RECEIVED MARCH 20, 2008

Analytical Data Package Prepared For

Fluor Hanford, Inc.

Analysis Provided By

TestAmerica Richland
2800 George Washington Way
Richland WA, 99354
(509)375-3131
Assigned Laboratory Code: TALR

SDG Number: WQ5352

Data Package Contains 10 Pages

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

March 20, 2008

Attention: Steve Trent

SAF Number	:	F08-039
Date SDG Closed	:	March 6, 2008
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W05352
Data Deliverable	:	24 Hour / 15 Day

CASE NARRATIVE

I. Introduction

On March 6, 2008 one sample was received at TestAmerica Laboratories Richland (TALR) for chemical analysis. Upon receipt, the sample was assigned to lot J8C060352 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1TNL6	KH6CE	WATER	3/06/08

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.

March 20, 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.

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

Analysis Date: **3/6/2008**
QC Batch #: **8066553**
Analyte: **Chromium**
MDL 0.0194

Sample ID	Comment	Client ID	Instrum't Reading (mg/L)	Final Vol. (L)	Dilution Factor	Recov'd Cr (mg/L)	Results (ug/L)	Yield
kh6ce1aa	10:1 dilution	B1TNL6	0.1567	1	10	1.567	1567	
kh6ce1ad	10:1 dilution - Duplicate	B1TNL6	0.1564	1	10	1.564	1564	
kh6ew1aa	Reagent Blank		-0.0009	0.05	1	-0.0009	<MDL	
kh6ew1ac	LCS		1.03	0.05	1	1.03		103.00%

TestAmerica

Richland Laboratory
Data Review Check List
Metals

Batch Numbers 8066553				
Lab Sample Numbers or SDG:				
Method/Test/Parameter: **Metals**				
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

Analyst: [signature] Date 3/6/08

Second-Level Review: [signature] Date: ~~3/6/08~~ 3/7/8 3/7/8

TESTAMERICA RICHLAND

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-039-078

COLLECTOR
NCO Samplers KHUGHES

COMPANY CONTACT
WIDRIG, DL

TELEPHONE NO.
376-2858

PROJECT COORDINATOR
TRENT, SJ

PRICE CODE 1A

DATA TURNAROUND
24 Hours / 15 Days

SAMPLING LOCATION
DR-5 filtered

PROJECT DESIGNATION
DR-5 GW Treatment Facility Regen Waste Characterization - Special Sampli

SAF NO.
F08-039

AIR QUALITY ☐

ICE CHEST NO.
GRP-05-010

FIELD LOGBOOK NO.
HNF-N-4283

ACTUAL SAMPLE DEPTH

COA
122569ES10

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
06MAR08

PRESERVATION	HNO3 to pH <2
TYPE OF CONTAINER	GP
NO. OF CONTAINER(S)	1
VOLUME	500mL
SAMPLE ANALYSIS	ICP Metals - 6010A (TAL) {Chromium}

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1TNL6	WATER	3-6-08	12:00

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R.R. Fox	3-6-08 1335	LLANE	TAL-R 3-6-08 1335
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
** 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.

J8C060352
W05352
DUE 3-7-08
KHGCE

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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Sample Check-in List

DUE 3-7-08

Date/Time Received: 3-6-08 1335 **GM Screen Result** 0.2K

Client: FLH **SDG #:** W05352 NA[ ] **SAF #:** F08-039 NA [ ]

Work Order Number: J8C060352 **Chain of Custody #** F08-039-078

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: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ___ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ] **Amount HNO_3 Added** _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] **Date:** 3-6-08

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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3/6/2008 4:24:09 PM

Sample Preparation/Analysis

108302, Fluor Hanford Inc , Waste
Management Federal Servi

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

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/07/2008

Batch: 8066553 WATER ug/L PM, Quote: SS , 29754

SEQ Batch, Test: None All Tests: 8066553 88EA,

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:
1 KH6CE-1-AA								
J8C060352-1-SAMP								
03/06/2008 12:00		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
2 KH6CE-1-AC-S								
J8C060352-1-MS								
03/06/2008 12:00		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
3 KH6CE-1-AD-X								
J8C060352-1-DUP								
03/06/2008 12:00		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
4 KH6EW-1-AA-B								
J8C060000-553-BLK								
03/06/2008 12:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 KH6EW-1-AC-C								
J8C060000-553-LCS								
03/06/2008 12:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

KH6CE1AA-SAMP Constituent List:

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Sample Preparation/Analysis

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

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/07/2008

Batch: 8066553 ug/L
SEQ Batch, Test: None

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:

KH6CE1AC-MS Constituent List:

KH6EW1AA-BLK:

KH6EW1AC-LCS:

KH6CE1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KH6CE1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KH6EW1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KH6EW1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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