W05033

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Rec 12-1-06

Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains 145 Pages

Report Nbr: 33876

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05033	I07-005	B1KMR4	J6J020227-1	JFHRH1AA	9JFHRH10	6276387
	I07-001	B1KLB6	J6J020228-1	JFHRN1AA	9JFHRN10	6276387
	S07-010	B1KPF7	J6J110172-1	JF6CG1AA	9JF6CG10	6290567
		B1KPF7	J6J110172-1	JF6CG1AC	9JF6CG10	6290577
		B1KPF7	J6J110172-1	JF6CG1AD	9JF6CG10	6290579
		B1KPF7	J6J110172-1	JF6CG1AE	9JF6CG10	6290569
		B1KPH3	J6J110172-2	JF6DJ1AA	9JF6DJ10	6290567
		B1KPH3	J6J110172-2	JF6DJ1AC	9JF6DJ10	6290577
		B1KPH3	J6J110172-2	JF6DJ1AD	9JF6DJ10	6290579
		B1KPH3	J6J110172-2	JF6DJ1AE	9JF6DJ10	6290571
		B1KPJ6	J6J110172-3	JF6DT1AA	9JF6DT10	6290567
		B1KPJ6	J6J110172-3	JF6DT1AC	9JF6DT10	6290577
		B1KPJ6	J6J110172-3	JF6DT1AD	9JF6DT10	6290571
	I07-001	B1JL89	J6J110353-1	JF7061AA	9JF70610	6290575
		B1JL89	J6J110353-1	JF7061AC	9JF70610	6290569

Comments:

Report Nbr: 33876

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05033	I07-001	B1JL90	J6J110353-2	JF71C1AA	9JF71C10	6290575
		B1JL90	J6J110353-2	JF71C1AC	9JF71C10	6290569
	S07-010	B1KPL4	J6J110357-1	JF72H1AA	9JF72H10	6290577
		B1KPL4	J6J110357-1	JF72H1AC	9JF72H10	6290579
		B1KPL4	J6J110357-1	JF72H1AD	9JF72H10	6290571
	I07-002	B1KLT0	J6J120305-1	JGAPR1AA	9JGAPR10	6290568
		B1KLT7	J6J120305-1	JGAPX1AA	9JGAPX10	6286296
		B1KLH9	J6J120305-2	JGAQA1AA	9JGAQ010	6286296
		B1KLT8	J6J120305-3	JGAQF1AA	9JGAQF10	6290568
		B1KLJ0	J6J120305-5	JGAQ41AA	9JGAQ410	6290577
		B1KLJ0	J6J120305-5	JGAQ41AC	9JGAQ410	6290579
		B1KLJ0	J6J120305-5	JGAQ41AD	9JGAQ410	6290562
		B1KLJ0	J6J120305-5	JGAQ41AE	9JGAQ410	6290568
	S07-010	B1KPR7	J6J120336-1	JGA231AA	9JGA2310	6290562
		B1KPR7	J6J120336-1	JGA231AC	9JGA2310	6290569
		B1KPR7	J6J120336-1	JGA231AD	9JGA2310	6290573
		B1KPR7	J6J120336-1	JGA231AE	9JGA2310	6290571
		B1KPR8	J6J120336-2	JGA3R1AA	9JGA3R10	6290562
		B1KPR8	J6J120336-2	JGA3R1AC	9JGA3R10	6290569
		B1KPR8	J6J120336-2	JGA3R1AD	9JGA3R10	6290573
		B1KPR8	J6J120336-2	JGA3R1AE	9JGA3R10	6290571
	I07-002	B1KM32	J6J160207-1	JGKEM1AA	9JGKEM10	6290297
		B1KM35	J6J160207-2	JGKEW1AA	9JGKEW10	6290567
		B1KM35	J6J160207-2	JGKEW1AC	9JGKEW10	6290562
		B1KM35	J6J160207-2	JGKEW1AD	9JGKEW10	6290568
		B1KLK0	J6J160207-3	JGKE11AA	9JGKE110	6290569

Comments:

Report Nbr: 33876

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05033	I07-002	B1KLR3	J6J160207-4	JGKE41AA	9JGKE410	6290569
		B1KLR2	J6J160207-5	JGKE81AA	9JGKE810	6290569
		B1KLK4	J6J160207-6	JGKFA1AA	9JGKFA10	6290569

Comments:

SEVERN TRENT STL

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2800 George Washington Way
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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

November 30, 2006

Attention: Dot Stewart

SAF Number	:	I07-005, I07-001, S07-010, I07-002
Date SDG Closed	:	October 16, 2206
Number of Samples	:	Twenty One (21)
Sample Type	:	Water
SDG Number	:	W05033
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between October 02, 2006 and October 16, 2006 twenty one water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1KMR4	JFHRH	WATER	10/02/06
B1KLB6	JFHRN	WATER	10/02/06
B1KPH3	JF6DJ	WATER	10/10/06
B1KPF7	JF6CG	WATER	10/10/06
B1KPJ6	JF6DT	WATER	10/10/06
B1KL89	JF706	WATER	10/11/06
B1KL90	JF71C	WATER	10/11/06
B1KPL4	JF72H	WATER	10/11/06
B1KLT0	JGAPR	WATER	10/12/06
B1KLT7	JGAPX	WATER	10/12/06
B1KLT8	JGAQF	WATER	10/12/06
B1KLH9	JGAQ0	WATER	10/12/06
B1KLJ0	JGAQ4	WATER	10/12/06

B1KPR7	JGA23	WATER	10/12/06
B1KPR8	JGA3R	WATER	10/12/06
B1KLK4	JGKFA	WATER	10/16/06
B1KLR2	JGKE8	WATER	10/16/06
B1KLR3	JGKE4	WATER	10/16/06
B1KLK0	JGKE1	WATER	10/16/06
B1KM32	JGKEM	WATER	10/16/06
B1KM35	JGKEW	WATER	10/16/06

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.

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
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Tritium (Mid Level) by method RICH-RC-5007
Carbon-14 by method RICH-RC-5022
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058
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:

Reduced volumes were analyzed based on elevated screen results for samples B1KPH3, B1KPJ6, B1KPL4, B1KLJ0 and B1KPL4 DUP. Except as noted, the LCS, batch blank, samples and sample duplicate (B1KPL4) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

Reduced volumes were analyzed based on elevated screen results for samples B1KPH3, B1KPL4 and B1KPH3 DUP. B1KPH3 and B1KPH3 DUP do not meet CRDL however the results are greater than the MDA which is greater than the CRDL. Except as noted, the LCS, batch blank, samples and sample duplicate (B1KPH3) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1KLK4) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

Sample B1KLT8 had insufficient volume for a 2500 ml aliquot. There was insufficient volume for a duplicate. Sample B1KLJ0 was counted again on a different detector for a duplicate. Except as noted, the LCS, batch blank, samples and sample duplicate (B1KLJ0) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1KPR7), and sample matrix spike (B1KPR7) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1KPJ6) results are within contractual requirements.

Tritium (Mid Level) by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1JL89) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:

The LCS, batch blank, samples and sample duplicate (B1KM35) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1KPR7), and sample matrix spike (B1KPR8) results are within contractual requirements.

Chemical Analysis

Batch 6276387
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1KMR4), sample matrix spike (B1KMR4), and matrix spike duplicate results (B1KMR4) are within contractual requirements.

Batch 6286296
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1KLT7), sample matrix spike (B1KLT7), and matrix spike duplicate results (B1KLT7) are within contractual requirements.

Batch 6290297
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1KM32), sample matrix spike (B1KM32), and matrix spike duplicate results (B1KM32) are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Segen

for 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.

11/30/2006 12:56:44 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 33876 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF6CG10	B1KPF7		MW6-SBB-A1	S07-010	W05033					10/10/2006 11:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290567	H-3	10028-17-8	8.94E+01	pCi/L	1.3E+02	1.4E+02	U	3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	10/31/2006 23:15	I
6290577	ALPHA	12587-46-1	2.47E+00	pCi/L	1.2E+00	1.3E+00		1.28E+00	100.0	9310_ALPHABETA	1.998E-01	L	11/21/2006 07:18	I
6290579	BETA	12587-47-2	1.21E+01	pCi/L	2.1E+00	2.6E+00		3.05E+00	100.0	9310_ALPHABETA	2.004E-01	L	11/21/2006 06:27	I
6290569	SR-90	10098-97-2	2.69E+00	pCi/L	3.9E-01	5.5E-01		4.73E-01	80.1	SRISO_SEP_PRE	1.0027E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF6DJ10	B1KPH3		MW6-SBB-A1	S07-010	W05033					10/10/2006 10:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290567	H-3	10028-17-8	2.11E+03	pCi/L	1.9E+02	2.3E+02		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	11/01/2006 00:36	I
6290577	ALPHA	12587-46-1	6.71E+00	pCi/L	2.3E+00	2.7E+00		2.18E+00	100.0	9310_ALPHABETA	1.307E-01	L	11/21/2006 08:45	I
6290579	BETA	12587-47-2	2.37E+01	pCi/L	3.4E+00	4.5E+00		4.42E+00	100.0	9310_ALPHABETA	1.358E-01	L	11/21/2006 06:27	I
6290571	Uranium	7440-61-1	9.62E-01	ug/L	1.2E-01	1.2E-01		8.12E-03		UTOT_KPA	2.58E-02	ML	11/30/2006 08:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF6DT10	B1KPJ6		MW6-SBB-A1	S07-010	W05033					10/10/2006 11:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290567	H-3	10028-17-8	3.42E+03	pCi/L	2.2E+02	2.8E+02		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	11/01/2006 01:58	I
6290577	ALPHA	12587-46-1	3.16E+00	pCi/L	1.9E+00	2.0E+00		2.09E+00	100.0	9310_ALPHABETA	1.794E-01	L	11/21/2006 07:18	I
6290571	Uranium	7440-61-1	6.86E-01	ug/L	8.2E-02	8.2E-02		8.12E-03		UTOT_KPA	2.58E-02	ML	11/30/2006 08:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF70610	B1JL89		MW6-SBB-A1	I07-001	W05033					10/11/2006 11:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290575	H-3	10028-17-8	6.13E+01	pCi/L	1.3E+01	2.5E+01		2.48E+01	100.0	906.0ML_H3_LSC	1.00E-02	L	11/18/2006 13:56	I
6290569	SR-90	10098-97-2	-1.68E-01	pCi/L	2.3E-01	2.3E-01	U	5.29E-01	73.0	SRISO_SEP_PRE	1.0059E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF71C10	B1JL90		MW6-SBB-A1	I07-001	W05033					10/11/2006 11:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290575	H-3	10028-17-8	7.45E+01	pCi/L	1.3E+01	2.6E+01		2.48E+01	100.0	906.0ML_H3_LSC	1.00E-02	L	11/20/2006 16:01	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

