0076505

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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

March 23, 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
F07-012	W05116
F07-015	W05118
R06-001	W05133

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:

RAhohlhes 3/26/07

Name Date

XC: File

MAR 2007
RECEIVED

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MAR 2 1 2008
EDMC

W05118

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ICOC 45

MAR 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.: 34746

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W05118	F07-015	B1LV09	J7B090151-1	JN6901AA	9JN69010	7040259
		B1LV09	J7B090151-1	JN6901AC	9JN69010	7043482
		B1LV11	J7B090151-2	JN69R1AC	9JN69R10	7040259
		B1LV11	J7B090151-2	JN69R1AA	9JN69R10	7043481

SEVERN TRENT STL

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Richland, WA 99354

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www.stl-inc.com

Certificate of Analysis

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

March 22, 2007

Attention: Steve Trent

SAF Number	:	F07-015
Date SDG Closed	:	February 8, 2007
Number of Samples	:	Two (2)
Sample Type	:	Water
SDG Number	:	W05118
Data Deliverable	:	45/45 Day

CASE NARRATIVE

I. Introduction

On February 8, 2007 two samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned to lot J7B090151 and assigned the following laboratory ID numbers to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1LV11	JN69R	WATER	2/8/07
B1LV09	JN690	WATER	2/8/07

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

March 22, 2007

The requested analyses were:

Gas Proportional Counting
Strontium-90 by method RICH-RC-5006
Liquid Scintillation Counting
Tritium by method RICH-RC-5007
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
Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1LV09) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1LV11) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1LV09), sample matrix spike (B1LV09), and matrix spike duplicate results (B1LV09) 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:

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-5006
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

Date: 22-Mar-07

STL Richland STLRL

Ordered by Client Sample ID, Batch No.

Report No. : 34746

SDG No: W05118

Client ID	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	MDC/MDA	RPD
B1LV09	JN6901AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A	2.00E-03	
B1LV09	JN6901AC	SR-90	4.07E-01 +- 2.62E-01	U	pCi/L	85%	4.83E-01	
	JN6901AG	SR-90	1.85E-01 +- 2.42E-01	U	pCi/L	85%	4.98E-01	74.9
B1LV09 DUP	JN6901AE	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A	2.00E-03	0.0
B1LV11	JN69R1AC	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A	2.00E-03	
B1LV11	JN69R1AA	H-3	2.69E+02 +- 1.66E+02	U	pCi/L	100%	3.32E+02	
B1LV11 DUP	JN69R1AD	H-3	2.69E+02 +- 1.66E+02	U	pCi/L	100%	3.32E+02	0.2

Number of Results: 7

STL Richland

rptSTLRchSaSum 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

Ordered by QC Type, Batch No.

Date: 22-Mar-07

Report No. : 34746

SDG No.: W05118

QC Type	Work Order Number	Parameter	Result +- Uncertainty (2s)	Qual	Units	Yield	Recovery	Bias	MDC|MDA
MATRIX SPIK	JN6901AC	HEXCHROME	2.64E-01 +- 0.00E+00		mg/L	N/A	100%	0.0	2.00E-03
MATRIX SPIK	JN6901AD	HEXCHROME	2.64E-01 +- 0.00E+00		mg/L	N/A	100%	0.0	2.00E-03
BLANK QC	JN7EL1AA	HEXCHROME	2.00E-03 +- 0.00E+00	U	mg/L	N/A			2.00E-03
LCS	JN7EL1AC	HEXCHROME	4.97E-01 +- 0.00E+00		mg/L	N/A	99%	0.0	2.00E-03
BLANK QC	JPA2N1AA	H-3	-8.02E+01 +- 1.50E+02	U	pCi/L	100%			3.30E+02
BLANK QC	JPA2N1AD	H-3	6.80E+01 +- 1.57E+02	U	pCi/L	100%			3.35E+02
BLANK QC	JPA2P1AA	SR-90	1.37E-01 +- 2.50E-01	U	pCi/L	77%			5.26E-01
LCS	JPA2N1AC	H-3	2.52E+03 +- 2.59E+02		pCi/L	100%	93%	-0.1	3.32E+02
LCS	JPA2N1AE	H-3	2.53E+03 +- 2.61E+02		pCi/L	100%	93%	-0.1	3.36E+02
LCS	JPA2P1AC	SR-90	1.30E+01 +- 2.02E+00		pCi/L	86%	96%	0.0	4.83E-01

Number of Results: 10

STL Richland
rptSTLRchQcSum
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/Mda or Total Uncert or not identified by gamma scan software.

