08-001	B1V368	J8C270332-1	KKCM01AA	9KKCM010	8091432
		B1V369	J8C270332-2	KKCM11AA	9KKCM110	8091432

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

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

May 8, 2008

Attention: Steve Trent

SAF Number	:	F08-001
Date SDG Closed	:	March 27, 2008
Number of Samples	:	Two (2)
Sample Type	:	Soil
SDG Number	:	W05365
Data Deliverable	:	45/45 Day

CASE NARRATIVE

I. Introduction

On March 27, 2008 two samples were received at TestAmerica for chemical analysis. Upon receipt, the samples were assigned to lot J8C270332 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1V368	KKCM0	WATER	3/27/08
B1V369	KKCM1	WATER	3/27/08

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 LCS, batch blank, samples, sample duplicate (B1V368), sample matrix spike (B1V368), and matrix spike duplicate results (B1V368) 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

TestAmerica TARL

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

Date: 08-May-08

Report No. : 38973

SDG No: W05365

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8091432	7196_CR6								
B1V368									
	KKCM01AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3.50E-01	3.50E-01	
	KKCM01AE	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3.50E-01		0.0
B1V369									
	KKCM11AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A	3.50E-01	3.50E-01	

No. of Results: 3

TestAmerica

rptSTLRchSaSummary2 V5.1.6
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

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 08-May-08

Report No. : 38973

SDG No.: W05365

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
8091432 MATRIX SPIKE, B1V368								
KKCM01AC	HEXCHROME	5.96E+00 +- 0.00E+00		mg/kg	N/A	60%	-0.4	3.50E-01
8091432 LCS,								
KKG5M1AC	HEXCHROME	1.62E+01 +- 0.00E+00		mg/kg	N/A	81%	-0.2	3.50E-01
8091432 BLANK QC,								
KKG5M1AA	HEXCHROME	3.50E-01 +- 0.00E+00	U	mg/kg	N/A			3.50E-01

No. of Results: 3

TestAmerica

rptSTLRchQcSummary 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.

TESTAMERICA

FORM I

SAMPLE RESULTS

Date: 08-May-08

Lab Name:	TestAmerica	SDG:	W05365	Collection Date:	3/27/2008 1:50:00 PM
Lot-Sample No.:	J8C270332-1	Report No. :	38973	Received Date:	3/27/2008 3:55:00 PM
Client Sample ID:	B1V368	COC No. :	F08-001-027	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8091432	7196_CR6			Work Order:	KKCM01AA		Report DB ID:	9KKCM010				
HEXCHROME	***3.50E-01***	U		0.0E+00	3.50E-01	mg/kg	N/A	*(1.)*	4/23/08		2.5	
							3.50E-01	*N/A*			G	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.1.6 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 I

SAMPLE RESULTS

Date: 08-May-08

Lab Name:	TestAmerica	SDG:	W05365	Collection Date:	3/27/2008 3:05:00 PM
Lot-Sample No.:	J8C270332-2	Report No. :	38973	Received Date:	3/27/2008 3:55:00 PM
Client Sample ID:	B1V369	COC No. :	F08-001-028	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8091432	7196_CR6			Work Order:	KKCM11AA		Report DB ID:	9KKCM110				
HEXCHROME	***3.50E-01***	U		0.0E+00	3.50E-01	mg/kg	N/A	*(1.)*	4/23/08		2.5	
							3.50E-01	*N/A*			G	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.1.6 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-May-08

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W05365	**Collection Date:**	3/27/2008 1:50:00 PM
Lot-Sample No.:	**J8C270332-1**	**Report No. :**	38973	**Received Date:**	3/27/2008 3:55:00 PM
Client Sample ID:	**B1V368**	**COC No. :**	F08-001-027	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8091432	7196_CR6			**Work Order:** KKCM01AE			**Report DB ID:** KKCM01ER		**Orig Sa DB ID:** 9KKCM010			
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	4/23/08		2.5	
	3.50E-01	U	**RPD**	**0.0**				N/A			G	

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

10

TestAmerica
rptSTLRchDupV5.1
.6 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-May-08

Lab Name: TestAmerica

Matrix: SOIL

SDG: W05365

Report No. : 38973

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: 8091432	7196_CR6			Work Order:	KKG5M1AA		Report DB ID:	KKG5M1AB				
HEXCHROME	3.50E-01	U		0.0E+00	3.50E-01	mg/kg	N/A	(1.)	4/23/08		2.5	
						3.50E-01		N/A			G	

No. of Results: 1 Comments:

11

TestAmerica
rptSTLRchBlank
V5.1.6 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-May-08

Lab Name: TestAmerica

SDG: W05365

Matrix: SOIL

Report No. : 38973

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: 8091432	7196_CR6			Work Order:	KKG5M1AC		Report DB ID:	KKG5M1AS					
HEXCHROME	1.62E+01			0.0E+00	3.50E-01	mg/kg	N/A	2.00E+01		81%	4/23/08	2.5	
							Rec Limits:	80	120	-0.2		G	

No. of Results: 1 Comments:

12

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

rptSTLRchLcs
V5.1.6 A2002

TESTAMERICA

FORM II

MATRIX SPIKE RESULTS

Date: 08-May-08

Lab Name: TestAmerica **SDG:** W05365

Lot-Sample No.: J8C270332-1, B1V368 **Report No. :** 38973 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Exp-ected	Exp Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 8091432	Work Order: KKCM01AC			Report DB ID: KKCM01CW			Orig Sa DB ID: 9KKCM010						
HEXCHROME	5.96E+00			0.0E+00	3.50E-01	mg/kg	N/A	59.60%	1.00E+01		4/23/08	2.5	7196_CR6
	2.00E-03											G	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.1.6 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

