

Analytical Data Package Prepared For

Fluor Hanford Inc.

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99352, (509)-375-3131.

Assigned Laboratory Code: STLRL

Data Package Contains 21 Pages

Report No.: 20721

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W03861		B15773	J21300210-		9E85N110	2274344



CERTIFICATE OF ANALYSIS

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

October 18, 2002

Attention: Steve Trent



SAF Number	:	C02-049
Date SDG Closed	:	September 30, 2002
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W03861
Data Deliverable	:	45-Day / Summary

I. Introduction

On September 30, 2002, one water sample was received at STL Richland (STLR) for chemical analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Fluor Hanford, Inc. specific IDs:

<u>STLR ID#</u>	<u>FLUOR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
E85N1	B15773	WATER	9/30/02

II. 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 Analyses**
Chromium Hex by EPA method 7196A

III. Quality Control

The analytical results for each analysis performed under SDG W03861 include 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.

Bechtel Hanford, Inc.
October 18, 2002
Page 2

IV. Comments

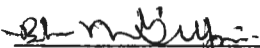
Chemical Analyses

Chromium Hex by EPA method 7196A:

The LCS, batch blank, duplicate (B15773), matrix spike (B15773), matrix spike duplicate (B15773), and 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:



Barbara M. Gillespie
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL 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 STL Richland.
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 CRDL (RL)	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations. Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "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 STL Richland 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: 24-Oct-02

STL Richland STLRL

Ordered by Client Sample ID, Batch No.

Report No. : 20721

SDG No: W03861

Client ID	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC MDA	RER
B15773	9E85N110	HEXCHROME	5.10E-01 +- 0.00E+00		mg/L	N/A	2.00E-03	
B15773 DUP	E85N11AE	HEXCHROME	5.10E-01 +- 0.00E+00		mg/L	N/A	2.00E-03	
Number of Results:		2						

STL Richland RER - Replicate Error Ratio = $(S-D)/[\text{sqrt}(\text{sq}(\text{TPUs})+\text{sq}(\text{TPUd}))]$ as defined by ICPT BOA.

rptSTLRchSaSum
V3.95 A97

QC Results Summary
STL Richland STLRL
 Ordered by QC Type, Batch No.

Date: 24-Oct-02

Report No. : 20721

SDG No.: W03861

QC Type	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC MDA
MATRIX SPI	E85N11AC	HEXCHROME	5.36E-01 +- 0.00E+00		mg/L	N/A	101.84%	0.0	2.00E-03
MATRIX SPI	E85N11AD	HEXCHROME	5.35E-01 +- 0.00E+00		mg/L	N/A	101.81%	0.0	2.00E-03
LCS	E86XX1AC	HEXCHROME	5.15E-01 +- 0.00E+00		mg/L	N/A	103.00%	0.0	2.00E-03
BLANK QC	E86XX1AA	HEXCHROME	0.00E+00 +- 0.00E+00	U	mg/L	N/A			2.00E-03

Number of Results: 4

FORM I

Date: 24-Oct-02

SAMPLE RESULTS

Lab Name: STL Richland

SDG: W03861

Collection Date: 9/30/2002

Lot-Sample No.: J21300210-

Report No. : 20721

Received Date: 9/30/2002 3:00:00 PM

Client Sample ID: B15773

COC No. : C02-049-7

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	Alliquot Size	Analy Method, Primary Detector
Batch: 2274344	Work Order:	Report DB ID: 9E85N110										
HEXCHROME	5.10E-01		0.00E+00	2.00E-03	mg/L	N/A	(255.)	10/1/02		100.0	ML	EPA7196
							N/A					

Number of Results: 1

Comments:

00

FORM II

Date: 24-Oct-02

DUPLICATE RESULTS

Lab Name: STL Richland

SDG: W03861

Collection Date: 9/30/2002

Lot-Sample No.: J21300210-

Report No. : 20721

Received Date: 9/30/2002 3:00:00 PM

Client Sample ID: B15773 DUP

COC No. : C02-049-7

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	Analy Method, Primary Detector
Batch: 2274344	Work Order:			Report DB ID: E85N11AE		Orig Sa DB ID: 9E85N110						
HEXCHROME	5.10E-01			0.00E+00	2.00E-03	mg/L	N/A	(255.)	10/1/02		100.0	EPA7196
	5.10E-01	RPD	0.0					N/A			ML	