STL RICHLAND

FORM I

SAMPLE RESULTS

Date: 22-Mar-07

Lab Name:	STL Richland	SDG:	W05118	Collection Date:	2/8/2007 9:17:00 AM
Lot-Sample No.:	J7B090151-1	Report No. :	34746	Received Date:	2/8/2007 2:55:00 PM
Client Sample ID:	B1LV09	COC No. :	F07-015-092	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	Analy Method, Primary Detector
Batch: 7040259	Work Order: JN6901AA			Report DB ID: 9JN69010								
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1.	2/8/07		100.0	7196_CR6
								N/A			ML	
Batch: 7043482	Work Order: JN6901AC			Report DB ID: 9JN69010								
SR-90	4.07E-01	U	2.6E-01	2.6E-01	4.83E-01	pCi/L	85%	0.84	3/2/07 06:51 a		0.9925	SRISO_SEP_PRECIP
						2.25E-01	2.00E+00	(3.1)			L	GPC1A

Number of Results: 2

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: 22-Mar-07

Lab Name:	STL Richland	SDG:	W05118	Collection Date:	2/8/2007 10:40:00 AM
Lot-Sample No.:	J7B090151-2	Report No. :	34746	Received Date:	2/8/2007 2:55:00 PM
Client Sample ID:	B1LV11	COC No. :	F07-015-092	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	Analy Method, Primary Detector
Batch: 7040259	Work Order: JN69R1AC			Report DB ID: 9JN69R10								
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1.	2/8/07		100.0	7196_CR6
								N/A			ML	
Batch: 7043481	Work Order: JN69R1AA			Report DB ID: 9JN69R10								
H-3	2.69E+02	U	1.5E+02	1.7E+02	3.32E+02	pCi/L	100%	0.81	3/8/07 09:26 a		0.005	906.0_H3_LSC
						1.59E+02	4.00E+02	(3.2)			L	LSC6

Number of Results: 2

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 II

Date: 22-Mar-07

DUPLICATE RESULTS

Lab Name:	STL Richland	SDG:	W05118	Collection Date:	2/8/2007 9:17:00 AM
Lot-Sample No.:	J7B090151-1	Report No. :	34746	Received Date:	2/8/2007 2:55:00 PM
Client Sample ID:	B1LV09 DUP	COC No. :	F07-015-092	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: 7040259	Work Order: JN6901AE			Report DB ID: JN6901ER		Orig Sa DB ID: 9JN69010						
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1.	2/8/07		100.0	7196_CR6
	2.00E-03	U	RPD 0.0					N/A			ML	

Number of Results: 1

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: 22-Mar-07

Lab Name: STL Richland

SDG: W05118

Lot-Sample No.: #Error

Report No. : 34746

Matrix: WATER

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	Analy Method, Primary Detector
Batch: 7040259	Work Order:	JN7EL1AA		Report DB ID:	JN7EL1AB							
HEXCHROME	2.00E-03	U		0.0E+00	2.00E-03	mg/L	N/A	1. N/A	2/8/07		100.0 ML	7196_CR6

Number of Results: 1

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

BLANK RESULTS

Date: 22-Mar-07

Lab Name: STL Richland SDG: W05118

Lot-Sample No.: J7B120000-481 Report No. : 34746 Matrix: WATER

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	Analy Method, Primary Detector
Batch: 7043481	Work Order:	JPA2N1AA		Report DB ID:	JPA2N1AB							
H-3	-8.02E+01	U	1.3E+02	1.5E+02	3.30E+02	pCi/L	100%	-0.24	3/8/07 03:57 a		0.005	906.0_H3_LSC
					1.58E+02	4.00E+02		-(1.1)			L	LSC6
Batch: 7043481	Work Order:	JPA2N1AD		Report DB ID:	JPA2N1DX							
H-3	6.80E+01	U	1.4E+02	1.6E+02	3.35E+02	pCi/L	100%	0.2	3/8/07 06:42 a		0.005	906.0_H3_LSC
					1.60E+02	4.00E+02		0.86			L	LSC6

