

Analytical Data Package Prepared For

Fluor Hanford, Inc.

Analysis Provided By

TestAmerica

2800 George Washington Way

Richland WA, 99354

(509)375-3131

Assigned Laboratory Code: TALR

SDG Number: W05376



Amended Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

June 4, 2008

Attention: Steve Trent

SAF Number	:	F08-039
Date SDG Closed	:	April 17, 2008
Number of Samples	:	Two (2)
Sample Type	:	Water
SDG Number	:	W05376
Data Deliverable	:	24 Hour / 15 Day

AMENDED CASE NARRATIVE

I. Introduction

On April 17, 2008 two samples were received at TestAmerica for chemical analysis. Upon receipt, the samples were assigned to lot J8D170213 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>
B1V4Y9	KLG0W	WATER	4/17/08
B1V501	KLG09	WATER	4/17/08

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.

June 4, 2008

The requested analyses were:

Chemical Analysis

Chromium by EPA method SW8466010

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

Chromium by EPA method SW8466010

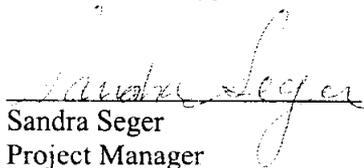
The LCS, batch blank, sample and duplicate sample results are within contractual requirements.

The analysis date was incorrect on the original report. An amended report that corrected the error was sent on May 7, 2008.

On May 29, 2008 TestAmerica received a Problems and Discrepancies (SDG W05376) stating that the analysis date was incorrect. The amended report was sent again on June 4, 2008.

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

Problems and Discrepancies

SDG W05376

TARL

1. The analysis date is incorrect and reflects a date that is prior to the sampling date. Please correct the hardcopy data package and re-submit the data.

Original sent 4/24 9:56 AM

Amended Report was sent on
5/17/08 at 1:22 PM

PAID was received on 5/29/08
more than 3 weeks after amended
Report was sent

Seger, Sandra

From: Widrig, Dana L [Dana_L_Widrig@RL.gov]
Sent: Thursday, May 29, 2008 10:59 AM
To: Jordan, Erika; Seger, Sandra; Hampt, Heidi; Sumner, Laine C; ^CPP Sample Management; Ayres, Doris E; Trent, Stephen J
Subject: P&D_W05376.doc
Attachments: P&D_W05376.doc

Erika,

Attached find a Problems and Discrepancies (P&D) report for SDG W05376. Please include a copy of this P&D with your response and reference it in your response. Please attach any hardcopy response to the end of your narrative in your new data package.

Thanks,

Dana L. Widrig
Sample Management Project Coordinator
Fluor Hanford - Soil & Groundwater Remediation Project
Ph: (509) 376-2858
Cell: (509) 392-2297

4/17/2008
 Analysis Date: 4/14/2008 SKS 5/7/08
 QC Batch #: 8108374
 Analyte: Chromium
 MDL 0.0194

Sample ID	Comment	Client ID	Instrument Reading (mg/L)	Final Vol. (L)	Dilution Factor	Recov'd Cr (mg/L)	Results (ug/L)	Yield
KLG0W1AA	10:1 dilution	B1V4Y9'	0.2168	1	10	2.168	2168	
KLG0W1AC	10:1 dilution MS	B1V4Y9'	1.079	1	10	10.79	10790	86.22%
KLG0W1AD	10:1 dilution MSD	B1V4Y9'	1.075	1	10	10.75	10750	85.82%
KLG0W1AE	10:1 dilution - Duplicate	B1V4Y9 DUP'	0.2135	1	10	2.135	2135	
KLG081AA	10:1 dilution	B1V501'	0.2224	1	10	2.224	2224	
KLHMW1AA	Reagent Blank		-0.0003	0.05	1	-0.0003	<MDL	
KLHMW1AC	LCS		0.9772	0.05	1	0.9772		97.72%



THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Metals

Batch Number(s): 8108374 J8D170213				
Lab Sample Number or SDG: WΦ 5376 SES 4/17/08				
Method/Test/Parameter: Metals				
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: 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 (✓)	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 _____