6290569	SR-90	10098-97-2	1.19E-01	pCi/L	2.2E-01	2.2E-01	U	4.69E-01	76.7	SRISO_SEP_PRE	1.0031E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JF72H10	B1KPL4		MW6-SBB-A1	S07-010	W05033					10/11/2006 10:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290577	ALPHA	12587-46-1	9.94E+00	pCi/L	2.8E+00	3.4E+00		1.87E+00	100.0	9310_ALPHABETA	1.226E-01	L	11/21/2006 08:45	I
6290579	BETA	12587-47-2	9.64E+00	pCi/L	2.4E+00	2.7E+00		3.75E+00	100.0	9310_ALPHABETA	1.455E-01	L	11/21/2006 06:27	I
6290571	Uranium	7440-61-1	1.57E+00	ug/L	1.9E-01	1.9E-01		8.15E-03		UTOT_KPA	2.57E-02	ML	11/30/2006 08:39	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGA2310	B1KPR7		MW6-SBB-A1	S07-010	W05033					10/12/2006 10:29

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290562	C-14	14762-75-5	1.62E+02	pCi/L	7.3E+00	2.5E+01		8.54E+00	100.0	C14_LSC	2.00E-01	L	11/22/2006 02:08	I
6290569	SR-90	10098-97-2	2.66E+01	pCi/L	1.1E+00	4.0E+00		5.31E-01	75.0	SRISO_SEP_PRE	9.979E-01	L	11/30/2006 06:09	I
6290573	TC-99	14133-76-7	3.25E+01	pCi/L	5.1E+00	7.7E+00		9.83E+00	100.0	TC99_ETVDSK_LS	1.262E-01	L	11/24/2006 16:36	I
6290571	Uranium	7440-61-1	2.80E+00	ug/L	2.9E-01	2.9E-01		8.25E-02		UTOT_KPA	2.54E-02	ML	11/30/2006 08:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGA3R10	B1KPR8		MW6-SBB-A1	S07-010	W05033					10/12/2006 07:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290562	C-14	14762-75-5	-1.47E+00	pCi/L	3.5E+00	7.1E+00	U	8.54E+00	100.0	C14_LSC	2.00E-01	L	11/22/2006 02:51	I
6290569	SR-90	10098-97-2	-2.48E-01	pCi/L	2.2E-01	2.3E-01	U	5.58E-01	70.3	SRISO_SEP_PRE	1.0026E+00	L	11/30/2006 06:09	I
6290573	TC-99	14133-76-7	2.47E+00	pCi/L	4.2E+00	6.0E+00	U	9.90E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	11/24/2006 19:43	I
6290571	Uranium	7440-61-1	0.00E+00	ug/L	0.0E+00	0.0E+00	U	2.10E-01		UTOT_KPA	2.52E-02	ML	11/30/2006 08:55	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGAPR10	B1KLT0		MW6-SBB-A1	!07-002	W05033					10/12/2006 07:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290568	BE-7	13966-02-4	1.16E+00	pCi/L	2.0E+01	2.0E+01	U	3.73E+01		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I
6290568	CO-60	10198-40-0	1.80E+00	pCi/L	2.3E+00	2.3E+00	U	4.88E+00		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I
6290568	CS-134	13967-70-9	1.35E+00	pCi/L	1.9E+00	1.9E+00	U	3.97E+00		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I
6290568	CS-137	10045-97-3	-4.46E-01	pCi/L	1.8E+00	1.8E+00	U	3.20E+00		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I
6290568	EU-152	14683-23-9	2.04E+00	pCi/L	4.3E+00	4.3E+00	U	8.09E+00		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I
6290568	EU-154	15585-10-1	7.81E-01	pCi/L	6.4E+00	6.4E+00	U	1.24E+01		GAMMA_GS	2.5006E+00	L	11/20/2006 19:21	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

11/30/2006 12:56:44 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 33876 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

6290568	EU-155	14391-16-3	-1.11E-02	pCi/L	2.7E+00	2.7E+00	U	4.79E+00		GAMMA_GS	2.5006E+00	L	11/20/2006	19:21	I
6290568	K-40	13966-00-2	-7.97E+01	pCi/L	4.0E+01	4.0E+01	U	8.00E+01		GAMMA_GS	2.5006E+00	L	11/20/2006	19:21	I
6290568	RU-106	13967-48-1	7.25E+00	pCi/L	1.8E+01	1.8E+01	U	3.50E+01		GAMMA_GS	2.5006E+00	L	11/20/2006	19:21	I
6290568	SB-125	14234-35-6	-3.41E+00	pCi/L	4.9E+00	4.9E+00	U	8.06E+00		GAMMA_GS	2.5006E+00	L	11/20/2006	19:21	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGAQ410	B1KLJ0		MW6-SBB-A1	I07-002	W05033					10/12/2006 11:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6290577	ALPHA	12587-46-1	2.70E+00	pCi/L	1.7E+00	1.8E+00		1.98E+00	100.0	9310_ALPHABETA	1.856E-01	L	11/21/2006	07:18	I
6290579	BETA	12587-47-2	6.01E+00	pCi/L	1.7E+00	1.9E+00		2.81E+00	100.0	9310_ALPHABETA	1.995E-01	L	11/21/2006	06:27	I
6290562	C-14	14762-75-5	1.05E+03	pCi/L	1.7E+01	1.3E+02		8.54E+00	100.0	C14_LSC	2.00E-01	L	11/22/2006	01:26	I
6290568	BE-7	13966-02-4	2.88E+00	pCi/L	1.8E+01	1.8E+01	U	3.36E+01		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	CO-60	10198-40-0	2.60E-01	pCi/L	1.7E+00	1.7E+00	U	3.42E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	CS-134	13967-70-9	-5.09E-01	pCi/L	1.7E+00	1.7E+00	U	3.11E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	CS-137	10045-97-3	-1.39E+00	pCi/L	1.5E+00	1.5E+00	U	2.28E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	EU-152	14683-23-9	-1.41E+00	pCi/L	3.7E+00	3.7E+00	U	6.43E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	EU-154	15585-10-1	1.15E+00	pCi/L	4.8E+00	4.8E+00	U	9.77E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	EU-155	14391-16-3	2.45E-01	pCi/L	3.1E+00	3.1E+00	U	5.66E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	K-40	13966-00-2	-8.56E+00	pCi/L	3.3E+01	3.3E+01	U	7.10E+01		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	RU-106	13967-48-1	3.55E+00	pCi/L	1.4E+01	1.4E+01	U	2.66E+01		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I
6290568	SB-125	14234-35-6	8.86E-01	pCi/L	3.7E+00	3.7E+00	U	6.90E+00		GAMMA_GS	2.0091E+00	L	11/20/2006	19:22	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGAQF10	B1KLT8		MW6-SBB-A1	I07-002	W05033					10/12/2006 10:29

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6290568	BE-7	13966-02-4	2.97E+00	pCi/L	2.3E+01	2.3E+01	U	4.38E+01		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	CO-60	10198-40-0	3.08E-01	pCi/L	2.0E+00	2.0E+00	U	4.26E+00		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	CS-134	13967-70-9	1.46E-01	pCi/L	2.8E+00	2.8E+00	U	5.20E+00		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	CS-137	10045-97-3	4.13E-01	pCi/L	2.1E+00	2.1E+00	U	3.99E+00		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	EU-152	14683-23-9	-1.71E+00	pCi/L	5.5E+00	5.5E+00	U	9.71E+00		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	EU-154	15585-10-1	6.21E+00	pCi/L	6.8E+00	6.8E+00	U	1.56E+01		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	EU-155	14391-16-3	-1.59E-01	pCi/L	4.0E+00	4.0E+00	U	7.32E+00		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	K-40	13966-00-2	2.96E+01	pCi/L	4.7E+01	4.7E+01	U	1.05E+02		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

6290568	RU-106	13967-48-1	5.10E+00	pCi/L	2.1E+01	2.1E+01	U	3.95E+01		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I
6290568	SB-125	14234-35-6	2.06E+00	pCi/L	5.8E+00	5.8E+00	U	1.10E+01		GAMMA_GS	1.9889E+00	L	11/20/2006	19:21	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGKE110	B1KLK0		MW6-SBB-A1	I07-002	W05033					10/16/2006 13:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290569	SR-90	10098-97-2	1.66E+00	pCi/L	3.5E-01	4.3E-01		5.54E-01	76.9	SRISO_SEP_PRE	1.0014E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGKE410	B1KLR3		MW6-SBB-A1	I07-002	W05033					10/16/2006 12:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290569	SR-90	10098-97-2	2.29E-01	pCi/L	2.3E-01	2.3E-01	U	4.58E-01	77.6	SRISO_SEP_PRE	1.0056E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGKE810	B1KLR2		MW6-SBB-A1	I07-002	W05033					10/16/2006 12:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290569	SR-90	10098-97-2	2.72E-01	pCi/L	2.4E-01	2.4E-01	U	4.83E-01	76.2	SRISO_SEP_PRE	1.0067E+00	L	11/30/2006 06:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGKEW10	B1KM35		MW6-SBB-A1	I07-002	W05033					10/16/2006 09:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290567	H-3	10028-17-8	7.57E+03	pCi/L	3.0E+02	4.4E+02		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	11/01/2006 04:42	I
6290562	C-14	14762-75-5	9.88E+01	pCi/L	6.1E+00	1.8E+01		8.54E+00	100.0	C14_LSC	2.00E-01	L	11/22/2006 03:33	I
6290568	BE-7	13966-02-4	-5.32E+00	pCi/L	1.7E+01	1.7E+01	U	2.94E+01		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	CO-60	10198-40-0	7.40E-01	pCi/L	1.1E+00	1.1E+00	U	2.56E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	CS-134	13967-70-9	1.73E-01	pCi/L	1.3E+00	1.3E+00	U	2.57E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	CS-137	10045-97-3	8.50E-01	pCi/L	1.3E+00	1.3E+00	U	2.58E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	EU-152	14683-23-9	1.42E+00	pCi/L	3.3E+00	3.3E+00	U	6.31E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	EU-154	15585-10-1	6.11E-01	pCi/L	4.6E+00	4.6E+00	U	8.82E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	EU-155	14391-16-3	-8.11E-02	pCi/L	2.8E+00	2.8E+00	U	5.02E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	K-40	13966-00-2	1.28E+00	pCi/L	2.3E+01	2.3E+01	U	2.41E+01		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	RU-106	13967-48-1	-2.52E+00	pCi/L	1.2E+01	1.2E+01	U	2.11E+01		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I
6290568	SB-125	14234-35-6	-2.48E+00	pCi/L	3.5E+00	3.5E+00	U	5.87E+00		GAMMA_GS	2.5026E+00	L	11/20/2006 19:22	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

11/30/2006 12:56:44 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 33876 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JGKFA10	B1KLK4		MW6-SBB-A1	I07-002	W05033					10/16/2006 11:12

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6290569	SR-90	10098-97-2	1.52E-01	pCi/L	2.2E-01	2.2E-01	U	4.56E-01	78.5	SRISO_SEP_PRE	1.0056E+00	L	11/30/2006 06:09	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMK21AB **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 11:39