Number of Results: 2

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

BLANK RESULTS

Date: 22-Mar-07

Lab Name: STL Richland

SDG: W05118

Lot-Sample No.: J7B120000-482

Report No. : 34746

Matrix: WATER

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	Analy Method, Primary Detector
Batch: 7043482	Work Order:	JPA2P1AA		Report DB ID:	JPA2P1AB							
SR-90	1.37E-01	U	2.5E-01	2.5E-01	5.26E-01	pCi/L	77%	0.26	3/2/07 06:51 a		1.0001	SRISO_SEP_PRECIP
					2.44E-01	2.00E+00		(1.1)			L	GPC1C

Number of Results: 1

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: 22-Mar-07

Lab Name: STL Richland **SDG:** W05118

Lot-Sample No.: #Error **Report No. :** 34746 **Matrix:** WATER

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	Analy Method, Primary Detector
Batch: 7040259	Work Order: JN7EL1AC			Report DB ID: JN7EL1AC									
HEXCHROME	4.97E-01			0.0E+00	2.00E-03	mg/L	N/A	5.00E-01		99%	2/8/07	100.0	7196_CR6
							Rec Limits:	85.	115.	0.0		ML	

Number of Results: 1

Comments:

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

rptSTLRchLcs
V5.1 A2002

FORM II

LCS RESULTS

Date: 22-Mar-07

Lab Name: STL Richland

SDG: W05118

Lot-Sample No.: J7B120000-481

Report No. : 34746

Matrix: WATER

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	Analy Method, Primary Detector
Batch: 7043481	Work Order: JPA2N1AC			Report DB ID: JPA2N1CS									
H-3	2.52E+03		2.1E+02	2.6E+02	3.32E+02	pCi/L	100.00%	2.72E+03	8.16E+01	93%	3/8/07 05:19 a	0.005	906.0_H3_LSC
							Rec Limits:	70.	130.	-0.1		L	LSC6
Batch: 7043481	Work Order: JPA2N1AE			Report DB ID: JPA2N1EM									
H-3	2.53E+03		2.2E+02	2.6E+02	3.36E+02	pCi/L	100.00%	2.72E+03	8.16E+01	93%	3/8/07 08:04 a	0.005	906.0_H3_LSC
							Rec Limits:	70.	130.	-0.1		L	LSC6

Number of Results: 2

Comments:

FORM II

LCS RESULTS

Date: 22-Mar-07

Lab Name: STL Richland

SDG: W05118

Lot-Sample No.: J7B120000-482

Report No. : 34746

Matrix: WATER

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	Analy Method, Primary Detector
Batch: 7043482	Work Order: JPA2P1AC			Report DB ID: JPA2P1CS									
SR-90	1.30E+01		7.0E-01	2.0E+00	4.83E-01	pCi/L	85.70%	1.36E+01	2.66E-01	96%	3/2/07 06:51 a	0.9999	SRISO_SEP_PRECIP
							Rec Limits:	70.	130.	0.0		L	GPC1D

Number of Results: 1

Comments:

FORM II

MATRIX SPIKE RESULTS

Date: 22-Mar-07

Lab Name: STL Richland **SDG:** W05118

Lot-Sample No.: J7B090151-1 **Report No. :** 34746 **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: 7040259	Work Order: JN6901AC			Report DB ID: JN6901CW			Orig Sa DB ID: 9JN69010						
HEXCHROME	2.64E-01			0.0E+00	2.00E-03	mg/L	N/A	100.38%	2.63E-01		2/8/07	100.0	7196_CR6
	2.00E-03											ML	

Number of Results: 1

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

FormN	FormS	Rec	FormatT	Versid	SampleNbr	Contract	LabCode	LabC	CaseI	SAS	SDGNbr
W	AA	H	FEAD	05	B1LV09	MW6-SBB-A19961	STLRL				W05118
W	AB	H	FEAD	05	B1LV11	MW6-SBB-A19961	STLRL				W05118
W	AC	H	FEAD	05	B1LV09	MW6-SBB-A19961	STLRL				W05118
W	AD	H	FEAD	05	B1LV09	MW6-SBB-A19961	STLRL				W05118
W	AE	H	FEAD	05	B1LV09 DUP	MW6-SBB-A19961	STLRL				W05118
W	AF	H	FEAD	05	NA	MW6-SBB-A19961	STLRL				W05118
W	AG	H	FEAD	05	NA	MW6-SBB-A19961	STLRL				W05118

