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SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

April 6, 2007

Leasa Hetzer
2430 Stevens Drive
Richland, WA 99354

Reference: Contract 615

Dear Ms. Hetzer:

Accompanying this letter are the Data Package(s) and Invoice(s) for the radiochemical analyses for the following Fluor Sample Delivery Groups:

SDG NUMBER	SAF NUMBER
W05127	F07-011

If you have any questions regarding this data package or require any additional information please contact Sherryl Adam at 375-3131.

Receipt of this letter and the packages are acknowledged by:

Leasa E. Hetzer 4/9/2007
Name Date

XC: File

APR 2007 RECEIVED

RECEIVED MAR 2 1 2008 EDMC

W05127

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ICOC 36

APR 2007
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Analytical Data Package Prepared For

Fluor Hanford Inc.

Radiochemical Analysis By

STL Richland

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: STLRL

Data Package Contains _____ Pages

Report No.: 34889

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W05127	F07-011	B1LTY6	J7B270263-1	JP6M11AD	9JP6M110	7058496
		B1LTY6	J7B270263-1	JP6M11AC	9JP6M110	7060475
		B1LTY6	J7B270263-1	JP6M11AG	9JP6M110	7060485
		B1LTY6	J7B270263-1	JP6M11AA	9JP6M110	7060487
		B1LTY6	J7B270263-1	JP6M11AE	9JP6M110	7060488

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SEVERN TRENT STL

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2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
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Certificate of Analysis

Fluor Hanford
P.O. Box 1000, T6-03
Richland, WA 99352

April 5, 2007

Attention: Steve Trent

SAF Number	:	F07-011
Date SDG Closed	:	February 27, 2007
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W05127
Data Deliverable	:	45/45 Day

CASE NARRATIVE

I. Introduction

On February 27, 2007 one sample was received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the sample was assigned to lot J7B270263 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1LTY6	JP6M1	WATER	2/27/07

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.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Liquid Scintillation Counting
Tritium by method RICH-RC-500
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

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, sample and sample duplicate (B1LTY6) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, sample and sample duplicate (B1LTY6) results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1LTY6) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1LTY6) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1LTY6), sample matrix spike (B1LTY6), and matrix spike duplicate results (B1LTY6) are within contractual requirements.

April 5, 2007

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:

Sherryl A. Adam
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 = 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/vn), 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) ***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 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 * 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 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

STL Richland STLRL

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

Date: 05-Apr-07

Report No. : 34889

SDG No: W05127

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC or MDA	CRDL	RPD
7060485 SRTOT_SEP_PRECIP_GPC									
B1LTY6									
	JP6M11AG	STRONTIUM	9.27E-02 +- 5.02E-01	U	pCi/L	92%	1.11E+00		
B1LTY6 DUP									
	JP6M11AQ	STRONTIUM	4.36E-01 +- 5.75E-01	U	pCi/L	88%	1.18E+00		129.8
7060487 9310_ALPHABETA_GPC									
B1LTY6									
	JP6M11AA	BETA	9.42E+00 +- 2.23E+00		pCi/L	100%	2.75E+00	4.00E+00	
B1LTY6 DUP									
	JP6M11AR	BETA	9.78E+00 +- 2.27E+00		pCi/L	100%	2.77E+00	4.00E+00	3.8
7060488 RICHRC5014									
B1LTY6									
	JP6M11AE	ALPHA	4.18E+00 +- 2.12E+00		pCi/L	100%	2.53E+00	3.00E+00	
B1LTY6 DUP									
	JP6M11AT	ALPHA	1.67E+00 +- 1.39E+00	U	pCi/L	100%	2.28E+00	3.00E+00	85.5
7058496 7196_CR6									
B1LTY6									
	JP6M11AD	HEXCHROME	2.30E-02 +- 0.00E+00		pCi/L	N/A	2.00E-03		
B1LTY6 DUP									
	JP6M11AC	HEXCHROME	2.82E-01 +- 0.00E+00		pCi/L	N/A			169.8
7060475 906.0_H3_LSC									
B1LTY6									
	JP6M11AC	H-3	5.42E+03 +- 3.65E+02		pCi/L	100%	3.64E+02	4.00E+02	
B1LTY6 DUP									
	JP6M11AP	H-3	5.27E+03 +- 3.61E+02		pCi/L	100%	3.66E+02	4.00E+02	2.7

No. of Results: 10

STL Richland

rptSTLRchSaSummary2 V5.1 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
STL Richland STLRL

Date: 05-Apr-07

Ordered by Method, Batch No, QC Type,.