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290568	BE-7	-1.64E+00	pCi/L	2.3E+01	U	4.00E+01			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	13966-02-4			2.3E+01						L	19:23				
6290568	CO-60	9.80E-01	pCi/L	2.1E+00	U	4.16E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	10198-40-0			2.1E+00						L	19:23				
6290568	CS-134	1.12E+00	pCi/L	2.1E+00	U	3.97E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	13967-70-9			2.1E+00						L	19:23				
6290568	CS-137	-5.77E-01	pCi/L	1.7E+00	U	2.97E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	10045-97-3			1.7E+00						L	19:23				
6290568	EU-152	1.97E+00	pCi/L	4.7E+00	U	8.40E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	14683-23-9			4.7E+00						L	19:23				
6290568	EU-154	-2.04E+00	pCi/L	5.4E+00	U	9.56E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	15585-10-1			5.4E+00						L	19:23				
6290568	EU-155	-4.39E-02	pCi/L	4.6E+00	U	7.94E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	14391-16-3			4.6E+00						L	19:23				
6290568	K-40	-6.72E+01	pCi/L	5.2E+01	U	1.10E+02			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	13966-00-2			5.2E+01						L	19:23				
6290568	RU-106	-1.69E+01	pCi/L	1.6E+01	U	2.47E+01			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	13967-48-1			1.6E+01						L	19:23				
6290568	SB-125	-5.86E-01	pCi/L	4.2E+00	U	7.37E+00			GAMMA_GS	2.4998E+00	11/20/2006				D
BLK	14234-35-6			4.2E+00						L	19:23				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMK31AB	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/16/2006 11:12
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290569	SR-90	-9.90E-03	pCi/L	2.1E-01	U	4.61E-01	71.0		SRISO_SEP_P	1.0036E+00	11/30/2006				D
BLK	10098-97-2			5.7E-02						L	06:10				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMKP1AB	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/16/2006 09:51
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290562	C-14	-3.00E+00	pCi/L	6.9E+00	U	8.54E+00	100.0		C14_LSC	2.00E-01	11/22/2006				D
BLK	14762-75-5			3.4E+00						L	00:01				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMKV1AB **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 11:33

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290567	H-3	1.02E-01	pCi/L	1.4E+02	U	3.04E+02	100.0		906.0_H3_LSC	5.00E-03	10/31/2006				D
BLK	10028-17-8			1.2E+02						L	17:47				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMKV1DX
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: BLK

Collection Date: 10/10/2006 11:33
Sample On Date:
Received Date: 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290567	H-3	-4.07E+01	pCi/L	1.4E+02	U	3.07E+02	100.0		906.0_H3_LSC	5.00E-03	10/31/2006				D
BLK	10028-17-8			1.2E+02						L	20:31				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLA1AB **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 10:29

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290571	Uranium	0.00E+00	ug/L	0.0E+00	U	2.10E-01			UTOT_KPA	2.56E-02	11/30/2006				D
BLK	7440-61-1			0.0E+00						ML	08:22				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMLG1AB	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/12/2006 10:29
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290573	TC-99	3.69E+00	pCi/L	6.1E+00	U	9.94E+00	100.0		TC99_ETVDSK	1.253E-01	11/24/2006				D
BLK	14133-76-7			4.2E+00						L	20:45				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLK1AB **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/11/2006 11:43

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290575	H-3	-1.56E+00	pCi/L	2.4E+01	U	2.37E+01	100.0		906.0ML_H3_L	1.00E-02	11/16/2006				D
BLK	10028-17-8			1.4E+01						L	11:51				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMLM1AB	**Sdg/Rept Nbr:**	W05033	33876	**Collection Date:** 10/11/2006 10:26
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290577	ALPHA	-8.17E-02	pCi/L	1.4E-01	U	5.79E-01	100.0		9310_ALPHAB	1.999E-01	11/21/2006				D
BLK	12587-46-1			1.4E-01						L	08:45				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLR1AB **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 10:57
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290579	BETA	7.10E-01	pCi/L	1.2E+00	U	2.59E+00	100.0		9310_ALPHAB	2.015E-01	11/21/2006				D
BLK	12587-47-2			1.2E+00						L	06:27				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMK21CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 11:39

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290568	CO-60	2.38E+01	pCi/L	5.9E+00		3.35E+00		3.06E+01	GAMMA_GS	2.5003E+00	11/20/2006			70	D
BS	10198-40-0			5.9E+00				78.0		L	21:25			130	
6290568	CS-137	1.86E+01	pCi/L	4.8E+00		3.74E+00		2.00E+01	GAMMA_GS	2.5003E+00	11/20/2006			70	D
BS	10045-97-3			4.8E+00				92.8		L	21:25			130	
6290568	EU-152	5.67E+01	pCi/L	1.2E+01		9.23E+00		6.16E+01	GAMMA_GS	2.5003E+00	11/20/2006			70	D
BS	14683-23-9			1.2E+01				92.1		L	21:25			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMK31CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/16/2006 11:12

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290569	SR-90	1.29E+01	pCi/L	2.0E+00		5.44E-01	67.2	1.36E+01	SRISO_SEP_P	1.0064E+00	11/30/2006			70	D
BS	10098-97-2			8.1E-01				94.6		L	06:10			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMKP1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: BS

Collection Date: 10/16/2006 09:51
Sample On Date:
Received Date: 10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290562	C-14	4.13E+01	pCi/L	1.2E+01		8.53E+00	100.0	4.54E+01	C14_LSC	2.00E-01	11/22/2006			70	D
BS	14762-75-5			4.8E+00				90.9		L	00:43			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMKV1CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 11:33

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290567	H-3	2.31E+03	pCi/L	2.4E+02		3.04E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	10/31/2006			70	D
BS	10028-17-8			2.0E+02				85.1		L	19:09			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMKV1EM **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 11:33

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290567	H-3	2.67E+03	pCi/L	2.5E+02		3.09E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	10/31/2006			70	D
BS	10028-17-8			2.1E+02				98.2		L	21:53			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMLA1CS	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/12/2006 10:29
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290571	Uranium	3.57E+00	ug/L	4.3E-01		8.38E-03		3.63E+01	UTOT_KPA	2.50E-02	11/30/2006			70	D
BS	7440-61-1			4.3E-01				9.8		ML	08:28			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLA1DS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 10:29

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290571	Uranium	3.50E-01	ug/L	3.6E-02		8.32E-03		3.60E+00	UTOT_KPA	2.52E-02	11/30/2006			70	D
BS	7440-61-1			3.6E-02				9.7		ML	08:29			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLG1CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 10:29

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290573	TC-99	4.82E+02	pCi/L	3.5E+01		9.93E+00	100.0	5.43E+02	TC99_ETVDSK	1.25E-01	11/24/2006			70	D
BS	14133-76-7			1.3E+01				88.8		L	21:48			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGMLK1CS	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/11/2006 11:43
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290575	H-3	2.24E+03	pCi/L	2.5E+02		2.39E+01	100.0	2.72E+03	906.0ML_H3_L	1.00E-02	11/17/2006			70	D
BS	10028-17-8			3.4E+01				82.4		L	12:53			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLM1CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/11/2006 10:26

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290577	ALPHA	2.18E+01	pCi/L	4.8E+00		7.34E-01	100.0	2.33E+01	9310_ALPHAB	2.001E-01	11/21/2006			70	D
BS	12587-46-1			2.2E+00				93.6		L	08:45			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGMLR1CS **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 10:57

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290579	BETA	2.10E+01	pCi/L	3.5E+00		2.52E+00	100.0	2.29E+01	9310_ALPHAB	1.996E-01	11/21/2006			70	D
BS	12587-47-2			2.3E+00				91.4		L	06:27			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JF6DJ1FR	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/10/2006 10:57
Client Id:	B1KPH3	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290579	BETA	2.19E+01	pCi/L	4.3E+00		4.08E+00	100.0		9310_ALPHAB	1.358E-01	11/21/2006	7.9	0.6		D
DUP	12587-47-2	2.37E+01		3.2E+00						L	06:27	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JF6DT1ER **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/10/2006 11:33

Client Id: B1KPJ6 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 10/10/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290567	H-3	3.32E+03	pCi/L	2.8E+02		3.04E+02	100.0		906.0_H3_LSC	5.00E-03	11/01/2006	3.1	0.5		D
DUP	10028-17-8	3.42E+03		2.2E+02						L	03:20	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JF7061DR	**Sdg/Rept Nbr:**	W05033	33876	**Collection Date:** 10/11/2006 11:43
Client Id:	B1JL89	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-001	MW6-SBB-A19981								AS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290575	H-3	6.43E+01	pCi/L	2.5E+01		2.49E+01	100.0		906.0ML_H3_L	1.00E-02	11/19/2006	4.8	0.2		D
DUP	10028-17-8	6.13E+01		1.3E+01						L	14:58	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JF72H1ER
Client Id: B1KPL4
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: DUP

Collection Date: 10/11/2006 10:26
Sample On Date:
Received Date: 10/11/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290577	ALPHA	1.16E+01	pCi/L	3.7E+00		1.96E+00	100.0		9310_ALPHAB	1.231E-01	11/21/2006	15.5	0.6		D
DUP	12587-46-1	9.94E+00		2.9E+00						L	08:45	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id:	JGA231FR	**Sdg/Rept Nbr:**	W05033 33876	**Collection Date:**	10/12/2006 10:29
Client Id:	B1KPR7	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290571	Uranium	2.85E+00	ug/L	2.9E-01		8.32E-02			UTOT_KPA	2.52E-02	11/30/2006	1.8	0.2		D
DUP	7440-61-1	2.80E+00		2.9E-01						ML	08:53	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGA231HR
Client Id: B1KPR7
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: DUP

Collection Date: 10/12/2006 10:29
Sample On Date:
Received Date: 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290573	TC-99	2.81E+01	pCi/L	7.3E+00		9.72E+00	100.0		TC99_ETVDSK	1.281E-01	11/24/2006	14.3	0.8		D
DUP	14133-76-7	3.25E+01		4.9E+00						L	18:41	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGAQ41FR **Sdg/Rept Nbr:** W05033 33876 **Collection Date:** 10/12/2006 11:39