AnalyticalMatrix	LabReceivedDate	CollectedDate	PercentSc	Decanta	LabSampleId	LabFileI	SafNbr
WATER	02/08/2007	02/08/2007			9JN69010		F07-015
WATER	02/08/2007	02/08/2007			9JN69R10		F07-015
WATER	02/08/2007	02/08/2007			JN6901CW		F07-015
WATER	02/08/2007	02/08/2007			JN6901DW		F07-015
WATER	02/08/2007	02/08/2007			JN6901ER		F07-015
WATER	02/08/2007				JN7EL1AB		F07-015
WATER	02/08/2007				JN7EL1AC		F07-015

CollectedTime	PercentM	Filename	SpecificMe
09:17		h:\Reportdb\edd\Fead\V\Wet\W0511	
10:40		h:\Reportdb\edd\Fead\V\Wet\W0511	
09:17		h:\Reportdb\edd\Fead\V\Wet\W0511	
09:17		h:\Reportdb\edd\Fead\V\Wet\W0511	
09:17		h:\Reportdb\edd\Fead\V\Wet\W0511	
		h:\Reportdb\edd\Fead\V\Wet\W0511	
		h:\Reportdb\edd\Fead\V\Wet\W0511	

FormNbr	FormSuffix	RecordType	CASNbr	Isotope	Result
W	AA	D	18540-29-9	HEXCHROME	+2.00E-03
W	AB	D	18540-29-9	HEXCHROME	+2.00E-03
W	AC	D	18540-29-9	HEXCHROME	+2.64E-01
W	AD	D	18540-29-9	HEXCHROME	+2.64E-01
W	AE	D	18540-29-9	HEXCHROME	+2.00E-03
W	AF	D	18540-29-9	HEXCHROME	+2.00E-03
W	AG	D	18540-29-9	HEXCHROME	+4.97E-01

OrigResult	ConcentrationU	ActionCode	AnalysisMethod	SampleAliquotS	SampleAliquotU
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML
	mg/l	J	7196_CB6	1.00E+02	ML

LabQualifier	DilutionFactor	DateAnalyzed	TimeAnalyzed	BatchNbr	QcType
U	1	02/08/2007	00:00	7040259	
U	1	02/08/2007	00:00	7040259	
	1	02/08/2007	00:00	7040259	MS
	1	02/08/2007	00:00	7040259	MSD
U	1	02/08/2007	00:00	7040259	DUP
U	1	02/08/2007	00:00	7040259	BLK
	1	02/08/2007	00:00	7040259	BS

SpikeConc	PercentRecover	Rpd	RpdMaximum	Rpd_UCL	LCSMS_LCL
+2.63E-01	100.4				20
+2.63E-01	100.4	0		20.0	85
		0		20.0	
+5.00E-01	99.4				85

LCS_UCL	TracerYield	DetectionLimit	RL	RLType	CommentCode
		2.00E-03	2.00E-03	BDL	
		2.00E-03	2.00E-03	BDL	
105		2.00E-03	2.00E-03	BDL	
115		2.00E-03	2.00E-03	BDL	
		2.00E-03	2.00E-03	BDL	
		2.00E-03	2.00E-03	BDL	
115		2.00E-03	2.00E-03	BDL	

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/5/2007 9:15:30 AM

Lot No., Due Date: J7B090151; 03/26/2007

Client, Site: 108302; Fluor

QC Batch No., Method Test: 7043482; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05118 ; WATER

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

6.0 Comments on any No response:

First Level Review Angela Long **Date** 3/5/07

SEVERN TRENT **STL**

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7043482

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: [signature] Petty [signature] Date: 3/5/07 3/6/07

LS-038B, Rev. 10, 8/02

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/12/2007 9:26:24 AM

Lot No., Due Date: J7B090151; 03/26/2007

Client, Site: 108302; FLH HANFORD

QC Batch No., Method Test: 7043481; RTRITIUM H-3 by LSC

SDG, Matrix: W05118; 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 => JN69R1AA 5.00<10.00 Q:VB ok AL 3/12/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JPA2N1AF SVP15/5<>SVP10/10 JPA2N1AG SVP15/5<>SVP10/10 JPA2N1AA SVP15/5<>SVP10/10 JPA2N1AC SVP15/5<>SVP10/10 JPA2N1AD SVP15/5<>SVP10/10 JPA2N1AE SVP15/5<>SVP10/10 JN69R1AA SVP15/5<>SVP10/10 JN69R1AD SVP15/5<>SVP10/10 Q:VC ok AL 3/12/07		✓	
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. RPD > UCL : 20.0=> JN69R1AD H-3 47.0 (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 Calin 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)			N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ☑	No	N/A