Report No. : 34889

SDG No.: W05127

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
SRTOT_SEP_PRECIP_GPC								
7060485 BLANK QC								
JQCLR1AA	STRONTIUM	3.33E-01 +- 5.44E-01	U	pCi/L	92%			1.14E+00
7060485 LCS								
JQCLR1AC	STRONTIUM	2.61E+01 +- 7.00E+00		pCi/L	89%	97%	0.0	1.15E+00
9310_ALPHABETA_GPC								
7060487 BLANK QC								
JQCLW1AA	BETA	-4.79E-01 +- 1.10E+00	U	pCi/L	100%			2.55E+00
7060487 LCS								
JQCLW1AC	BETA	2.13E+01 +- 3.56E+00		pCi/L	100%	94%	-0.1	2.41E+00
RICHRC5014								
7060488 BLANK QC								
JQCLX1AA	ALPHA	7.15E-01 +- 6.69E-01	U	pCi/L	100%			1.03E+00
7060488 LCS								
JQCLX1AC	ALPHA	2.21E+01 +- 4.84E+00		pCi/L	100%	97%	0.0	1.66E+00
7196_CR6								
7058496 MATRIX SPIKE								
JP6XF1AC	HEXCHROME	2.84E-01 +- 0.00E+00		pCi/L	N/A			
7058496 MATRIX SPIKE DUP								
JP6M11AD	HEXCHROME	2.82E-01 +- 0.00E+00		pCi/L	N/A			
7058496 BLANK QC								
JP6XF1AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	pCi/L	N/A			
7058496 LCS								
JP6XF1AC	HEXCHROME	4.62E-01 +- 0.00E+00		pCi/L	N/A			
906.0_H3_LSC								
7060475 BLANK QC								
JQCK81AA	H-3	-1.74E+00 +- 1.62E+02	U	pCi/L	100%			3.62E+02
JQCK81AD	H-3	-3.76E+01 +- 1.62E+02	U	pCi/L	100%			3.74E+02
7060475 LCS								
JQCK81AE	H-3	2.32E+03 +- 2.58E+02		pCi/L	100%	86%	-0.1	3.73E+02
JQCK81AC	H-3	2.47E+03 +- 2.61E+02		pCi/L	100%	91%	-0.1	3.64E+02

No. of Results: 14

STL Richland

rptSTLRchQcSummary V5.1 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/Mds or Total Uncert or not identified by gamma scan software.

STL RICHLAND

FORM I

SAMPLE RESULTS

Date: 05-Apr-07

Lab Name:	STL Richland	SDG:	W05127	Collection Date:	2/27/2007 8:57:00 AM
Lot-Sample No.:	J7B270263-1	Report No. :	34889	Received Date:	2/27/2007 12:00:00 PM
Client Sample ID:	B1LTY6	COC No. :	F07-011-077	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: 7058496	7196_CR6			Work Order:	JP6M11AD		Report DB ID: 9JP6M110					
HEXCHROME	2.30E-02			0.0E+00	2.00E-03	pCi/L	N/A	*(11.5)*	2/27/07 02:00 p		100.0	
								N/A			ML	
Batch: 7060475	906.0_H3_LSC			Work Order:	JP6M11AC		Report DB ID: 9JP6M110					
H-3	5.42E+03		3.1E+02	3.7E+02	3.64E+02	pCi/L	100%	*(14.9)*	3/14/07 12:37 a		0.005	LSC3
						1.73E+02	4.00E+02	*(29.7)*			L	
Batch: 7060485	SRTOT_SEP_PRECIP_GPC			Work Order:	JP6M11AG		Report DB ID: 9JP6M110					
STRONTIUM	9.27E-02	U	5.0E-01	5.0E-01	1.11E+00	pCi/L	92%	*0.08*	3/12/07 06:15 p		0.5008	GPC26B
						5.25E-01		*0.37*			L	
Batch: 7060487	9310_ALPHABETA_GPC			Work Order:	JP6M11AA		Report DB ID: 9JP6M110					
BETA	9.42E+00		1.9E+00	2.2E+00	2.75E+00	pCi/L	100%	*(3.4)*	3/27/07 07:54 p		0.2005	GPC27A
						1.30E+00	4.00E+00	*(8.5)*			L	
Batch: 7060488	RICHRC5014			Work Order:	JP6M11AE		Report DB ID: 9JP6M110					
ALPHA	4.18E+00		2.0E+00	2.1E+00	2.53E+00	pCi/L	100%	*(1.7)*	3/27/07 07:29 p		0.1996	GPC11B
						1.00E+00	3.00E+00	*(3.9)*			L	

No. of Results: 5 Comments:

STL Richland
rptSTLRchSample
V5.1 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.