Client Id: B1KLJ0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-002	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290568	BE-7	-1.46E+00	pCi/L	2.7E+01	U	4.71E+01			GAMMA_GS	2.0091E+00	11/20/2006	609.6	0.2		D
DUP	13966-02-4	2.88E+00		2.7E+01						L	21:21	20.0	3		
6290568	CO-60	-8.57E-01	pCi/L	2.3E+00	U	4.15E+00			GAMMA_GS	2.0091E+00	11/20/2006	0.0	0.7		D
DUP	10198-40-0	2.60E-01		2.3E+00						L	21:21	20.0	3		
6290568	CS-134	1.08E+00	pCi/L	2.4E+00	U	4.54E+00			GAMMA_GS	2.0091E+00	11/20/2006	555.0	0.9		D
DUP	13967-70-9	-5.09E-01		2.4E+00						L	21:21	20.0	3		
6290568	CS-137	-1.60E+00	pCi/L	2.1E+00	U	3.43E+00			GAMMA_GS	2.0091E+00	11/20/2006	0.0	0.1		D
DUP	10045-97-3	-1.39E+00		2.1E+00						L	21:21	20.0	3		
6290568	EU-152	4.58E+00	pCi/L	5.7E+00	U	1.05E+01			GAMMA_GS	2.0091E+00	11/20/2006	378.2	1.5		D
DUP	14683-23-9	-1.41E+00		5.7E+00						L	21:21	20.0	3		
6290568	EU-154	2.71E+00	pCi/L	6.9E+00	U	1.35E+01			GAMMA_GS	2.0091E+00	11/20/2006	80.8	0.3		D
DUP	15585-10-1	1.15E+00		6.9E+00						L	21:21	20.0	3		
6290568	EU-155	2.33E+00	pCi/L	5.6E+00	U	1.00E+01			GAMMA_GS	2.0091E+00	11/20/2006	162.0	0.5		D
DUP	14391-16-3	2.45E-01		5.6E+00						L	21:21	20.0	3		
6290568	K-40	-5.58E+01	pCi/L	6.5E+01	U	1.41E+02			GAMMA_GS	2.0091E+00	11/20/2006	0.0	1.		D
DUP	13966-00-2	-8.56E+00		6.5E+01						L	21:21	20.0	3		
6290568	RU-106	6.26E-01	pCi/L	1.9E+01	U	3.37E+01			GAMMA_GS	2.0091E+00	11/20/2006	140.1	0.2		D
DUP	13967-48-1	3.55E+00		1.9E+01						L	21:21	20.0	3		
6290568	SB-125	-3.49E-02	pCi/L	5.3E+00	U	9.48E+00			GAMMA_GS	2.0091E+00	11/20/2006	216.4	0.2		D
DUP	14234-35-6	8.86E-01		5.3E+00						L	21:21	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGKEW1ER
Client Id: B1KM35
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: DUP

Collection Date: 10/16/2006 09:51
Sample On Date:
Received Date: 10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-002	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290562	C-14	1.42E+02	pCi/L	2.3E+01		8.54E+00	100.0		C14_LSC	2.00E-01	11/22/2006	36.1	2.7		D
DUP	14762-75-5	9.88E+01		7.0E+00						L	04:15	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGKFA1CR
Client Id: B1KLK4
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: DUP

Collection Date: 10/16/2006 11:12
Sample On Date:
Received Date: 10/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-002	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290569	SR-90	1.03E-01	pCi/L	2.2E-01	U	4.66E-01	76.9		SRISO_SEP_P	1.0025E+00	11/30/2006	38.6	0.3		D
DUP	10098-97-2	1.52E-01		2.2E-01						L	06:09	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGA231GW
Client Id: B1KPR7
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: MS

Collection Date: 10/12/2006 10:29
Sample On Date:
Received Date: 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290573	TC-99	3.39E+03	pCi/L	2.1E+02		1.00E+01	100.0	3.63E+03	TC99_ETVDSK	1.245E-01	11/24/2006			60	D
MS	14133-76-7			3.2E+01				93.4		L	17:38			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, November 30, 2006

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05033.Edd, h:\Reportdb\edd\FeadIV\Rad\33876.Edd

Lab Sample Id: JGA3R1FW
Client Id: B1KPR8
Moisture/Solids%*:

Sdg/Rept Nbr: W05033 33876
Matrix: WATER WATER
QC Type: MS

Collection Date: 10/12/2006 07:30
Sample On Date:
Received Date: 10/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-010	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6290571	Uranium	3.61E+01	ug/L	4.3E+00		8.35E-02		3.62E+01	UTOT_KPA	2.51E-02	11/30/2006			60	D
MS	7440-61-1			4.3E+00				100.0		ML	09:00			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	S. Wheland	Calibration Curve Information				SOP Information		BATCH #	6276387
Start Date:	10/3/2006		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	
Start Time:	8:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	10/3/2006	Std. 1	0.100	0.050	0.100				
End Time	10:15	Std. 2	0.400	0.200	0.385			Instrument Information	
		Std. 3	1.000	0.500	0.945	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	2.000	1.000	1.843			Wavelength:	540
		Std 5	3.000	1.500	2.587			R Squared	0.99792
Date:	10/03/06	Standard Volume (mL):			100.000			Slope:	1.74169
		Date of Curve:			10/3/2006			Intercept:	0.03325

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-06-00344	Cr-06-00345		Cr-06-00344		Cr-06-00344	
Prep Date:	10/03/06	10/03/06		10/03/06		10/03/06	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	10/04/06	10/04/06		10/04/06		10/04/06	
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	0.950	0.000	0.950	1	0.5264	0.526	105.27%
n/a	n/a	ICB	100.000	0.002	0.000	0.002	1	-0.0179	<MDL	
JFKAT-1AA-B	n/a	Prep Blank	100.000	0.006		0.006	1	-0.0156	<MDL	
JFKAT-1AC-C	n/a	LCS	100.000	0.932		0.932	1	0.5160	0.516	103.20%
JFHRH-1AA	B1KMR4	Sample	100.000	0.462		0.462	1	0.2462	0.246	
JFHRH-1AC-S	B1KMR4-MS	MS	100.000	0.892		0.892	1	0.4931	~~0.493~~ 0.249	93.82%
JFHRH-1AD-D	B1KMR4-MSD	MSD	100.000	0.911		0.911	1	0.5040	~~0.504~~ 0.252	97.96%
JFHRH-1AE-X	B1KMR4-DUP	Duplicate	100.000	0.462		0.462	1	0.2462	0.246	0.258
JFHRN-1AA	B1KLB6	Sample	100.000	0.017		0.017	1	-0.0093	<MDL	
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.951		0.951	1	0.5269	0.527	105.39%
n/a	n/a	CCB	100.000	0.005		0.005	1	-0.0162	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SS 11/29/06

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	S. Wheland	Calibration Curve Information				SOP Information		BATCH #	6286296
Start Date:	10/13/2006		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05033
Start Time:	9:00	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	10/13/2006	Std. 1	0.100	0.050	0.100				
End Time	10:30	Std. 2	0.400	0.200	0.393			Instrument Information	
		Std. 3	1.000	0.500	0.959	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	2.000	1.000	1.866			Wavelength:	540
		Std 5	3.000	1.500	2.658			R Squared	0.99865
Date:	10/13/06	Standard Volume (mL):			100.000			Slope:	1.78392
		Date of Curve:			10/13/2006			Intercept:	0.02971

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-06-00352	Cr-06-00353		Cr-06-00352		Cr-06-00352	
Prep Date:	10/13/06	10/13/06		10/13/06		10/13/06	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	10/14/06	10/14/06		10/14/06		10/14/06	
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	0.946	0.000	0.946	1	0.5136	0.514	102.73%
n/a	n/a	ICB	100.000	0.004	0.000	0.004	1	-0.0144	<MDL	
JGDQD-1AA-B	n/a	Prep Blank	100.000	0.011		0.011	1	-0.0105	<MDL	
JGDQD-1AC-C	n/a	LCS	100.000	0.956		0.956	1	0.5192	0.519	103.85%
JGAPX-1AA	B1KLT7	Sample	100.000	0.819		0.819	1	0.4424	0.442	
JGAPX-1AC-S	B1KLT7-MS	MS	100.000	1.291		1.291	1	0.7070	~~0.707~~ 0.707	100.54%
JGAPX-1AD-D	B1KLT7-MSD	MSD	100.000	1.294		1.294	1	0.7087	~~0.709~~ 0.707	101.18%
JGAPX-1AE-X	B1KLT7-DUP	Duplicate	100.000	0.831		0.831	1	0.4492	0.449	
JGAQ0-1AA	B1KLH9	Sample	100.000	0.050		0.050	1	0.0114	0.011	
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.944		0.944	1	0.5125	0.513	102.50%
n/a	n/a	CCB	100.000	0.002		0.002	1	-0.0155	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SKS 11/21/06

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	S. Wheland	Calibration Curve Information				SOP Information		BATCH #	6290297
Start Date:	10/17/2006		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05033
Start Time:	8:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	10/17/2006	Std. 1	0.100	0.050	0.099				
End Time	10:00	Std. 2	0.400	0.200	0.381			Instrument Information	
		Std. 3	1.000	0.500	0.926	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	2.000	1.000	1.823			Wavelength:	540
		Std 5	3.000	1.500	2.590			R Squared	0.99867
Date:	10/17/06	Standard Volume (mL):			100.000			Slope:	1.73964
		Date of Curve:			10/17/2006			Intercept:	0.02753

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-06-00354	Cr-06-00355		Cr-06-00354		Cr-06-00354	
Prep Date:	10/17/06	10/17/06		10/17/06		10/17/06	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	10/18/06	10/18/06		10/18/06		10/18/06	
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	0.915	0.000	0.915	1	0.5101	0.510	102.03%
n/a	n/a	ICB	100.000	0.002	0.000	0.002	1	-0.0147	<MDL	
JGLG0-1AA-B	n/a	Prep Blank	100.000	0.002		0.002	1	-0.0147	<MDL	
JGLG0-1AC-C	n/a	LCS	100.000	0.929		0.929	1	0.5182	0.518	103.64%
JGKEM-1AA	B1KM32	Sample	100.000	0.063		0.063	1	0.0204	0.020	
JGKEM-1AC-S	B1KM32-MS	MS	100.000	0.536		0.536	1	0.2923	~~0.292~~ 0.2[illegible]	103.32%
JGKEM-1AD-D	B1KM32-MSD	MSD	100.000	0.543		0.543	1	0.2963	~~0.296~~ 0.2[illegible]6	104.85%
JGKEM-1AE-X	B1KM32-DUP	Duplicate	100.000	0.063		0.063	1	0.0204	0.020	
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.916		0.916	1	0.5107	0.511	102.14%
n/a	n/a	CCB	100.000	0.002		0.002	1	-0.0147	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SKS 11/29/06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/21/2006 10:15:30 AM

Lot No., Due Date: J6J120305,J6J160207; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290568; RGAMMA Gamma by GER

SDG, Matrix: W05033; WATER

1.0 COC

1.1 Is the ICOC 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 & Samples

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:
See NCM. 10-0919

First Level Review Pam Anderson **Date** 11-21-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6L90568
W05033

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: See NCM

Second Level Review: Darryl R Adam Date: 11-22-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: 10-09019
NCM Initiated By: Pam Anderson
Date Opened: 11/22/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Gamma by GER
Lot #'s (Sample #'s): J6J120305 (1,3,5), J6J160207 (2),
QC Batches: 6290568

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	11/22/2006	There was insufficient sample sent for a duplicate in this gamma batch. A sample was counted on a different detector for a replicate.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	11/22/2006	Note in case narrative.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 11/22/2006