First Level Review Angela Long Date 3/12/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7043481, W05118

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: 3-13-07

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): JN7EL, JN69R, JN690

Lab Sample Numbers or SDG: W0511

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: [signature] Date: 2/9/07

Second-Level Review: [signature] Date: 2-23-07

STL RICHLAND

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F07-015-092	PAGE 1 OF 1

COLLECTOR: POPE/PFISTER/HUGHES/WISE	COMPANY CONTACT: TRENT, SJ	TELEPHONE NO.: 373-5869	PROJECT COORDINATOR: TRENT, SJ
SAMPLING LOCATION: AT-F-2-M	PROJECT DESIGNATION: AQUIFER TUBE SAMPLING IN THE 100-FR-3 OU		SAF NO.: F07-015
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

PRICE CODE: 7N
AIR QUALITY: ☐
DATA TURNAROUND: 45 Days / 45 Days

J7B090151 RW 2/9/07 ~~W05116~~ W05118 Due 03-26-07

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegetation, 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	None			
TYPE OF CONTAINER	aG	P			
NO. OF CONTAINER(S)	1	1			
VOLUME	500mL	1000mL			
SAMPLE ANALYSIS	Chromium Hex - 7196; *	Tritium - H3;			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B1LV11	WATER	2/8/07	0919	✓	✓				JN69R			

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: KHUGHES 2-8-07 DATE/TIME	RECEIVED BY/STORED IN: Eric Darby Eric Darby 2/8/07 1410 DATE/TIME	* filtered < 0.45 µm
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	

LABORATORY SECTION	RECEIVED BY: Eric Darby	TITLE	DATE/TIME: 2/8/07 1455
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

STL RICHLAND

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F07-015-090	PAGE 1 OF 1

COLLECTOR POPE/PFISTER/HUGHES/WISE	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 7N	DATA TURNAROUND
SAMPLING LOCATION AT-F-1-D	PROJECT DESIGNATION AQUIFER TUBE SAMPLING IN THE 100-FR-3 OU		SAF NO. F07-015	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-451-1	COA 122543ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	JJB090151 RW 2/9/07
SHIPPED TO Severn Trent Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	~~W05116~~ W05118 Due 03-26-07

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			
TYPE OF CONTAINER	aG	P			
NO. OF CONTAINER(S)	1	3			
VOLUME	500mL	1000mL			
SAMPLE ANALYSIS	Chromium Hex - 7196; *	Strontium-89,90 -- Total Sr;			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B1LV09	WATER	2/8/07	1040	✓	✓				JN690			

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K HUGHES	2-8-07	E Daly Eric Daly	2/8/07 1400
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

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
* filtered <0.45 µm

LABORATORY SECTION	RECEIVED BY E Daly	TITLE	DATE/TIME 2/8/07 1450
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 2/8/07 1455

Client: PNL SDG #: W05118 W05116 RWO 9/07 NA [ ] SAF #: F07-015 NA [ ]

Work Order Number: J7B070151 Chain of Custody # F07-015-092, 090

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: 2

7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]

8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels

9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking.
   - ____ have air bubbles (Only for samples requiring head space)

10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]

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). There is no relinquish time on COCs signed by Hughes (AH) 2-9-07

Sample Custodian: [signature] Date: 2/8/07 1455

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, 9/03, Rev. 5

STL RICHLAND

2/28/2007 2:44:39 PM

Sample Preparation/Analysis

Balance Id:1120482733,E32905

108302, Fluor Hanford Inc , Waste
Management Federal Servi

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

Pipet #: _____

AnalyDueDate: 03/21/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech: 02/21/2007 09:10,ManisD

Batch: 7043482 WATER pCi/L PM, Quote: SA , 29754

Sep2 DT/Tm Tech: 02/28/2007 08:30,ManisD

SEQ Batch, Test: None All Tests: 7040259 88EA, 7043481 ARS6, 7043482 CLTL, [redacted]