Analyst: *Alan E. M. [Signature]*

Date 4/17/08

Second-Level Review: *E. [Signature]*

Date: 4/24/08

Fluor Hanford Inc. COLLECTOR NCO Samplers		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST PROJECT COORDINATOR TRENT, SJ		F08-039-088	PAGE 1 OF 1
COMPANY CONTACT WIDRIG, DL TELEPHONE NO. 376-2858		PROJECT DESIGNATION DR-5 GW Treatment Facility Regen Waste Characterization - Special Sample		PRICE CODE 1A	DATA TURNAROUND 24 Hours / 15 Days
SAMPLING LOCATION DR-5 filtered ICE CHEST NO. GRP-05-010		FIELD LOGBOOK NO. HNF-N-4283		AIR QUALITY <input type="checkbox"/>	
SHIPPED TO TestAmerica Incorporated, Richland		OFFICE PROPERTY NO. N/A		METHOD OF SHIPMENT GOVERNMENT VEHICLE	
MATRIX* A=Air DL=Drum L=Liquid DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Waste WI=Wipe X=Other		PRESERVATION HNO3 to pH <2			
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)		TYPE OF CONTAINER 1			
SPECIAL HANDLING AND/OR STORAGE 17APR08		VOLUME 500ml			
SAMPLE NO. JB1V4Y9		MATRIX* WATER			
CHAIN OF POSSESSION RELINQUISHED BY/REMOVED FROM DATE/TIME RELINQUISHED BY/REMOVED FROM DATE/TIME		SIGN/ PRINT NAMES RECEIVED BY/STORED IN DATE/TIME RECEIVED BY/STORED IN DATE/TIME		SPECIAL INSTRUCTIONS ** The field samplers are requested to filter the sample with a 0.45 micron filter and preserve with HNO3 to a pH less than 2. J8D170213 W05376 DUE 41808 KLGOW	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		TITLE DISPOSED BY	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		DATE/TIME	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		DATE/TIME	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		DATE/TIME	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		DATE/TIME	
RELINQUISHED BY/REMOVED FROM DATE/TIME		RECEIVED BY/STORED IN DATE/TIME		DATE/TIME	
LABORATORY SECTION RECEIVED BY		FINAL SAMPLE DISPOSITION DISPOSAL METHOD		DATE/TIME	

TESTAMERICA		Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F08-039-090		PAGE 1 OF 1	
COLLECTOR NCO Samplers	COMPANY CONTACT WIDRUG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 1A	AIR QUALITY	SAF NO. F08-039	COA 122569ES10	DATA TURNAROUND 24 Hours / 15 Days	
SAMPLING LOCATION DR-5 Un-Filtered	PROJECT DESIGNATION DR-5 GW Treatment Facility Regen Waste Characterization - Special Sampl	ACTUAL SAMPLE DEPTH N/A	FIELD LOGBOOK NO. HNF-N-4283	METHOD OF SHIPMENT GOVERNMENT VEHICLE					
ICE CHEST NO. 682-05-010	OFFSITE PROPERTY NO. N/A								
SHIPPER TO TestAmerica Incorporated, Richland									
MATRIX* A=Air D=Drum L=Liquid DS=Drum S=Soil O=Oil S=Soil SE=Settlement T=Tissue V=Vegetation W=Water WT=Whole 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 HNO3 to pH <2	TYPE OF CONTAINER GP	NO. OF CONTAINER(S) 1	VOLUME 500ml	SAMPLE ANALYSIS DOE Metals SOLUB (TAL) (Onsite)			
SPECIAL HANDLING AND/OR STORAGE 17APR08									
SAMPLE NO. 00 B1V501	MATRIX* WATER	SAMPLE DATE 4-17-08	SAMPLE TIME 0830						
CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS					
RELINQUISHED BY/REMOVED FROM <i>Susan S. Nelson</i>	DATE/TIME 4/17/08 1015	RECEIVED BY/STORED IN <i>R. L. SLANE</i>	DATE/TIME 4-17-08	** Special Instructions: The laboratory is to filter the samples and preserve them with add before analysis.					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	J8D170213					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	W05376					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	DOE 41808					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	KLG09					
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TITLE					
LABORATORY SECTION	RECEIVED BY			DISPOSED BY					
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD			DATE/TIME					