FORM I

SAMPLE RESULTS

Date: 05-Apr-07

Lab Name:	STL Richland	SDG:	W05127	Collection Date:	2/27/2007 8:57:00 AM
Lot-Sample No.:	J7B270263-1	Report No. :	34889	Received Date:	2/27/2007 12:00:00 PM
Client Sample ID:	B1LTY6	COC No. :	F07-011-077	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

STL Richland
rptSTLRichSample
V5.1 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.

STL RICHLAND

FORM II

Date: 05-Apr-07

DUPLICATE RESULTS

Lab Name:	STL Richland	SDG:	W05127	Collection Date:	2/27/2007 8:57:00 AM
Lot-Sample No.:	J7B270263-1	Report No. :	34889	Received Date:	2/27/2007 12:00:00 PM
Client Sample ID:	B1LTY6 DUP	COC No. :	F07-011-077	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: 7058496	7196_CR6			Work Order: JP6M11AC		Report DB ID: JP6M11PR			Orig Sa DB ID: 9JP6M110			
HEXCHROME	2.82E-01			0.0E+00		pCi/L	N/A	N/A	2/27/07 02:00 p		100.0	
	2.30E-02		RPD	169.8				N/A			ML	
Batch: 7060475	906.0_H3_LSC			Work Order: JP6M11AP		Report DB ID: JP6M11PR			Orig Sa DB ID: 9JP6M110			
H-3	5.27E+03		3.0E+02	3.6E+02	3.66E+02	pCi/L	100%	(14.4)	3/14/07 01:57 a		0.005	LSC3
	5.42E+03		RPD	2.7		4.00E+02		(29.2)			L	
Batch: 7060485	SRTOT_SEP_PRECIP_GPC			Work Order: JP6M11AQ		Report DB ID: JP6M11QR			Orig Sa DB ID: 9JP6M110			
STRONTIUM	4.36E-01	U	5.6E-01	5.7E-01	1.18E+00	pCi/L	88%	0.37	3/12/07 06:15 p		0.504	GPC26C
	9.27E-02	U	RPD	129.8				(1.5)			L	
Batch: 7060487	B310_ALPHABETA_GPC			Work Order: JP6M11AR		Report DB ID: JP6M11RR			Orig Sa DB ID: 9JP6M110			
BETA	9.78E+00		1.9E+00	2.3E+00	2.77E+00	pCi/L	100%	(3.5)	3/27/07 07:54 p		0.1995	GPC27B
	9.42E+00		RPD	3.8		4.00E+00		(8.6)			L	
Batch: 7060488	RICHRC5014			Work Order: JP6M11AT		Report DB ID: JP6M11TR			Orig Sa DB ID: 9JP6M110			
ALPHA	1.67E+00	U	1.4E+00	1.4E+00	2.28E+00	pCi/L	100%	0.74	3/27/07 07:29 p		0.2039	GPC11C
	4.18E+00		RPD	85.5		3.00E+00		(2.4)			L	

No. of Results: 5 Comments:

STL Richland
rptSTLRchDupV5.1
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.

FORM II
BLANK RESULTS

Date: 05-Apr-07

Lab Name: STL Richland
Matrix: WATER

SDG: W05127
Report No. : 34889

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Lc	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 7058496	7196_CR6			Work Order:	JP6XF1AA		Report DB ID:	JP6XF1AB				
HEXCHROME	2.00E-03	U		0.0E+00		pCi/L	N/A	N/A	2/27/07 02:00 p		100.0	
								N/A			ML	
Batch: 7060475	906.0_H3_LSC			Work Order:	JQCK81AA		Report DB ID:	JQCK81AB				
H-3	-1.74E+00	U	1.5E+02	1.6E+02	3.62E+02	pCi/L	100%	0.	3/13/07 07:06 p		0.005	LSC3
					1.72E+02	4.00E+02		-0.02			L	
Batch: 7060475	906.0_H3_LSC			Work Order:	JQCK81AD		Report DB ID:	JQCK81DX				
H-3	-3.76E+01	U	1.5E+02	1.6E+02	3.74E+02	pCi/L	100%	-0.1	3/13/07 09:52 p		0.005	LSC3
					1.78E+02	4.00E+02		-0.46			L	
Batch: 7060488	RICHRC5014			Work Order:	JQCLX1AA		Report DB ID:	JQCLX1AB				
ALPHA	7.15E-01	U	6.6E-01	6.7E-01	1.03E+00	pCi/L	100%	0.7	3/27/07 07:29 p		0.2004	GPC11D
					3.58E-01	3.00E+00		(2.1)			L	
Batch: 7060487	9310_ALPHABETA_GPC			Work Order:	JQCLW1AA		Report DB ID:	JQCLW1AB				
BETA	-4.79E-01	U	1.1E+00	1.1E+00	2.55E+00	pCi/L	100%	-0.19	3/27/07 07:54 p		0.2019	GPC27D
					1.21E+00	4.00E+00		-0.87			L	
Batch: 7060485	SRTOT_SEP_PRECIP_GPC			Work Order:	JQCLR1AA		Report DB ID:	JQCLR1AB				
STRONTIUM	3.33E-01	U	5.4E-01	5.4E-01	1.14E+00	pCi/L	92%	0.29	3/12/07 06:15 p		0.5053	GPC26D
					5.41E-01	4.00E+00		(1.2)			L	

No. of Results: 6 Comments:

STL Richland
rptSTLRchBlank
V5.1 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.