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN690-1-AC J7B090151-2-SAMP [redacted]		992.50g,in	srtb14509 02/12/07,pd 09/11/06,r	0.8524	1.0	25.7	100	1A 1A	0739 0740	3/1/07 3/2/07	
						~~02/21/2007 09:10,s1, 02/28/2007~~					
02/08/2007 10:40		AmtRec: 500G,3XLP	#Containers: 4					Scr:	Alpha: 8.34E-04 uCi/Sa		Beta: -3.09E-04 uCi/Sa
2 JN690-1-AG-X J7B090151-2-DUP [redacted]		1001.30g,in	srtb14510 02/12/07,pd 09/11/06,r	0.9058	1.0	23.9	100	1B 1B	0739 0740	3/1/07 3/2/07	
						~~02/21/2007 09:10,s1, 02/28/2007~~					
02/08/2007 10:40		AmtRec: 500G,3XLP	#Containers: 4					Scr:	Alpha: 8.34E-04 uCi/Sa		Beta: -3.09E-04 uCi/Sa
3 JPA2P-1-AA-B J7B120000-482-BLK [redacted]		1000.10g,in	srtb14511 02/12/07,pd 09/11/06,r	0.7682	1.0	25.7	100	1C 1C	0739 0740	3/1/07 3/2/07	
						~~02/21/2007 09:10,s1, 02/28/2007~~					
02/08/2007 10:40		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
4 JPA2P-1-AC-C J7B120000-482-LCS [redacted]		999.00g,in	srsg1313 12/20/06,pd 09/11/06,r	0.8604	1.0	25.3	100	1D 1D	0739 0740	3/1/07 3/2/07	
						~~02/21/2007 09:10,s1, 02/28/2007~~					
02/08/2007 10:40		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: 4
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

STL RICHLAND

2/28/2007 2:44:40 PM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 03/21/2007

Sep1 DT/Tm Tech: 02/21/2007 09:10,ManisD

Batch: 7043482 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech: 02/28/2007 08:30,ManisD

Prep Tech: ManisD

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: JN690-SAMP "Comments Upon addition of sample JPA2P-1aa-blk to the YTA tube a small amount was spilled, sample recounted DRM 2/22/07."

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

JN6901AC-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JPA2P1AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JPA2P1AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JN6901AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JPA2P1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JPA2P1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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STL RICHLAND

2/19/2007 2:08:56 PM

Sample Preparation/Analysis

Balance Id:1120482733

108302, Fluor Hanford Inc Management Federal Servi , Waste

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day Ingrowth
5I CLIENT: HANFORD

Pipet #: DRM

Sep1 DT/Tm Tech: 2/21/07 9:10:19 AM

AnalyDueDate: 03/21/2007 WO5118

Sep2 DT/Tm Tech: 2/28/07 8:30:02 AM

Batch: 7043482 WATER pCi/L PM, Quote: SA , 29754

SEQ Batch, Test: None

Prep Tech: ,BockJ DRM

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN690-1-AC J7B090151-2-SAMP [redacted]		992.50g,in	srlb14509 02/12/07,pd 09/11/06,r Y1A17017 Ex:1/3/2008	1.6785 1.9642 0.8588			100	911	0953	2/21/07	
02/08/2007 10:40		AmtRec: 500G,3XLP	#Containers: 4					Scr:	Alpha: 8.34E-04 uCi/Sa	Beta: -3.09E-04 uCi/Sa	
2 JN690-1-AG-X J7B090151-2-DUP [redacted]		1001.30g,in	srlb14510 02/12/07,pd 09/11/06,r Y1A17018 Ex:1/3/2008	1.799 1.9860 0.9058				311	0953	2/21/07	
02/08/2007 10:40		AmtRec: 500G,3XLP	#Containers: 4					Scr:	Alpha: 8.34E-04 uCi/Sa	Beta: -3.09E-04 uCi/Sa	
3 JPA2P-1-AA-B J7B120000-482-BLK [redacted]		1000.10g,in	srlb14511 02/12/07,pd 09/11/06,r Y1A17019 Ex:1/3/2008	1.610 1560 2.0896 2.0696 0.7933 0.7686				911 311	1025 1504	2/21/07 2/22/07	
02/08/2007 10:40		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
4 JPA2P-1-AC-C J7B120000-482-LCS [redacted]		999.90g,in	srsg1313 12/20/06,pd 09/11/06,r Y1A17020 Ex:1/3/2008	1.7715 1.9932 0.8604				311	1024	2/21/07	
02/08/2007 10:40		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