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/22/2006 10:01:48 AM

Lot No., Due Date: J6J110172,J6J110357,J6J120305; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290577; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05033; 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 => JF6DJ1AC 130.70<200.00 JF6DT1AC 179.40<200.00 JF72H1AA 122.60<200.00 JGAQ41AA 185.60<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
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. No Matrix Blanks (MBlks) found in Batch!			✓
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. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
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. Batch Positive Result => JF6CG1AC ALPHA 2.5E+00 L:1.3E+00 JF6DJ1AC ALPHA 6.7E+00 L:2.2E+00 JF6DT1AC ALPHA 3.2E+00 L:2.1E+00 JF72H1AA ALPHA 9.9E+00 L:1.9E+00 JGAQ41AA ALPHA 2.7E+00 L:2.0E+00		✓	
8.23 Result <= Action Level, when Defined. OK: No Action Level Found => ALPHA	✓		

OK; No Callin Level Found => ALPHA

8.24 Result + 3s >=0, Not Too Negative. Yes No N/A
OK ✓

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

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. Yes No N/A
OK ✓

First Level Review Pam Anderson **Date** 11-22-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: L290577
W05023

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: Sherryl R. Adam Date: 11-22-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/21/2006 10:14:47 AM

Lot No., Due Date: J6J110172,J6J110357,J6J120305; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290579; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05033; 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 => JF6DJ1AD 135.80<200.00 JF72H1AC 145.50<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
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. No Matrix Blanks (MBlks) found in Batch!			✓
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. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JF6DJ1AD BETA 4.4E+00>4.0E+00 JF6DJ1AF BETA 4.1E+00>4.0E+00 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JF6CG1AD BETA 1.2E+01 L:3.0E+00 JF6DJ1AD BETA 2.4E+01 L:4.4E+00 JF72H1AC BETA 9.6E+00 L:3.8E+00 JGAQ41AC BETA 6.0E+00 L:2.8E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		

NCm# 10-09018

8.24 Result + 3s >=0, Not Too Negative. Yes No N/A
OK ✓

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A
No FWHM found in Batch Data! ✓

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A
No Count Library found in Batch Data! ✓

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. Yes No N/A
OK ✓

First Level Review Pam Anderson **Date** 11-21-04

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290579
W05033

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: See NCM

Second Level Review: Sheryl A Adam Date: 11-22-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09018**
NCM Initiated By: Pam Anderson
Date Opened: 11/22/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J6J110172 (2),
QC Batches: 6290579

Nonconformance: MDA not met
Subcategory: Sample size reduced due to high residue mass

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	11/22/2006	Beta sample JF6DJ1AD and it's duplicate JF6DJ1AF do not meet CRDL due to high dissolved solids; however, the results of these samples >MDA>CRDL.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	11/22/2006	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 11/22/2006

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/30/2006 10:34:18 AM

Lot No., Due Date: J6J110172,J6J110353,J6J120336,J6J160207; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290569; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05033; 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 Incorrect Tracer/Vial => JF6CG1AE SRTA<>SRTB JF7061AC SRTA<>SRTB JF71C1AC SRTA<>SRTB JGA231AC SRTA<>SRTB JGA3R1AC SRTA<>SRTB JGKE11AA SRTA<>SRTB JGKE41AA SRTA<>SRTB JGKE81AA SRTA<>SRTB JGKFA1AA SRTA<>SRTB JGKFA1AC SRTA<>SRTB JGMK31AA SRTA<>SRTB JGMK31AC STSC<>SRSG Q:V9 ok PA 11.30.06		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
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. No Matrix Blanks (MBlks) found in Batch!			✓
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=> JGKFA1AC SR-90 140.0 JGKFA1AC SR-90 68.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
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. Batch Positive Result =>		✓	

JF6CG1AE SR-90 2.6E+00 L:4.7E-01
JF6CG1AE SR-90 2.8E+00 L:8.7E-01
JF6CG1AE SR-90 2.7E+00 L:4.7E-01
JGA231AC SR-90 2.6E+01 L:6.0E-01
JGA231AC SR-90 2.7E+01 L:9.0E-01
JGA231AC SR-90 2.7E+01 L:5.3E-01
JGKE11AA SR-90 2.0E+00 L:7.3E-01
JGKE11AA SR-90 1.3E+00 L:8.4E-01
JGKE11AA SR-90 1.7E+00 L:5.5E-01

8.23 Result <= Action Level, when Defined. Yes ✓ No N/A
OK; No Action Level Found => SR-90

OK; No Callin Level Found => SR-90

8.24 Result + 3s >=0, Not Too Negative. Yes ✓ No N/A
OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

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. Yes ✓ No N/A
OK

First Level Review Pam Andrews **Date** 11 30 06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290569
W05033

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 Wilson Date: 11-30-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/24/2006 9:02:18 AM

Lot No., Due Date: J6J120336,J6J120305,J6J160207; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290562; RC14 C-14 by LSC

SDG, Matrix: W05033; 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 OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
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. No Matrix Blanks (MBlks) found in Batch!			✓
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=> JGKEW1AE C-14 35.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
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 => C-14 OK, No Callin Level Found => C-14	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

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 Pam Anderson **Date** 11-24-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290562
W05033

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: Sherryl A Adam Date: 11-24-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/27/2006 10:46:12 AM

Lot No., Due Date: J6J120336; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290573; RTC99 Tc-99 by LSC

SDG, Matrix: W05033; 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 Incorrect Tracer/Vial => JGA231AG TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
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. No Matrix Blanks (MBlks) found in Batch!			✓
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=> JGA231AH TC-99 26.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
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 => TC-99 OK; No Calln Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

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. Yes No N/A ✓
OK

First Level Review Pam Anderson **Date** 11-27-05

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6L90573
W05033

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: 11-28-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/21/2006 10:13:38 AM

Lot No., Due Date: J6J110353; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290575; RLOALPUX Midlevel Tritium

SDG, Matrix: W05033; WATER

1.0 COC

	Yes	No	N/A
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		

2.0 QC Batch

	Yes	No	N/A
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

	Yes	No	N/A
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

	Yes	No	N/A
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

	Yes	No	N/A
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** 11-21-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290575
W05033

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: Sherryl A Adam Date: 11-21-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/2/2006 4:41:42 PM

Lot No., Due Date: J6J110172,J6J160207; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290567; RTRITIUM H-3 by LSC

SDG, Matrix: W05033; WATER

8.0 Correction Calculation Protocol Used. — Yes ✓ No N/A
OK

8.01 The Appropriate Methods Were Used To Analyze the Samples — Yes ✓ No N/A
OK

8.02 Final Results Are in the Appropriate Activity Units — Yes ✓ No N/A
OK

8.03 Batch Contains the Required QC Appropriate for the Method — Yes ✓ No N/A
OK

8.04 The Correct Tracer and QC Vials Where Used in the Samples — Yes ✓ No N/A
OK

8.05 Sample was Appropriately Traced Before or After Fractionating the Sample — Yes ✓ No N/A
OK

8.06 At Least the Minimum Sample Volume Was Used — Yes No ✓ N/A
Analysis Volume => JF6CG1AA 5.00<10.00
JF6DJ1AA 5.00<10.00
JF6DT1AA 5.00<10.00
JGKEW1AA 5.00<10.00 Q:VB

8.07 The Correct Count Geometry was Used. — Yes No ✓ N/A
Count Geometry => JGMKV1AF SVP15/5<>SVP10/10
JGMKV1AG SVP15/5<>SVP10/10
JGMKV1AA SVP15/5<>SVP10/10
JGMKV1AC SVP15/5<>SVP10/10
JGMKV1AD SVP15/5<>SVP10/10
JGMKV1AE SVP15/5<>SVP10/10
JF6CG1AA SVP15/5<>SVP10/10
JF6DJ1AA SVP15/5<>SVP10/10
JF6DT1AA SVP15/5<>SVP10/10
JF6DT1AE SVP15/5<>SVP10/10
JGKEW1AA SVP15/5<>SVP10/10 Q:VC

OK
PA
11-3-06

8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. — Yes ✓ No N/A
OK

8.09 Method Blank is within Control Limits. — Yes ✓ No N/A
OK

8.1 Comments:

8.11 Matrix Blank is within Control Limits. — Yes ✓ No N/A
OK

8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). — Yes ✓ No N/A
OK

8.13 QAS Specified Duplicate Equation Value within Control Limits. — Yes ✓ No N/A
OK (RPD)

8.14 LCS within Control Limits. — Yes ✓ No N/A
OK

8.15 MLCS within Control Limits. — Yes ✓ No N/A
OK

8.16 MS within Control Limits. — Yes No ✓ N/A
No Matrix Spike Samples (MS) found in Batch!

8.17 Tracer within Control Limits. — Yes No ✓ N/A
No Tracers found in Batch!

8.18 Samples are above Minimum Tracer Yield (No Failed Samples) — Yes No ✓ N/A
No Tracers found in Batch!

8.19 Sample Specific MDC <= CRDL. — Yes ✓ No N/A
OK

8.2 Comments:

8.21 Result < Lc, Activity Not Detected, U Flag. — Yes No ✓ N/A
No Limit Specified!

8.22 Result < Mdc, Activity Not Detected, U Flag. Yes No N/A
No Positive Results
OK Calc_IDL Not Calculated

8.23 Result <= Action Level, when Defined. Yes No N/A
OK; No Action Level Found => H-3

OK; No Callin Level Found => H-3

8.24 Result + 3s >=0, Not Too Negative. Yes No N/A
OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A
No Count Library found in Batch Data!

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. Yes No N/A
OK

First Level Review Pam Anderson Date 11-

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290567
W05033

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. Adams Date: 11-6-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/30/2006 10:33:35 AM

Lot No., Due Date: J6J110172,J6J110357,J6J120336; 11/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6290571; RUNAT UNat by KPA

SDG, Matrix: W05033; 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 Incorrect Tracer/Vial => JGMLA1AD UNSC<>UNSF Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
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. LCS Exceeds Control Limit => JGMLA1AC Uranium 10 L:70|130 JGMLA1AD Uranium 10 L:70|130 Q:S0		✓	
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
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. MDC/MDA > CRDL => JGA3R1AE Uranium 2.1E-01>1.4E-01 JGMLA1AA Uranium 2.1E-01>1.4E-01 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JF6DJ1AE Uranium 9.6E-01 L:8.1E-03 JF6DT1AD Uranium 6.9E-01 L:8.1E-03 JF72H1AD Uranium 1.6E+00 L:8.2E-03 JGA231AE Uranium 2.8E+00 L:8.3E-02		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	✓		

8.24 Result + 3s >=0, Not Too Negative. Yes No N/A
OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A
No Count Library found in Batch Data!