Number of Results: 1

Comments:

60

STL Richland RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUD))] as defined by ICPT BOA.

rptSTLRchDupV3. MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

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FORM II

Date: 24-Oct-02

BLANK RESULTS

Lab Name: STL Richland

SDG: W03861

Lot-Sample No.: J2I300210-

Report No. : 20721

Matrix: WATER

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MD A,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Analy Method, Primary Detector
Batch: 2274344	Work Order:		Report DB ID: E86XX1AA									
HEXCHROME	0.00E+00	U		0.00E+00	2.00E-03	mg/L	N/A	0. N/A	10/1/02		100.0 ML	EPA7196

Number of Results: 1

Comments:

10

FORM II
LCS RESULTS

Date: 24-Oct-02

Lab Name: STL Richland

SDG: W03861

Lot-Sample No.: J2I300210-

Report No. : 20721

Matrix: WATER

Parameter	Result	Count Qual	Count Error (2s)	Total Uncert(2 s)	MDC MD	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 2274344	Work Order:	Report DB ID: E86XX1AC											
HEXCHROME	5.15E-01			0.00E+00	2.00E-03	mg/L	N/A	5.00E-01		103.00%	10/1/02	100.0	EPA7196
							Rec Limits:			0.0		ML	

Number of Results: 1

Comments:

11

FORM II

Date: 24-Oct-02

MATRIX SPIKE RESULTS

Lab Name: STL Richland

SDG: W03861

Lot-Sample No.: J2I300210-

Report No. : 20721

Matrix: WATER

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MD	Rpt Unit, CRDL	Yield	Rec- overy	Exp- ected	Exp Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 2274344	Work Order:			Report DB ID: E85N11AD		Orig Sa DB ID: 9E85N110							
HEXCHROME	5.35E-01			0.00E+00	2.00E-03	mg/L	N/A	101.81%	5.26E-01		10/1/02	100.0	EPA7196
	5.10E-01	RPD	0.0									ML	
HEXCHROME	5.36E-01			0.00E+00	2.00E-03	mg/L	N/A	101.84%	5.26E-01		10/1/02	100.0	EPA7196
	5.10E-01	RPD	0.0									ML	

Number of Results: 2

Comments:

12

STL Richland RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
 rptSTLRchMs Blas - (Result/Expected)-1 as defined by ANSI N13.30.
 V3.95 A97

**SEVERN
TRENT
SERVICES**

Richland Laboratory
Data Review Check List
METALS

Work Order Number(s): <u>E85N1</u>		BATCH # <u>2274344</u>		
Lab Sample Numbers or SDG: <u>W03861</u>		LOT # <u>J21300210</u>		
Method/Test/Parameter: <u>CR+6 IN WATER</u>		<u>RICHWC 5003 R.L</u>		
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: M. fabri

Date: 10/15/02

Second-Level Review: [Signature]

Date: 10-17-02

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 2274344

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			✓
1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?			✓
3. Are the correct isotopes reported?			✓
B. QC Samples			✓
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?			✓
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		✓
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			✓
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: sh m bryson Date: 10/17/02

CHAIN OF CUSTODY

U-29154

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # C02-049-7
		Page 1 of 1

Collector F.M. HALL	Contact/Requester SF TRENT	Telephone No. (509) 373-5869	MSIN FAX
SAF No. C02-049	Sampling Origin HANFORD SITE	Purchase Order/Charge Code	
Project Title CERCLA ISRM GW MONITORING, SEPTEMBER 2002	Logbook No. SAUS-1160	Ice Chest No. ERC-01	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment GOVT VEHICLE	Bill of Lading/Air Bill No.	
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS
* * * **SDG**
W03861