STL RICHLAND

2/19/2007 2:09:02 PM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 03/21/2007

Sep1 DT/Tm Tech:

Batch: 7043482 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

[redacted]

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: PH <2.0 BJ 2-19-07

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

JN6901AC-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JPA2P1AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JPA2P1AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JN6901AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2P1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2P1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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STL RICHLAND

2/12/2007 4:41:47 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: 03/21/2007 W05118

Batch: 7043481 WATER pCi/L PM, Quote: SA , 29754
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3/6 0700
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 JN69R-1-AA J7B090151-1-SAMP [redacted] 02/08/2007 09:17		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
2 JN69R-1-AD-X J7B090151-1-DUP [redacted] 02/08/2007 09:17		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
3 JPA2N-1-AA-B J7B120000-481-BLK [redacted] 02/08/2007 09:17		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JPA2N-1-AC-C J7B120000-481-LCS [redacted] 02/08/2007 09:17		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JPA2N-1-AD-BX J7B120000-481-MBLK [redacted] 02/08/2007 09:17		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JPA2N-1-AE-CM J7B120000-481-MLCS [redacted] 02/08/2007 09:17		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JPA2N-1-AF-BN J7B120000-481-IBLK [redacted] 02/08/2007 09:17		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL Richland Richland Wa.

Key: in - Initial Amt, fl - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
ICOC v4.8.26

STL RICHLAND

2/12/2007 4:41:56 PM

Sample Preparation/Analysis

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

Balance Id: 124415
Pipet #:
Sep1 DT/Tm Tech: 3-1-07 Tam
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/21/2007

Batch: 7043481 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 JPA2N-1-AG-BN								
J7B120000-481-IBLK								
[redacted]								
02/08/2007 09:17	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

JN69R1AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JPA2N1AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JPA2N1AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JPA2N1AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JPA2N1AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JPA2N1AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JPA2N1AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

JN69R1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2N1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2N1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2N1AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2N1AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPA2N1AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

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STL RICHLAND

2/12/2007 4:41:58 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 03/21/2007

Batch: 7043481 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:

JPA2N1AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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STL RICHLAND

2/9/2007 9:52:46 AM

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

AnalyDueDate: 03/21/2007

Batch: 7040259 WATER ug/L
SEQ Batch, Test: None All Tests: 7040259 88EA,

PM, Quote: SA , 29754

[redacted]

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN69R-1-AC J7B090151-1-SAMP [redacted] 02/08/2007 09:17		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
2 JN690-1-AA J7B090151-2-SAMP [redacted] 02/08/2007 10:40		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
3 JN690-1-AD-S J7B090151-2-MS [redacted] 02/08/2007 10:40		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
4 JN690-1-AE-D J7B090151-2-MSD [redacted] 02/08/2007 10:40		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
5 JN690-1-AF-X J7B090151-2-DUP [redacted] 02/08/2007 10:40		AmtRec: 500G,LP	#Containers: 2			Scr:	Alpha:	Beta:
6 JN7EL-1-AA-B J7B090000-259-BLK [redacted] 02/08/2007 10:40		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JN7EL-1-AC-C J7B090000-259-LCS [redacted] 02/08/2007 10:40		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL Richland Key: in - Initial Amt, fi - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

STL RICHLAND

2/9/2007 9:52:54 AM

Sample Preparation/Analysis

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

Balance Id:

Pipet #:

AnalyDueDate: 03/21/2007

Sep1 DT/Tm Tech:

Batch: 7040259 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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:

Comments:

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

JN69R1AC-SAMP Constituent List:
HEXCHROME RDL: ug/L LCL:85 UCL:115 RPD:20
JN6901AD-MS:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20
JN6901AE-MSD:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20
JN7EL1AA-BLK:
HEXCHROME RDL: ug/L LCL: UCL: RPD:
JN7EL1AC-LCS:
HEXCHROME RDL:10 ug/L LCL:85 UCL:115 RPD:20

JN69R1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JN6901AD-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JN6901AE-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JN7EL1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JN7EL1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