FORM II

LCS RESULTS

Date: 05-Apr-07

Lab Name: STL Richland

SDG: W05127

Matrix: WATER

Report No. : 34889

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: 7058496	7196_CR6			Work Order:	JP6XF1AC		Report DB ID:	JP6XF1CS					
HEXCHROME	4.62E-01			0.0E+00		pCi/L	N/A	0.00E+00		#Div/0!	2/27/07 02:00 p	100.0	
							Rec Limits:	85	115			ML	
Batch: 7060475	906.0_H3_LSC			Work Order:	JQCK81AC		Report DB ID:	JQCK81CS					
H-3	2.47E+03		2.3E+02	2.6E+02	3.64E+02	pCi/L	100%	2.71E+03	8.14E+01	91%	3/13/07 08:29 p	0.005	LSC3
							Rec Limits:	70	130	-0.1		L	
Batch: 7060475	906.0_H3_LSC			Work Order:	JQCK81AE		Report DB ID:	JQCK81EM					
H-3	2.32E+03		2.3E+02	2.6E+02	3.73E+02	pCi/L	100%	2.71E+03	8.14E+01	86%	3/13/07 11:14 p	0.005	LSC3
							Rec Limits:	70	130	-0.1		L	
Batch: 7060488	RICHRC5014			Work Order:	JQCLX1AC		Report DB ID:	JQCLX1CS					
ALPHA	2.21E+01		3.3E+00	4.8E+00	1.66E+00	pCi/L	100%	2.28E+01	7.14E-01	97%	3/27/07 07:29 p	0.201	GPC11A
							Rec Limits:	75	125	0.0		L	
Batch: 7060487	9310_ALPHABETA_GPC			Work Order:	JQCLW1AC		Report DB ID:	JQCLW1CS					
BETA	2.13E+01		2.3E+00	3.6E+00	2.41E+00	pCi/L	100%	2.25E+01	2.60E-01	94%	3/27/07 07:54 p	0.2007	GPC27C
							Rec Limits:	70	130	-0.1		L	
Batch: 7060485	SRTOT_SEP_PRECIP_GPC			Work Order:	JQCLR1AC		Report DB ID:	JQCLR1CS					
STRONTIUM	2.61E+01		1.6E+00	7.0E+00	1.16E+00	pCi/L	89%	2.68E+01	5.26E-01	97%	3/12/07 06:15 p	0.5036	GPC27A
							Rec Limits:	75	125	0.0		L	

No. of Results: 6 Comments:

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

rptSTLRichLcs
V5.1 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 05-Apr-07

Lab Name: STL Richland SDG: W05127

Lot-Sample No.: J7B270263-1 Report No. : 34889 Matrix: WATER

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: 7058496	Work Order: JP6M11AD			Report DB ID: JP6M11DW			Orig Sa DB ID: JP6M11CW						
HEXCHROME	2.82E-01			0.0E+00		pCi/L	N/A		0.00E+00		2/27/07 02:00 p	100.0	7196_CR6
	2.84E-01											ML	
Batch: 7058498	Work Order: JP6XF1AC			Report DB ID: JP6M11CW			Orig Sa DB ID: 9JP6M110						
HEXCHROME	2.84E-01			0.0E+00		pCi/L	N/A		0.00E+00		2/27/07 02:00 p	100.0	7196_CR6
	2.30E-02											ML	

Number of Results: 2

Comments:

STL Richland RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
rptSTLRchMs V5.1 Bias - (Result/Expected)-1 as defined by ANSI N13.30.
A2002

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/28/2007 4:00:54 PM

Lot No., Due Date: J7B270263; 04/13/2007

Client, Site: 108302; FLH HANFORD

QC Batch No., Method Test: 7060488; RALPHATH Alpha by GPC-Th

SDG, Matrix: W05127; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson **Date** 3-28-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7060488
W05127

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: Sheryl R Adam Date: 5-29-07

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/28/2007 4:02:16 PM

Lot No., Due Date: J7B270263; 04/13/2007

Client, Site: 108302; FLH HANFORD

QC Batch No., Method Test: 7060487; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05127; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson Date 3-28-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7060487
W05127

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: Sheryl A. Adam Date: 5-29-07