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. Yes No N/A
OK

First Level Review Pam Anderson **Date** 11·30·06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6290571
W05033

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: 11-30-06

Entered 11/29/06 SKS

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JFKAT, JFHRH, JFHRN**

Lab Sample Numbers or SDG: WQ5079 33 JGJ020227, JGJ020228

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003** SKS04/06 Batch 6276387

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: 10/3/06

Second-Level Review: [signature] Date: 11-29-06

Entered 11/29/06 SKS

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JGDQD, JGAPX, JGAQ0**

Lab Sample Numbers or SDG: W05033 J6J 120305

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003** Batch 6286296

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: 10/13/04

Second-Level Review: [signature] Date: 11-29-06

Entered 11/29/06 SKS

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JGLG0, JGKEM**

Lab Sample Numbers or SDG: JGL5033 JGJ160207

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003** Batch 6 290 297

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: 10/17/06

Second-Level Review: [signature] Date: 11-29-06

PNNL U6W020227
W050233

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Due 11-16-06

C.O.C. # I07-005-3

Page 1 of 1

Collector Fluor Hanford D. P. CONNOLLY SCS 10/4/06	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL OCTOBER 2006	DTS-SAWS H 109	**Ice Chest No.** TJ-2 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KMR4 (F)		W	10-2-06	1007	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
B1KMR5		W	↓	↓	1x20-mL P	Activity Scan	None

JFHRH

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. P. CONNOLLY			OCT 0 2 2006 1500	S. Smith		S. Smith	OCT 0 2 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

STL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10/2/06 1500

Client: PGW

SDG #: WD50229 33 SKS 10/4/06 NA [ ] SAF #: 107-005 NA [ ]

Work Order Number: U6J020227

Chain of Custody # 107-005-3

Shipping Container ID: TJ-2

Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes ~~[ ]~~ No [ ]
2. Custody Seals dated and signed? NA [ ] Yes ~~[ ]~~ No [ ]
3. Chain of Custody record present? Yes ~~[ ]~~ No [ ]
4. Cooler temperature: _____ NA ~~[ ]~~ 5. Vermiculite/packing materials is NA ~~[ ]~~ Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
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? Chrom NA ~~[ ]~~ pH<2 [ ] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes ~~[ ]~~ No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No ~~[ ]~~
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 10-2-06 1500

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

PNNL JGT 060228 W050229 33 SKS 10/4/06 Due 11-16-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-001-60

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-001	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100HR3IAM(1/2)-LOI OCTOBER 2006	Logbook: DTS-SAWS-H113	**Ice Chest No.** AFS-04-022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLB6 (F)		W	10/2/06	1057	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
B1KLB7		W	↓	↓	1x20-mL P	Activity Scan	None

JFHRN

D. Wall 10/2/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		OCT 02 2006 1500	L. Smith		S. Smith	OCT 02 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

SEE RETURN

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10/2/06 15:00

Client: PGW SDG #: W05029 33 SKS 10/4/06 NA [ ] SAF #: 107-001 NA [ ]

Work Order Number: J6J020228 Chain of Custody # 107-001-60

Shipping Container ID: AFS-04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? NA [ ] Yes [X] No [ ]
4. Cooler temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Yes [ ] No [ ]
6. Number of samples in shipping container: 1 Wet [ ] Dry [ ]
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   [X] appropriate samples labels
9. Samples are:
   [X] in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? CHROM NA [X] 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): N/A

Sample Custodian: S. Smith Date: 10/2/06 1500

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

PNNL J6J110172
W05033
Due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-19

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, OCTOBER 2006	HNF-N-506 2	Ice Chest No.: SAWJ-212 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPH3		W	10-10-06	1057	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KPH3		W			1x20-mL P	Activity Scan	None
B1KPH3		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KPH3		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JF6DJ	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington	D. R. Brewington	OCT 10 2006 14:10	S. Smith	S. Smith	S. Smith	OCT 10 2006 14:10
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

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STL RICHLAND

PNNL U6J110172
W05033
Due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-010-12**

Page 1 of 1

Collector Fluor Hanford L. D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** N 10-10-06
Project Title SURV, OCTOBER 2006	HNF-N-506 3	**Ice Chest No.** AFS-04 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPF7		W	10-10-06	1150	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KPF7		W			1x20-mL P	Activity Scan	None
B1KPF7		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KPF7		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

JF6CG

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L. D. Wall	L. D. Wall	14:10 OCT 10 2006	S. Smith	S. Smith	S. Smith	14:10 OCT 10 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PNNL J6V110172
WO 5033
Due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-24

Page 1 of 1

Collector Fluor Hanford ~~D. R. BREWINGTON~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	HNF-N-506 2	**Ice Chest No.** 54W5212 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPJ6		W	10-10-06	1133	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1KPJ6		W			1x20-mL P	Activity Scan	None
B1KPJ6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1KPJ6		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Alpha (1)	HNO3 to pH <2
						JF6DT	

Relinquished By	Received By
Print: Fluor Hanford ~~D. R. BREWINGTON~~ Sign: D.R. Brewington for Date/Time: OCT 10 2006 14:10	Print: S. Smith Sign: S. Smith Date/Time: OCT 10 2006 14:10
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10·10·06 14:10

Client: PGW SDG #: W05033 NA [ ] SAF #: S07-010 NA [ ]

Work Order Number: V6W110172 Chain of Custody # S07-010-12, 19, 24

Shipping Container ID: SAWS-212 AES-01-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler temperature: _____ NA [ ] Yes [✓] No [ ]
5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
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 [ ] 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): N/A

Sample Custodian: S. Smith Date: 10·10·06 14:10

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

PNNL JGJ110353
W05033
Due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-001-24

Page 1 of 1

Collector: R.T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100HR3IAM(1/2)-LOI, OCTOBER 2006	NNF-N-506 3	Ice Chest No.: SAMPLING Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KL89		W	10-11-06	1143	1x1000-mL P	906.0ML_H3_LSC: Mid-level Tritium (1)	None
B1KL89		W			1x20-mL P	Activity Scan	None
B1KL89		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JF706	

Relinquished By	Received By
Print: R.T. SICKLE Sign: Date/Time: 1430 OCT 11 2006	Print: S. Smith Sign: S. Smith Date/Time: 1430 OCT 11 2006
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PNNL U6U110353
W05033
Due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-001-25

Page 1 of 1

Collector R.T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-001	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100HR3IAM(1/2)-LOI OCTOBER 2006	HNF-N-509 3	**Ice Chest No.** SHWS119 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KL90		W	10-11-06	1143	1x1000-mL P	906.0ML_H3_LSC: Mid-level Tritium (1)	None
B1KL90		W	↓	↓	1x20-mL P	Activity Scan	None
B1KL90		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JF 7/C	

Relinquished By R.T. SICKLE Print Sign	Date/Time OCT 11 2006 14:30	Received By S. Smith Print S. Smith Sign	Date/Time OCT 11 2006 14:30
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

SITE RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10-11-06 1430

Client: PGW

SDG #: W05033 NA [ ] SAF #: I07-001 NA [ ]

Work Order Number: J6U110353

Chain of Custody # I07-001-24,25

Shipping Container ID: SAWS119

Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] Yes [✓] No [ ]
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 [✓] 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): N/A

Sample Custodian: S. Smith Date: 10-11-06 1430

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

PNNL J6J110357
W05033
due 11-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-47

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, OCTOBER 2006	Logbook: HNF-N-506-2	**Ice Chest No.** 3AWS-300 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPL4		W	10/11/06	1026	1x20-mL P	Activity Scan	None
B1KPL4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KPL4		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JF72H

L. Wall 10/11/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington	D.R. Brewington	OCT 11 2006 1430	D. Smith	D. Smith	D. Smith	OCT 11 2006 1430
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10-11-06 14:30

Client: PGW

SDG #: W05033 NA [ ] SAF #: 507-010 NA [ ]

Work Order Number: J6W110357

Chain of Custody # 507-010-47

Shipping Container ID: SAWS-300

Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] Yes [✓] No [ ]
5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard 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 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [✓] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 10-11-06 1430

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

PNNL J6U120305
W05033
due 11-27-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-4

Page 1 of 1

Collector: R.T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-002	Sampling Origin: Hanford Site 20.10/12/06	Purchase Order/Charge Code: 20.10/12/06
Project Title: 100KR4IAM(1/2)-LOL OCTOBER 2006	Logbook: ~~AFS-04-022~~ HNF-N-506-3	Ice Chest No.: AR AFS-04-022 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLT0		W	10.12.06	0730	1x20-mL P	Activity Scan	None
B1KLT0		W	↓	↓	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
						JGAPR	

R.L. Wade 10/12/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R.T. SICKLE			OCT 12 2006 1410	L. Smith	L. Smith		OCT 12 2006 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

96

PNNL J6J120305
W05033
Due 11-27-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-5

Page 1 of 1

Collector: R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: 107-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2)-LOL OCTOBER 2006	Logbook: HNF-N-506-3	Ice Chest No.: AFS-04-023 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLT7 (F)		W	10/12/06	~~1027~~ 1029	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
~~B1KLT8~~		~~W~~			~~1x500-mL aG~~	~~7196_CR6: Hexavalent Chromium (1)~~ 9-28-06 DF	Cool 4C
B1KLT8		W	10/12/06	1029	1x20-mL P	Activity Scan	None
B1KLT8		W	↓	↓	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2

BIKLT7 = JGAPX

BIKLT8 = JGAQF

R. Wall 10/12/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. T. SICKLE			OCT 13 2006 1410	S. Smith		S. Smith	OCT 13 2006 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

97

PNNL JUJ 120305
WC 5033
Due 11-27-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-14

Page 1 of 1

Collector R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI OCTOBER 2006	Logbook: HNF-N-506-3	**Ice Chest No.** AFS-04-022 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLH9 (F)		W	10/12/06	1139	1x500-mL aG	7196_CR6: Hexavalent Chromium (1) JGAQ0	Cool 4C
B1KLJ0		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KLJ0		W			1x20-mL P	Activity Scan	None
B1KLJ0		W			2x1000-mL G/P	C14_LSC: C-14 (1) JGAQ4	None
B1KLJ0		W			3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2

R. Wells 10/12/06

Relinquished By	Received By
Print R. T. SICKLE Sign [signature] Date/Time OCT 12 2006 1410	Print S. Smith Sign S. Smith Date/Time OCT 12 2006 1410
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

98

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10/12/06 14:10

Client: PGW SDG #: W05733 NA [ ] SAF #: I07-002 NA [ ]

Work Order Number: JW12030S Chain of Custody # I07-002-4,5,14

Shipping Container ID: AFS-04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] Yes [✓] No [ ]
5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
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 [✓] 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): N/A

Sample Custodian: S. Smith Date: 10-12-06 14:10

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

PNNL JGJ120336
WC5033
due 11-27-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-59

Page 1 of 1

Collector: R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. OCTOBER 2006	Logbook: HNF-N-506-3	Ice Chest No. AFS-04-022 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPR7		W	10/12/06	1029	1x20-mL P	Activity Scan	None
B1KPR7		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1KPR7		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1KPR7		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1KPR7		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JGA23	

L. Wall 10/12/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. T. SICKLE			OCT 12 2006 1410	L. Smith	L. Smith		OCT 12 2006 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