3/5/2007 9:13:18 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/5/2006, 3/10/2007, Batch: '7043482', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7043482						
AC		CalcC	BockJ	2/19/2007 2:00:49 PM		
SC			wagam	IsBatched	2/12/2007 4:43:09 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/19/2007 2:00:49 PM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	2/19/2007 2:10:09 PM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	2/19/2007 2:15:48 PM	RICH-RC-5006 REV 6
SC			ManisD	Sep1C	2/21/2007 9:11:21 AM	RICH-RC-5006 REV 6
SC			StringerR	InCnt1	2/21/2007 9:22:09 AM	RICH-RD-0007 REVISION 5
SC			StringerR	Cnt1C	2/21/2007 10:29:41 AM	RICH-RD-0007 REVISION 5
SC			ManisD	Sep2C	2/28/2007 2:45:38 PM	RICH-RC-5071 REV 4
SC			DAWKINSO	InCnt2	2/28/2007 3:11:52 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	3/2/2007 8:12:29 AM	RICH-RD-0003 REVISION 4
AC			BockJ	2/19/2007 2:10:09 PM		
AC			ManisD	2/21/2007 9:11:21		
AC			StringerR	2/21/2007 9:22:09		
AC			StringerR	2/21/2007 10:29:41		
AC			ManisD	2/28/2007 2:45:38 PM		
AC			DAWKINSO	2/28/2007 3:11:52 PM		
AC			BlackCL	3/2/2007 8:12:29 AM		

AC: Accepting Entity; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.26

STL RICHLAND

3/12/2007 9:25:52 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/12/2006, 3/17/2007, Batch: '7043481', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7043481						
AC		CalcC	McDowellD	3/1/2007 10:55:03		
SC			wagarr	IsBatched	2/12/2007 4:43:09 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	3/1/2007 10:55:03 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	3/7/2007 1:54:42 PM	RICH-RC-5007 REVISION 6
SC			StringerR	InCnt1	3/7/2007 2:29:14 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	3/8/2007 2:10:36 PM	RICH-RD-0001 REVISION 3
AC			McDowellD	3/7/2007 1:54:42 PM		
AC			StringerR	3/7/2007 2:29:14 PM		
AC			StringerR	3/8/2007 2:10:36 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	S. Wheland	Calibration Curve Information				SOP Information		BATCH #	7040259
Start Date:	2/8/2007		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	
Start Time:	15:00	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	2/8/2007	Std. 1	0.100	0.050	0.108				
End Time	16:15	Std. 2	0.500	0.250	0.487			Instrument Information	
		Std. 3	0.750	0.375	0.716	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.415			Wavelength:	540
		Std 5	2.000	1.000	1.849			R Squared	0.99971
Date:	02/09/07	Standard Volume (mL):			100.000			Slope:	1.84973
		Date of Curve:			2/8/2007			Intercept:	0.01531

		Calibration Information:	ICV Information:	LCS Information:	Matrix Spike Information:	
Dilution ID #		Cr-07-0015	Cr-07-0016	Cr-07-0015	Cr-07-0015	
Prep Date:		02/08/07	02/08/07	02/08/07	02/08/07	
Concentration (mg/L)		50	50	50	50	
Expiration Date:		02/09/07	02/09/07	02/09/07	02/09/07	
Pipettor(s)		70,190	190	190	190	
Volume Used (	Expected Value		1.000 0.50000	1.00 0.50000	0.50	0.26316

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	0.939	0.000	0.939	1	0.4996	0.500	99.93%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
JN7EL-1AA-B	n/a	Prep Blank	100.000	0.002		0.002	1	-0.0072	<MDL	
JN7EL-1AC-C	n/a	LCS	100.000	0.935		0.935	1	0.4975	0.497	99.49%
JN690-1AA	B1LV09	Sample	100.000	0.014		0.014	1	-0.0007	<MDL	
JN690-1AC-S	B1LV09-MS	MS	100.000	0.503		0.503	1	0.2638	0.264	100.24%
JN690-1AD-D	B1LV09-MSD	MSD	100.000	0.503		0.503	1	0.2638	0.264	100.24%
JN690-1AE-X	B1LV09-DUP	Duplicate	100.000	0.014		0.014	1	-0.0007	<MDL	
JN69R-1AC	B1LV11	Sample	100.000	0.010		0.010	1	-0.0029	<MDL	
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.939		0.939	1	0.4996	0.500	99.93%
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			