DUE 11-14
J2I300210

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes No
FAX copies of STL log-in to SF Trent (373-5871) and DL Stewart (372-1704). Invoices & deliverables to SF Trent, FH.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B15773 (F)		W	9/30/02	1056	1x500-mL G/P	7196_CR6: Hexavalent Chromium (1) E85N1	Cool 4C
B15774		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By F.M. HALL Print Sign	Date/Time SEP 30 2002 15:20	Received By STL A. Rhineheart Print A. Rhineheart Sign	Date/Time SEP 30 2002 15:20	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liqui T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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Sample Check-in List

Date/Time Received: 9/30/02 @ 15:00 AR
 Client: PGW SDG #: W03861 NA SAF #: C02-049 NA
 Work Order Number: JAI300210 Chain of Custody # C02-049-7
 Shipping Container ID: ERC-01 Air Bill # N/A

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? 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 samples labels
9. Samples are:
 in good condition _____ leaking
 _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2
11. Sample Location, Sample Collector Listed? * Yes No
 *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: April Hunsley / Richard Date: 9/30/02

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____

10/1/2002 11:36:07 AM

Sample Preparation/Analysis

Balance Id: _____

108302, FLUOR HANFORD IC
Management Federal Servi

Waste 88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

Pipet #: _____

Report Due: 11/14/2002 **W038601**

01 STANDARD TEST SET

Sep1 DT/Tm Tech: _____

Batch: 2274344 WATER ug/L PM, Quote: BG1, 29754

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None All Tests: 88EA, 2274344 88EA,

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	QC Vial 2 Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date
1 E85N1-1-AA J2I300210-1-SAMP								
09/30/2002 10:56		AmtRec: 500P,20ML	#Containers: 2			Scr Rst:	Alpha:	Beta:
2 E85N1-1-AC-S J2I300210-1-MS								
09/30/2002 10:56		AmtRec: 500P,20ML	#Containers: 2			Scr Rst:	Alpha:	Beta:
3 E85N1-1-AD-D J2I300210-1-MSD								
09/30/2002 10:56		AmtRec: 500P,20ML	#Containers: 2			Scr Rst:	Alpha:	Beta:
4 E85N1-1-AE-X J2I300210-1-DUP								
09/30/2002 10:56		AmtRec: 500P,20ML	#Containers: 2			Scr Rst:	Alpha:	Beta:
5 E86XX-1-AA-B J2J010000-344-BLK								
09/30/2002 10:56		AmtRec:	#Containers: 1			Scr Rst:	Alpha:	Beta:
6 E86XX-1-AC-C J2J010000-344-LCS								
09/30/2002 10:56		AmtRec:	#Containers: 1			Scr Rst:	Alpha:	Beta:

19

10/1/2002 11:36:07 AM

Sample Preparation/Analysis

Balance Id: _____

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

Pipet #: _____

Report Due: 11/14/2002

Sep1 DT/Tm Tech: _____

Batch: 2274344 ug/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: _____

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	QC Vial 2 Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date
--------------------------------------	-------------------	-----------------------------	------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------

Comments:

All Clients for Batch:
108302, FLUOR HANFORD IC

Waste Management Federal Servi, BGI, 29754

E85N11AA-SAMP Constituent List:

E85N11AC-MS Constituent List:

E85N11AD-MSD:

E86XX1AA-BLK:

E86XX1AC-LCS:

E85N11AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

E85N11AC-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

E85N11AD-MSD:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

E86XX1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

E86XX1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

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ICOC Fraction Transfer/Status Report

ByDate: 9/17/02, 10/18/02, Batch: '2274344', User: *All Order by BatchNbr,WorkOrderNbr,DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
2274344				
AC		IsDisp	FABREM 10/1/02 8:00:34 AM	
SC		FABREM	InPrep 10/1/02 8:00:34 AM	RICH-WC-5003 REVISION 6
SC		FABREM	Prep1C 10/15/02 7:30:58 PM	RICH-WC-5003 REVISION 6
SC		FABREM	IsDisp 10/15/02 7:32:38 PM	RICH-HS-0001 REVISION 4
AC		FABREM	10/15/02 7:30:58 PM	
AC		FABREM	10/15/02 7:32:38 PM	