100

PNNL U6J120336
W05033
Due 11.27.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-010-60

Page 1 of 1

Collector: R.T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, OCTOBER 2006	Logbook: HNF-N-506-3	Ice Chest No.: AFS-04-022 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL GW samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KPR8		W	10-12-06	0730	1x20-mL P	Activity Scan	None
B1KPR8		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1KPR8		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1KPR8		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1KPR8		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JEA3R	

L.W. 10/12/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R.T. SICKLE			L.W. 10/12/06 OCT 13 2006 1410		S. Smith	S. Smith	L.W. 10/12/06 OCT 13 2006 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

SITE RICHLAND

1 of 1

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10·12·06 14:10

Client: PGW SDG #: W05033 NA [ ] SAF #: 507-010 NA [ ]

Work Order Number: J6U120336 Chain of Custody # 507-010-59,60

Shipping Container ID: AFS 04-022 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5: Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ 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 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [✓] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 10·12·06 14:10

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

PNNL JGW160207
W05033
Due 11.30 06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-002-68**

Page 1 of 1

Collector	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI OCTOBER 2006	HNE-N-506	**Ice Chest No.** SAWS-300 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLK4		W	10-16-06	1112	1x20-mL P	Activity Scan	None
B1KLK4		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JGKFA	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford D.R. CONNOLLY		1500 OCT 16 2006		SMITH	1500 OCT 16 2006
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

SUI RICHLAND

103

PNNL J6J160207
W05033
Due 11-30-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-60

Page 1 of 1

Collector: Floor Hanford D. P. CONNOLLY	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2)-LOL OCTOBER 2006	HNF N 5062	Ice Chest No.: SHUS 300 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLR2		W	10-16-06	1204	1x20-mL P	Activity Scan	None
B1KLR2		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JGKE8	

Relinquished By: Floor Hanford D. P. CONNOLLY	Print	Sign	Date/Time 1500 OCT 16 2006	Received By: S. Smith	Print	Sign	Date/Time 1500 OCT 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PNNL U6U160207
W05033
due 11-30-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-61

Page 1 of 1

Collector: Fluor Hanford D. P. CONNOLLY	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2)-LOI OCTOBER 2006	HNE N-506 2	Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLR3		W	10-16-06	1204	1x20-mL P	Activity Scan	None
B1KLR3		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JGKE4	

Relinquished By: Fluor Hanford D. P. CONNOLLY	Print	Sign	Date/Time OCT 16 2006 1500	Received By: S. Smith	Print S. SMITH Sign Date/Time OCT 16 2006 1500
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

STL RICHLAND

105

PNNL J6W160207
W05033
Due 11-30-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-002-52

Page 1 of 1

Collector: Fluor Hanford D. P. CONNOLLY	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2)-LOI OCTOBER 2006	HNF N 506 2	Ice Chest No.: SAMW 702 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

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 INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KLK0		W	10-16-06	1326	1x20-mL P	Activity Scan	None
B1KLK0		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1) JGKE1	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D.P.CONNOLLY			1500 OCT 16 2006	S. Smith	S. SMITH		1500 OCT 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

SPL RICHLAND

106

PNNL JGJ160207
W05033
Due 11-30-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-002-44**

Page 1 of 1

Collector Fluor Hanford D. R. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI OCTOBER 2006	HNF-N-506 2	**Ice Chest No.** 3AWS-300 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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 INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KM32 (F)		W	10-16-06	0951	1x500-mL aG	7196_CR6: Hexavalent Chromium (1) JGKEM	Cool 4C
B1KM35		W	↓	↓	1x20-mL P	Activity Scan	None
B1KM35		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1KM35		W			3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
B1KM35		W			1x1000-mL P	906.0_H3_LSC: Tritium (1) JGKEW	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. CONNOLLY			OCT 16 2006 1500	J. Smith		J. SMITH	OCT 16 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

SPT RICHLAND

I07

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 10/16/06 1500

Client: PGW SDG #: WD5033 NA [ ] SAF #: I07-002 NA [ ]

Work Order Number: J6J 160207 Chain of Custody # I07-002-44, 52, 61, 60, 68

Shipping Container ID: SAWS -300 Air Bill # N/A

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ] Yes [✓] No [ ]
6. Number of samples in shipping container: 5
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 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [✓] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Smith Date: 10/16/06 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

STL RICHLAND

11/17/2006 11:52:13 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #:

AnalyDueDate: 11/27/2006 W05033

Batch: 6290568 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ / APA

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 JGAPR-1-AA J6J120305-1-SAMP 10/12/2006 07:30		2500.60g,in AmtRec: 20ML,3XLP	#Containers: 4		100 mL	100	G6	2101	11/20/06 DD Scr: Alpha: 3.41E-04 uCi/Sa	Beta: -1.20E-04 uCi/Sa
2 JGAQF-1-AA J6J120305-3-SAMP 10/12/2006 10:29		1988.90g,in AmtRec: 20ML,3xLP	#Containers: 4				G7	2181 Scr: Alpha: -3.17E-04 uCi/Sa		Beta: 2.34E-04 uCi/Sa
3 JGAQ4-1-AE J6J120305-5-SAMP 10/12/2006 11:39		2009.10g,in AmtRec: 20ML,6XLP	#Containers: 7				G12	2182 Scr: Alpha: -4.38E-04 uCi/Sa		Beta: 1.24E-03 uCi/Sa
4 JGAQ4-1-AF-X J6J120305-5-DUP 10/12/2006 11:39		AmtRec: 20ML,6XLP	#Containers: 7				G13	2301 Scr: Alpha: -4.38E-04 uCi/Sa		Beta: 1.24E-03 uCi/Sa
5 JGKEW-1-AD J6J160207-2-SAMP 10/16/2006 09:51		2502.60g,in AmtRec: 20ML,6XLP	#Containers: 7				G10	2102 Scr: Alpha: -1.48E-03 uCi/Sa		Beta: 1.32E-03 uCi/Sa
6 JGMK2-1-AA-B J6J170000-568-BLK 10/12/2006 11:39		2499.80g,in AmtRec:	#Containers: 1				G13	2103 Scr: Alpha:		Beta:
7 JGMK2-1-AC-C J6J170000-568-LCS 10/12/2006 11:39		2500.30g,in AmtRec:	QCAG1297 11/07/06,pd 06/14/05,r #Containers: 1				G8	2305 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: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.24

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STL RICHLAND

11/17/2006 11:52:15 AM

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 11/27/2006

Sep1 DT/Tm Tech:

Batch: 6290568 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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:

Comments: JGAQF-SAMP "Comments Not enough sample for 2, 500 ml. aliquot. JB 11/17 /06"
JGAQ4-SAMP "Comments Not enough sample for 2,500 ml. aliquot.Not enough sample for Dup. Recount on diff. detector. JB 11/17/06"

PH <2.0 JB 11-17-06

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JGAPR1AA-SAMP Constituent List:

Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						

JGMK21AA-BLK:

Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						

JGMK21AC-LCS:

Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

JGAPR1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JGMK21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JGMK21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

110

11/21/2006 9:37:57 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/21/2005, 11/26/2006, Batch: '6290568', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290568						
AC		**CalcC**	**BockJ**	11/17/2006 11:10:51		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	InPrep	11/17/2006 11:10:51 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	11/17/2006 11:52:25 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	Sep2C	11/20/2006 7:14:19 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	11/20/2006 7:20:33 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	11/21/2006 6:24:18 AM	RICH-RD-0007 REVISION 5
AC			**BockJ**	11/17/2006 11:52:25		
AC			**AshworthA**	11/20/2006 7:14:19		
AC			**DAWKINSO**	11/20/2006 7:20:33		
AC			**BlackCL**	11/21/2006 6:24:18		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.18

STL RICHLAND

11/20/2006 7:31:11 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: 235

AnalyDueDate: 11/24/2006 W05033

Sep1 DT/Tm Tech:

Batch: 6290577 WATER pCi/L **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6290567 ARS6, 6290569 CLTL, 6290571 DHSS, 6290577 AZS7, 6290579 BCS8,

Prep Tech: ,BockJ / APA

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 JF6CG-1-AC J6J110172-1-SAMP 10/10/2006 11:50		199.80g,in AmtRec: 20ML,5XLP #Containers: 6		1.5	21.5	.50	10A	0743	n/21/06	Scr: Alpha: -6.68E-07 uCi/Sa Beta: -2.36E-08 uCi/Sa
2 JF6DJ-1-AC J6J110172-2-SAMP 10/10/2006 10:57		130.70g,in AmtRec: 20ML,500MLP,2XLP #Containers: 4			54.3	~~100~~ 11/21/06 100 .50 JB	10A	0936		Scr: Alpha: 6.38E-04 uCi/Sa Beta: -1.89E-04 uCi/Sa
3 JF6DT-1-AC J6J110172-3-SAMP 10/10/2006 11:33		179.40g,in AmtRec: 20ML,500MLP,2XLP #Containers: 4			55.3	.50	10B	0743	n/21/06	Scr: Alpha: 3.80E-04 uCi/Sa Beta: -3.35E-04 uCi/Sa
4 JF72H-1-AA J6J110357-1-SAMP 10/11/2006 10:26		122.60g,in AmtRec: 20ML,500ML,LP #Containers: 3			53.6	100	10B	0936		Scr: Alpha: -1.76E-04 uCi/Sa Beta: 1.17E-04 uCi/Sa
5 JF72H-1-AE-X J6J110357-1-DUP 10/11/2006 10:26		123.10g,in AmtRec: 20ML,500ML,LP #Containers: 3			45.9	100	10C			Scr: Alpha: -1.76E-04 uCi/Sa Beta: 1.17E-04 uCi/Sa
6 JGAQ4-1-AA J6J120305-5-SAMP 10/12/2006 11:39		185.60g,in AmtRec: 20ML,6XLP #Containers: 7			45.1	~~100~~ .50 JB	10C	0743	n/21/06	Scr: Alpha: -4.38E-04 uCi/Sa Beta: 1.24E-03 uCi/Sa
7 JGMLM-1-AA-B J6J170000-577-BLK 10/11/2006 10:26		199.90g,in AmtRec: #Containers: 1			0.1	100	10B	0936		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: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.24

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STL RICHLAND

11/20/2006 7:31:12 AM

Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 11/24/2006

Batch: 6290577 pCi/L
SEQ Batch, Test: None

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:
8 JGMLM-1-AC-C J6J170000-577-LCS 10/11/2006 10:26		200.10g,in AmtRec:	ASD4046 11/09/06,pd 02/09/06,r #Containers: 1	1.5	0.0	100	10D	0936 Scr:	11/21/06 Alpha:	Beta:

Comments: ~~JGAQ4-SAMP~~ ""

pH < 2.0 JB 11-20-06

Aliquots reduced due to weight screen activity JB 11-20-06

1% collodion added to ea. samp. 11/20/06 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF6CG1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JGMLM1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JGMLM1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JF6CG1AC-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JGMLM1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JGMLM1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