A-600-618(01/06)



Sample Check-in List

Date/Time Received: 4/7/08 10:15 GM Screen Result 0.1K
Client: FLH SDG#: W05376 NA[] SAF#: F08-039 NA[]
Work Order Number: J8D170213 Chain of Custody # F08-039-088,-090

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: 2
7. Sample holding times exceeded? NA[X] Yes[] No[]
8. Samples have: Tape Custody Seals Hazard Labels Appropriate Sample Labels
9. Samples are: In Good Condition Broken Leaking Have Air Bubbles
10. Sample pH taken? NA[] pH<2[X] pH>2[] pH>9[] Amount HNO3 Added
11. Sample Location, Sample Collector Listed? *
12. Were any anomalies identified in sample receipt? Yes[] No[X]
13. Description of anomalies (include sample numbers):

Sample Custodian: [Signature] Date: 4/7/08

Table with 4 columns: Client Sample ID, Analysis Requested, Condition, Comments/Action

Client Informed on by Person Contacted

[] No action necessary; process as is.

Project Manager Date

Sample Preparation/Analysis

Balance Id: _____ Pipet #: _____

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

Sep1 DT/Tm Tech: _____
Sep2 DT/Tm Tech: _____
Prep Tech: _____

PM, Quote: SS , 29754

Batch: 8108374 WATER ug/L
SEQ Batch, Test: None All Tests: 8108374 88EA,

Waste
108302, Fluor Hanford Inc
Management Federal Servi

AnalyteDate: 04/18/2008

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 KLG0W-1-AA								
J8D170213-1-SAMP								
04/17/2008 08:30								
2 KLG0W-1-AC-S								
J8D170213-1-MS								
04/17/2008 08:30								
3 KLG0W-1-AD-D								
J8D170213-1-MSD								
04/17/2008 08:30								
4 KLG0W-1-AE-X								
J8D170213-1-DUP								
04/17/2008 08:30								
5 KLG09-1-AA								
J8D170213-2-SAMP								
04/17/2008 08:30								
6 KLHMW-1-AA-B								
J8D170000-374-BLK								
04/17/2008 08:30								
7 KLHMW-1-AC-C								
J8D170000-374-LCS								
04/17/2008 08:30								

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
ICOC v4.8.32

4/17/2008 1:10:01 PM
 Balance Id: _____
 Pipet #: _____
 Sample Preparation/Analysis
 88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
 EA Chromium, Hexavalent (7196A)
 01 STANDARD TEST SET
 AnalyzeDate: 04/18/2008
 Batch: 8108374
 SEO Batch, Test: None
 ug/L
 Sep1 DT/Tm Tech: _____
 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:

Comments:

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

KLQOW1AA-SAMP Constituent List:

KLQOW1AC-MS Constituent List:

KLQOW1AD-MSD:

KLQOW1AA-BLK:

KLQOW1AC-LCS:

KLQOW1AA-SAMP Calc Info:	Decay to SaDt:	Blk Subt.:	Sci. Not.:	ODRs:
Uncert Level (\$s): 2	Y	N	Y	B
KLQOW1AC-MS Calc Info:	Y	N	Y	B
Uncert Level (\$s): 2	Y	N	Y	B
KLQOW1AD-MSD:	Y	N	Y	B
Uncert Level (\$s): 2	Y	N	Y	B
KLQOW1AA-BLK:	Y	N	Y	B
Uncert Level (\$s): 2	Y	N	Y	B
KLQOW1AC-LCS:	Y	N	Y	B
Uncert Level (\$s): 2	Y	N	Y	B

Approved By: _____ Date: _____

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
 Richland Wa. pd - Prep Dt, r - Reference Dt, ec - Enrichment Cell, ct - Cocktailed Added

WO Cnt: 7
 ICOC v4.8.32