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/14/2007 1:20:05 PM

Lot No., Due Date: J7B270263; 04/13/2007

Client, Site: 108302; FLH HANFORD

QC Batch No., Method Test: 7060475; RTRITIUM H-3 by LSC

SDG, Matrix: W05127; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are In the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JP6M11AC 5.00<10.00 Q:VB ok AL 3/14/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JQCK81AF SVP15/5<>SVP10/10 JQCK81AG SVP15/5<>SVP10/10 JQCK81AA SVP15/5<>SVP10/10 JQCK81AC SVP15/5<>SVP10/10 JQCK81AD SVP15/5<>SVP10/10 JQCK81AE SVP15/5<>SVP10/10 JP6M11AC SVP15/5<>SVP10/10 JP6M11AP SVP15/5<>SVP10/10 Q:VC ok AL 3/14/07		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc. IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3	✓		

OK; No Callin Level Found => H-3			
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ☑	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ☑
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ☑
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ☑	No	N/A

First Level Review Angela Long **Date** 3/14/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7060475
W05127

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: Sheryl A Adam Date: 5-14-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/13/2007 3:23:19 PM

Lot No., Due Date: J7B270263; 04/13/2007

Client, Site: 108302; FLH HANFORD

QC Batch No., Method Test: 7060485; RSRTOT SrTot by GPC

SDG, Matrix: W05127; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson Date 3-13-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number: 7060485
W05127

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: Cheryl A Adam Date: 3-14-07

STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): JP6M1

Lab Sample Numbers or SDG: W05127

Method/Test/Parameter: Cr+6 in Water / RICH-WC-5003

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: DMaries Date: 2/28/07

Second-Level Review: [signature] Date: 2/26/07

STL RICHLAND

Fluor Hanford Inc. J7B270263	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST W05127	F07-011-077	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
Pope/Pfister/Hughes/Wise	TRENT, SJ	373-5869	TRENT, SJ	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION: 05-D	PROJECT DESIGNATION: AQUIFER TUBE SAMPLING IN THE 100-BC-5 OU		SAP NO.: F07-011	Due 04.13.07	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-451-1	COA: 122543ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE		
SHIPPED TO: Severn Trent 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	HNO3 to pH <2	HNO3 to pH <2	None					
TYPE OF CONTAINER	aG	P	P	P					
NO. OF CONTAINER(S)	1	1	3	1					
VOLUME	500mL	1000mL	1000mL	1000mL	JP6m1				
SAMPLE ANALYSIS	Chromium Hex - 7196; *	Gross Alpha; Gross Beta;	Strontium-89,90 – Total Sr;	Tritium - H3;					

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1LTY6	WATER	2/27/07	0857	✓	✓	✓	✓						

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: K HUGHES	2-27-07 1100	RECEIVED BY/STORED IN: J. Pope	2-27-07 1200
RELINQUISHED BY/REMOVED FROM: J. Pope	2.27.07 1250	RECEIVED BY/STORED IN: [illegible]	2/27/07 1200
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: * Filtered to .45 µm

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

A-6003-618(01/06)

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 2/27/07 1200

Client: FLH SDG #: W05127 NA [ ] SAF #: F07-011 NA [ ]

Work Order Number: J7B270263 Chain of Custody # F07-011-077

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? 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 _____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 [✓] adjusted pH [ ]
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: [signature] Date: 2/27/07 1200

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, 12/05, Rev. 6

STL RICHLAND

3/27/2007 6:23:36 PM

Sample Preparation/Analysis

Balance Id:1120482733

108302, Fluor Hanford Inc Management Federal Servi , Waste

AZ Gross Alpha PrpRC5014
TZ Gross Alpha by GPC using Th-230 curve
01 STANDARD TEST SET

Pipet #: _____

AnalyDueDate: 04/09/2007

Sep1 DT/Tm Tech:

Batch: 7060488 WATER pCi/L PM, Quote: SA , 29754

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7058496 88EA, 7060475 ARS6, 7060485 CGTH, 7060487 BCS6, 7060488 AZTZ,

Prep Tech: ,BockJ

[redacted]

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 JP6M1-1-AE J7B270263-1-SAMP [redacted] 02/27/2007 08:57		199.60g,in AmtRec: 500MLP,5XLP	#Containers: 6		28.9mg	50	11B Scr:	1955 Alpha: 9.57E-04 uCi/Sa	3/27/07 DD Beta: 1.70E-03 uCi/Sa	
2 JP6M1-1-AT-X J7B270263-1-DUP [redacted] 02/27/2007 08:57		203.90g,in AmtRec: 500MLP,5XLP	#Containers: 6		28.4mg	50	11C Scr:	Alpha: 9.57E-04 uCi/Sa	Beta: 1.70E-03 uCi/Sa	
3 JQCLX-1-AA-B J7C010000-488-BLK [redacted] 02/27/2007 08:57		200.40g,in AmtRec:	#Containers: 1		1.3mg	50	11D Scr:	Alpha:	Beta:	
4 JQCLX-1-AC-C J7C010000-488-LCS [redacted] 02/27/2007 08:57		201.00g,in AmtRec:	asd4141 02/14/07,pd 02/09/06,r #Containers: 1		1.6mg	50	11A Scr:	Alpha:	Beta:	