Due 5/12/08

Batch Number(s): 8091432 J8C270332

Lab Sample Numbers or SDG: ~~J00159~~ WQ05365 SKS 4/30/08

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: The MS recovered low at 58%. The LCS and the insoluble MS recovered within limits. The PDMS recovered at 94.5%. See NCM

Analyst: [signature] Date: 4/30/08

Second-Level Review: [signature] Date: 5/8/08

Clouseau
Nonconformance Memo

TestAmerica

NCM #:	10-12236		
NCM Initiated By:	Diana Petty	Classification:	Anomaly
Date Opened:	04/30/2008	Status:	GLREVIEW
Date Closed:		Production Area:	Classical Chemistry
		Tests:	7196A
		Lot #'s (Sample #'s):	J8C270332 (1,2), J8C310000 (432),
		QC Batches:	8091432,
Nonconformance:	Other (describe in detail)		
Subcategory:	Other (explanation required)		

Problem Description / Root Cause

Name	Date	Description
Diana Petty	04/30/2008	The MS recovered low at 58%. The PDMS recovered at 95%. The insoluble MS recovered at 90%. This implies a possible small amount of reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS.

Corrective Action

Name	Date	Corrective Action
Diana Petty	04/30/2008	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: 4/30/2008

TESTAMERICA

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-001-027

COLLECTOR
NCO Sampler White / C.

COMPANY CONTACT
TRENT, SJ

TELEPHONE NO.
373-5869

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 8N

DATA TURNAROUND
45 Days / 45 Days

SAMPLING LOCATION
~~C6386, I-1~~ C6386, I-1 PMG 3/27/08

PROJECT DESIGNATION
100-KR-4 Pump & Treat Expansion - Soil

SAF NO.
F08-001

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.

ACTUAL SAMPLE DEPTH
57.6'-59.6'

COA
122636ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
TestAmerica Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION Cool~4C

TYPE OF CONTAINER G/P

NO. OF CONTAINER(S) 1

VOLUME 60mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS Chromium Hex - 7196;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1V368	SOIL	3-27-08	1350 ✓

LOT # 024870

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	3-27-08 1555	RK LJ LANE TAL IL	32708 1555

SPECIAL INSTRUCTIONS

J8C270332
W05365
DUE ~~6-6~~ 8N -5-12-08
KKCMO

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

A-6003-618(01/06)

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TESTAMERICA

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-001-028

COLLECTOR NCO Sampler White	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** TRENT, SJ	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION ~~C5306, 12~~ C6386, I-1/2 PMG 3/27/08 mw 3-27-08	**PROJECT DESIGNATION** 100-KR-4 Pump & Treat Expansion - Soil		**SAF NO.** F08-001	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH** 63.3'-65.3'	**COA** 122636ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO TestAmerica Incorporated, Richland	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

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
B1V369	SOIL	3-27-08	1505 ~~1250~~ mw 3-27-08

LOT # 024810

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	32708 1555	KK LWLANE TAL IL	32708 1555
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
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

JSC270332
WO5365
DUE 5 12 08
KKCM1

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

DUE 5 12 08

Date/Time Received: 3 27 08 GM Screen Result 0.1 K

Client: FLH SDG #: WO5365 NA[ ] SAF #: F08-001 NA [ ]

Work Order Number: J8C270332 Chain of Custody # F08-001-027,-028

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 [ ] 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: _____ Date: 3 27 08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, Rev. 7, 1/08

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4/1/2008 4:16:19 PM

Sample Preparation/Analysis

108302, Fluor Hanford Inc , Flour
Hanford Inc

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

AnalyDueDate: 05/12/2008 W05365

Batch: 8091432 SOIL mg/kg PM, Quote: SS , 50639
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
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:
1 KKCM0-1-AA J8C270332-1-SAMP 03/27/2008 13:50		AmtRec: 60G	#Containers: 1		2.5082g			Scr:	Alpha:	Beta:
2 KKCM0-1-AC-S J8C270332-1-MS 03/27/2008 13:50		AmtRec: 60G	#Containers: 1		2.5075g			Scr:	Alpha:	Beta:
3 KKCM0-1-AD-X J8C270332-1-DUP 03/27/2008 13:50		AmtRec: 60G	#Containers: 1		2.5095g			Scr:	Alpha:	Beta:
4 KKCM0-1-AE-S J8C270332-1-MS PbCrO4 03/27/2008 13:50		1.6099g = 9.9mg AmtRec: 60G	#Containers: 1		2.4987g			Scr:	Alpha:	Beta:
5 KKCM1-1-AA J8C270332-2-SAMP 03/27/2008 15:05		AmtRec: 60G	#Containers: 1		2.4980g			Scr:	Alpha:	Beta:
6 KKG5M-1-AA-B J8C310000-432-BLK 03/27/2008 13:50		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
7 KKG5M-1-AC-C J8C310000-432-LCS 03/27/2008 13:50		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

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4/1/2008 4:16:19 PM

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:

AnalyDueDate: 05/12/2008

Batch: 8091432 mg/kg
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:

Comments:

All Clients for Batch:
108302, Fluor Hanford Inc Flour Hanford Inc , SS , 50639

KKCM01AA-SAMP Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
KKCM01AC-MS Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KKCM01AE-MS:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
KKG5M1AA-BLK:
HEXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
KKG5M1AC-LCS:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20

KKCM01AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KKCM01AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KKCM01AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KKG5M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KKG5M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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