Comments:

DH 2/27/2007

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

JP6M11AE-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JQCLX1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JQCLX1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JP6M11AE-SAMP Calc Info:

28

STL RICHLAND

3/27/2007 6:37:57 PM

Sample Preparation/Analysis

Balance Id:1120482733

108302, Fluor Hanford Inc , Waste
Management Federal Servi

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/09/2007

Sep1 DT/Tm Tech:

Batch: 7060487 WATER pCi/L PM, Quote: SA , 29754

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7058496 88EA, 7060475 ARS6, 7060485 CGTH, 7060487 BCS8, 7060488 AZTZ,

Prep Tech: ,BockJ

[redacted]

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 JP6M1-1-AA J7B270263-1-SAMP [redacted]		200.50g,in			58.7mg	100	27A	2044	3/27/2007	
02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6				Scr:	Alpha: 9.57E-04 uCi/Sa	Beta: 1.70E-03 uCi/Sa	
2 JP6M1-1-AR-X J7B270263-1-DUP [redacted]		199.50g,in			50.9mg	100	27B			
02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6				Scr:	Alpha: 9.57E-04 uCi/Sa	Beta: 1.70E-03 uCi/Sa	
3 JQCLW-1-AA-B J7C010000-487-BLK [redacted]		201.90g,in			0.7mg	100	27D			
02/27/2007 08:57		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
4 JQCLW-1-AC-C J7C010000-487-LCS [redacted]		200.70g,in	besb3024 02/26/07,pd 08/08/06,r		0.5mg	100	27E			
02/27/2007 08:57		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

Comments:

DH 3/27/2007

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

JP6M11AA-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JQCLW1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JQCLW1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JP6M11AA-SAMP Calc Info:

29

STL RICHLAND

3/1/2007 3:45:11 PM

Sample Preparation/Analysis

108302, Fluor Hanford Inc Management Federal Servi , Waste

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 04/09/2007 WO 527

Batch: 7060475 WATER pCi/L PM, Quote: SA , 29754

SEQ Batch, Test: None

Balance Id: 12424

Pipet #:

Sep1 DT/Tm Tech: 3-12-07

Sep2 DT/Tm Tech:

Prep Tech:

[redacted]

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 JP6M1-1-AC J7B270263-1-SAMP [redacted] 02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha: 9.57E-04 uCi/Sa	Beta: 1.70E-03 uCi/Sa
2 JP6M1-1-AP-X J7B270263-1-DUP [redacted] 02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha: 9.57E-04 uCi/Sa	Beta: 1.70E-03 uCi/Sa
3 JQCK8-1-AA-B J7C010000-475-BLK [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JQCK8-1-AC-C J7C010000-475-LCS [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JQCK8-1-AD-BX J7C010000-475-MBLK [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JQCK8-1-AE-CM J7C010000-475-MLCS [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JQCK8-1-AF-BN J7C010000-475-IBLK [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

3/1/2007 3:45:20 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 3-12 0700m
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 04/09/2007

Batch: 7060475 pCi/L
SEQ Batch, Test: None

[redacted]

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:
8 JQCK8-1-AG-BN								
J7C010000-475-IBLK								
[redacted]								
02/27/2007 08:57	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

JP6M11AC-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JQCK81AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JQCK81AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JQCK81AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JQCK81AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JQCK81AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JQCK81AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

JP6M11AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JQCK81AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JQCK81AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JQCK81AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JQCK81AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JQCK81AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

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STL RICHLAND

3/1/2007 3:45:22 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 04/09/2007

Batch: 7060475 pCi/L
SEQ Batch, Test: None

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 3-12 0 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

[redacted]

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:

JQCR81AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y QDRs: B

Approved By _____ Date: _____

STL RICHLAND

3/12/2007 1:49:07 PM

Sample Preparation/Analysis

Balance Id:1120482733

108302, Fluor Hanford Inc , Waste
Management Federal Servi

CG Sr-Total Prp/SepRC5006
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/09/2007

Sep1 DT/Tm Tech: 03/12/2007 10:24,ManisD

Batch: 7060485 WATER pCi/L PM, Quote: SA , 29754

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7058496 88EA, 7060475 ARS6, 7060485 CGTH, 7060487 BCS8, 7060488 AZTZ,

Prep Tech: ,BockJ

Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Prep Geometry	Count Time Min	Detector id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JP6M1-1-AG J7B270263-1-SAMP [redacted] 02/27/2007 08:57			500.80g,in	500.80g	SRTA16623 02/28/07,pd 09/11/08,r	1.5	91.5	100	26B	1904	3/12/07	
			AmtRec: 500MLP,5XLP		#Containers: 6	03/12/2007 10:24,s1			Scr:	Alpha: 9.57E-04 uCi/Sa		Beta: 1.70E-03 uCi/Sa
2 JP6M1-1-AQ-X J7B270263-1-DUP [redacted] 02/27/2007 08:57			504.00g,in	504.00g	SRTA16624 02/28/07,pd 09/11/08,r	1.5	87.9	100	26C			
			AmtRec: 500MLP,5XLP		#Containers: 6	03/12/2007 10:24,s1			Scr:	Alpha: 9.57E-04 uCi/Sa		Beta: 1.70E-03 uCi/Sa
3 JQCLR-1-AA-B J7C010000-485-BLK [redacted] 02/27/2007 08:57			505.30g,in	505.30g	SRTA16625 02/28/07,pd 09/11/08,r	1.5	92.2	100	26D			
			AmtRec:		#Containers: 1	03/12/2007 10:24,s1			Scr:	Alpha:	0	Beta:
4 JQCLR-1-AC-C J7C010000-485-LCS [redacted] 02/27/2007 08:57			503.60g,in	503.60g	STSC1824 01/24/07,pd 09/11/08,r	1.5	88.8	100	27A			
			AmtRec:		#Containers: 1	03/12/2007 10:24,s1			Scr:	Alpha:		Beta:

Comments:

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

JP6M11AG-SAMP Constituent List:

Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JQCLR1AA-BLK:

Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JQCLR1AC-LCS:

Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JP6M11AG-SAMP Calc Info:

33

STL RICHLAND

2/27/2007 3:32:32 PM

Sample Preparation/Analysis

108302, Fluor Hanford Inc Management Federal Servi , Waste

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

W05127

AnalyDueDate: 04/09/2007

Batch: 7058496 WATER ug/L
SEQ Batch, Test: None

PM, Quote: SA , 29754

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

[redacted]

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 JP6M1-1-AD J7B270263-1-SAMP [redacted] 02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha:	Beta:
2 JP6M1-1-AL-S J7B270263-1-MS [redacted] 02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha:	Beta:
3 JP6M1-1-AM-X J7B270263-1-DUP [redacted] 02/27/2007 0[illegible]		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha:	Beta:
4 JP6M1-1-AN-S J7B270263-1-MS [redacted] 02/27/2007 08:57		AmtRec: 500MLP,5XLP	#Containers: 6			Scr:	Alpha:	Beta:
5 JP6XF-1-AA-B J7B270000-496-BLK [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JP6XF-1-AC-C J7B270000-496-LCS [redacted] 02/27/2007 08:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL Richland Key: in - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 6
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

STL RICHLAND

2/27/2007 3:32:34 PM

Sample Preparation/Analysis

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

AnalyDueDate: 04/09/2007

Batch: 7058496 ug/L
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 Trace[redacted] 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, SA , 29754

JP6M11AD-SAMP Constituent List:
HEXCHROME RDL: ug/L LCL:85 UCL:115 RPD:20
JP6M11AL-MS Constituent List:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20
JP6M11AN-MS:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20
JP6XF1AA-BLK:
HEXCHROME RDL: ug/L LCL: UCL: RPD:
JP6XF1AC-LCS:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20

JP6M11AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JP6M11AL-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JP6M11AN-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JP6XF1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JP6XF1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

3/28/2007 3:40:51 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/28/2006, 4/2/2007, Batch: '7060488', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7060488						
AC		CalcC	BockJ	3/7/2007 10:52:23		
SC			wagarr	IsBatched	3/1/2007 3:49:48 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	3/7/2007 10:52:23 AM	rich-rc-5014 rEVISION 6
SC			BockJ	Prep1C	3/7/2007 11:01:39 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	3/27/2007 8:58:12 AM	RICH-RC-5014 REVISION 6
SC			HARBINSOND	Prep1C	3/27/2007 6:19:38 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	3/27/2007 6:53:45 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	3/27/2007 9:43:08 PM	RICH-RD-0003 REVISION 4
AC			BockJ	3/7/2007 11:01:39		
AC			AshworthA	3/27/2007 8:58:12		
AC			HARBINSOND	3/27/2007 6:19:38 PM		
AC			DAWKINSO	3/27/2007 6:53:45 PM		
AC			DAWKINSO	3/27/2007 9:43:08 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

3/28/2007 3:42:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/28/2006, 4/2/2007, Batch: '7060487', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7060487						
AC		CalcC	BockJ	3/7/2007 10:45:59		
SC			wagarr	IsBatched	3/1/2007 3:49:48 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	3/7/2007 10:45:59 AM	rich-rc-5014 rEVISION 6
SC			BockJ	Prep1C	3/7/2007 10:51:46 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	3/27/2007 8:58:06 AM	RICH-RC-5014 REVISION 6
SC			HARBINSOND	Prep1C	3/27/2007 6:21:33 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	3/27/2007 7:09:38 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	3/27/2007 9:43:28 PM	RICH-RD-0003 REVISION 4
AC			BockJ	3/7/2007 10:51:46		
AC			AshworthA	3/27/2007 8:58:06		
AC			HARBINSOND	3/27/2007 6:21:33 PM		
AC			DAWKINSO	3/27/2007 7:09:38 PM		
AC			DAWKINSO	3/27/2007 9:43:28 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

3/14/2007 1:18:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/14/2006, 3/19/2007, Batch: '7060475', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7060475						
AC		CalcC	McDowellD	3/12/2007 11:14:02		
SC			wagarr	IsBatched	3/1/2007 3:49:48 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	inSep1	3/12/2007 11:14:02 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	3/13/2007 10:02:03 AM	RICH-RC-5007 REVISION 6
SC			BlackCL	inCnt1	3/13/2007 10:18:21 AM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	3/14/2007 6:35:05 AM	RICH-RD-0001 REVISION 3
AC			McDowellD	3/13/2007 10:02:03		
AC			BlackCL	3/13/2007 10:18:21		
AC			BlackCL	3/14/2007 6:35:05		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:4

ICOCFractions v4.8.26

3/13/2007 2:10:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/13/2006, 3/18/2007, Batch: '7060485', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7060485						
AC		CalcC	BockJ	3/5/2007 8:33:27 AM		
SC			wagarr	IsBatched	3/1/2007 3:49:48 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	3/5/2007 8:33:27 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	3/5/2007 8:43:36 AM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	3/7/2007 3:55:52 PM	RICH-RC-5006 REV 6
SC			ManisD	Sep1C	3/12/2007 1:47:04 PM	RICH-RC-5006 REV 6
SC			BlackCL	InCnt1	3/12/2007 1:55:09 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	3/12/2007 9:08:58 PM	RICH-RD-0003 REVISION 4
AC			BockJ	3/5/2007 8:43:36 AM		
AC			ManisD	3/7/2007 3:55:52 PM		
AC			ManisD	3/12/2007 1:47:04 PM		
AC			BlackCL	3/12/2007 1:55:09 PM		
AC			DAWKINSO	3/12/2007 9:08:58 PM		

AC: Accepting Entity; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	S.Wheland	Calibration Curve Information				SOP Information		BATCH #	7058496
Start Date:	2/27/2007		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05127
Start Time:	14:00	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	2/27/2007	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.478			Instrument Information	
		Std. 3	0.750	0.375	0.695	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:	DMamia	Std. 4	1.500	0.750	1.411			Wavelength:	540
		Std 5	2.000	1.000	1.860			R Squared	0.999982
Date:	2/28/07	Standard Volume (mL):			100.000			Slope:	1.85791
		Date of Curve:			2/27/2007			Intercept:	0.00526

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	CR-07-0021	CR-07-0022		CR-07-0021		CR-07-0021	
Prep Date:	02/27/07	02/27/07		02/27/07		02/27/07	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	02/28/07	02/28/07		02/28/07		02/28/07	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.25000

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.957	0.000	0.957	1	0.5133	0.513	102.67%
n/a	n/a	ICB	100.000	-0.001	0.000	-0.001	1	<MDL	<MDL	
JP6XF-1AA-B	n/a	Prep Blank	100.000	0.000		0.000	1	<MDL	<MDL	
JP6XF-1AC-C	n/a	LCS	100.000	0.861		0.861	1	0.4617	0.462	92.33%
JP6M1-1AD	B1LTY6	Sample	100.000	0.046		0.046	1	0.0230	0.023	
JP6M1-1AC-S	B1LTY6-MS	MS	100.000	0.531		0.531	1	0.2840	0.284	99.20%
JP6M1-1AD-D	B1LTY6-MSD	MSD	100.000	0.528		0.528	1	0.2824	0.282	98.58%
JP6M1-1AE-X	B1LTY6-DUP	Duplicate	100.000	0.043		0.043	1	0.0214	0.021	
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.956		0.956	1	0.5128	0.513	102.56%
n/a	n/a	CCB	100.000	0.000		0.000	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			