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11/22/2006 9:45:19 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/22/2005, 11/27/2006, Batch: '6290577', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290577						
AC		**CalcC**	**BockJ**	11/20/2006 7:20:41		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	InPrep	11/20/2006 7:20:41 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	11/20/2006 7:31:33 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Sep2C	11/20/2006 9:05:20 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	11/20/2006 9:19:29 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	11/21/2006 9:42:40 AM	RICH-RD-0003 REVISION 4
AC			**BockJ**	11/20/2006 7:31:33		
AC			**AshworthA**	11/20/2006 9:05:20		
AC			**DAWKINSO**	11/20/2006 9:19:29		
AC			**BlackCL**	11/21/2006 9:42:40		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.18

STL RICHLAND

11/20/2006 7:39:05 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 11/24/2006 1005033

Batch: 6290579 **WATER** **pCi/L**
SEQ Batch, Test: None

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

PM, Quote: SA , 57671

Balance Id:1120482733
Pipet #: 235
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ / APA

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 JF6CG-1-AD J6J110172-1-SAMP 10/10/2006 11:50	AmtRec: 20ML,5XLP	200.40g,in	#Containers: 6	1.5	37.8	100	26A	0716	11/21 [illegible]	Scr: Alpha: -6.68E-07 uCi/Sa Beta: -2.36E-08 uCi/Sa
2 JF6DJ-1-AD J6J110172-2-SAMP 10/10/2006 10:57	AmtRec: 20ML,500MLP,2XLP	135.80g,in	#Containers: 4		92.4		26B			Scr: Alpha: 6.38E-04 uCi/Sa Beta: -1.89E-04 uCi/Sa
3 JF6DJ-1-AF-X J6J110172-2-DUP 10/10/2006 10:57	AmtRec: 20ML,500MLP,2XLP	135.80g,in	#Containers: 4		89.1		26C			Scr: Alpha: 6.38E-04 uCi/Sa Beta: -1.89E-04 uCi/Sa
4 JF72H-1-AC J6J110357-1-SAMP 10/11/2006 10:26	AmtRec: 20ML,500ML,LP	145.50g,in	#Containers: 3		79.4		26D			Scr: Alpha: -1.76E-04 uCi/Sa Beta: 1.17E-04 uCi/Sa
5 JGAQ4-1-AC J6J120305-5-SAMP 10/12/2006 11:39	AmtRec: 20ML,6XLP	199.50g,in	#Containers: 7		84.1		27A			Scr: Alpha: -4.38E-04 uCi/Sa Beta: 1.24E-03 uCi/Sa
6 JGMLR-1-AA-B J6J170000-579-BLK 10/10/2006 10:57	AmtRec:	201.50g,in	#Containers: 1		0.1		27B			Scr: Alpha: Beta:
7 JGMLR-1-AC-C J6J170000-579-LCS 10/10/2006 10:57	AmtRec:	199.60g,in	besb2948 10/13/06,pd 08/08/06,r #Containers: 1		0.4		27C			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: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.24

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STL RICHLAND

11/20/2006 7:39:07 AM

Sample Preparation/Analysis

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

Balance Id:1120482733
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 11/24/2006

Batch: 6290579 pCi/L
SEQ Batch, Test: None

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:

Comments: ~~JGAQ4-SAMP~~ ""
PH <2.0 JB 11-20-06

10% collodion added to ea. samp. 11/20/06 APA

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF6CG1AD-SAMP Constituent List:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JGMLR1AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JGMLR1AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

JF6CG1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLR1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLR1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/21/2006 9:35:14 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/21/2005, 11/26/2006, Batch: '6290579', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290579						
AC		CalcC	BockJ	11/20/2006 7:33:25		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	InPrep	11/20/2006 7:33:25 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	11/20/2006 7:41:14 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Sep2C	11/20/2006 9:05:03 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	11/20/2006 9:19:20 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	11/21/2006 8:25:06 AM	RICH-RD-0003 REVISION 4
AC			BockJ	11/20/2006 7:41:14		
AC			BockJ	11/20/2006 7:41:29		
AC			AshworthA	11/20/2006 9:05:03		
AC			DAWKINSO	11/20/2006 9:19:20		
AC			BlackCL	11/21/2006 8:25:06		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:6

ICOCFractions v4.8.18

STL RICHLAND

11/16/2006 3:35:18 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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 #: 7

AnalyDueDate: 11/24/2006 W05033

Sep1 DT/Tm Tech: 21 Nov 06 1115 DRM
Sep2 DT/Tm Tech: 28 Nov 06 0945 DRM

Batch: 6290569 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Prep Tech: ,BockJ

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 JF6CG-1-AE J6J110172-1-SAMP YTA16544 Ex:7/23/2007		1002.70g,in	SRTA16283 11/09/06,pd 09/11/06,r	87.3	1"	23.3	50	3D 7A	0933 Close	11/29/06 11/30/06	
10/10/2006 11:50		AmtRec: 20ML,5XLP	#Containers: 6					Scr:	Alpha: -6.68E-07 uCi/Sa		Beta: -2.36E-08 uCi/Sa
2 JF706-1-AC J6J110353-1-SAMP YTA16545 Ex:7/23/2007		1005.90g,in	SRTA16284 11/09/06,pd 09/11/06,r	87.1		21.3		4A 7B	0933 Close	11/29/06 11/30/06	
10/11/2006 11:43		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: -2.55E-04 uCi/Sa		Beta: -1.62E-04 uCi/Sa
3 JF71C-1-AC J6J110353-2-SAMP YTA16546 Ex:7/23/2007		1003.10g,in	SRTA16285 11/09/06,pd 09/11/06,r	86.6		22.5		4B 1A	0933 Close	11/29/06 11/30/06	
10/11/2006 11:43		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: 6.73E-04 uCi/Sa		Beta: -9.21E-04 uCi/Sa
4 JGA23-1-AC J6J120336-1-SAMP YTA16547 Ex:7/23/2007		997.90g,in	SRTA16286 11/09/06,pd 09/11/06,r	85.0		22.4		4C 1B	0933 Close	11/29/06 11/30/06	
10/12/2006 10:29		AmtRec: 20ML,2X500ML,5XLP	#Containers: 8					Scr:	Alpha: 1.11E-03 uCi/Sa		Beta: -8.81E-04 uCi/Sa

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STL RICHLAND

11/16/2006 3:35:19 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 11/24/2006

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 #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

Batch: 6290569 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

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:
5 JGA3R-1-AC J6J120336-2-SAMP		1002.60g,in	SRTA16287 11/09/06,pd 09/11/06,r	86.3		20.7	100	4D	0933	11/29/06	
			YTA16548 Ex:7/23/2007					1C	0654	11/30/06	
10/12/2006 07:30		AmtRec: 20ML,2X500ML,5XLP	#Containers: 8					Scr:	Alpha: -1.36E-03 uCi/Sa	Beta: 1.46E-03 uCi/Sa	
6 JGKE1-1-AA J6J160207-3-SAMP		1001.40g,in	SRTA16288 11/09/06,pd 09/11/06,r	88.0		22.2		7A	1120	11/29/06	
			YTA16549 Ex:7/23/2007					1D	0654	11/30/06	
10/16/2006 13:26		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -1.41E-04 uCi/Sa	Beta: 1.27E-04 uCi/Sa	
7 JGKE4-1-AA J6J160207-4-SAMP		1005.60g,in	SRTA16289 11/09/06,pd 09/11/06,r	87.6		22.5		7B	1120	11/29/06	
			YTA16550 Ex:7/23/2007					2A	0654	11/30/06	
10/16/2006 12:04		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 5.52E-04 uCi/Sa	Beta: -3.33E-04 uCi/Sa	
8 JGKE8-1-AA J6J160207-5-SAMP		1006.70g,in	SRTA16290 11/09/06,pd 09/11/06,r	88.8		21.8		7C	1120	11/29/06	
			YTA16551 Ex:7/23/2007					2B	0654	11/30/06	
10/16/2006 12:04		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 1.77E-04 uCi/Sa	Beta: -1.93E-04 uCi/Sa	

STL RICHLAND

11/16/2006 3:35:20 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 11/24/2006

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 #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Batch: 6290569 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

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:
9 JGKFA-1-AA J6J160207-6-SAMP YTA16552 Ex:7/23/2007		1005.60g,in	SRTA16291 11/09/06,pd 09/11/06,r	91.1		21.9	100	1A 2C	1120 0654	11/29/06 11/30/06	
10/16/2006 11:12		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -2.53E-04 uCi/Sa	Beta: 7.28E-04 uCi/Sa	
10 JGKFA-1-AC-X J6J160207-6-DUP YTA16553 Ex:7/23/2007		1002.50g,in	SRTA16292 11/09/06,pd 09/11/06,r	90.9		21.5		1B 2D	1120 0654	11/29/06 11/30/06	
10/16/2006 11:12		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -2.53E-04 uCi/Sa	Beta: 7.28E-04 uCi/Sa	
11 JGMK3-1-AA-B J6J170000-569-BLK YTA16554 Ex:7/23/2007		1003.60g,in	SRTA16293 11/09/06,pd 09/11/06,r	80.9		22.3		1C 3A	1120 0654	11/29/06 11/30/06	
10/16/2006 11:12		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
12 JGMK3-1-AC-C J6J170000-569-LCS YTA16555 Ex:7/23/2007		1006.40g,in	STSC1769 09/27/06,pd 06/21/06,r	80.5		21.2		1D 3B	1120 0654	11/29/06 11/30/06	
10/16/2006 11:12		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

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STL RICHLAND

11/16/2006 3:35:21 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: 11/24/2006

Sep1 DT/Tm Tech:

Batch: 6290569 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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 96 11-16-06

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF6CG1AE-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

JGMK31AA-BLK:

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

JGMK31AC-LCS:

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

JF6CG1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMK31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMK31AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/30/2006 10:32:15 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/30/2005, 12/5/2006, Batch: '6290569', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290569						
AC		**CalcC**	**BockJ**	11/16/2006 3:35:52		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	Prep1C	11/16/2006 3:35:52 PM	RICH-RC-5016 REVISION 6
SC			ManisD	Sep1C	11/21/2006 2:58:14 PM	RICH-RC-5006 REVISION 6
SC			ManisD	Sep2C	11/28/2006 5:25:16 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	11/28/2006 5:49:26 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	11/30/2006 7:37:23 AM	RICH-RD-0003 REVISION 4
AC			**ManisD**	11/21/2006 2:58:14		
AC			**ManisD**	11/28/2006 5:25:16		
AC			**DAWKINSO**	11/28/2006 5:49:26		
AC			**BlackCL**	11/30/2006 7:37:23		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:5

ICOCFractions v4.8.18

STL RICHLAND

10/17/2006 3:44:41 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 11/27/2006 LN050533

Batch: 6290562 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 11-14-06 am
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 JGAQ4-1-AD J6J120305-5-SAMP 10/12/2006 11:39	AmtRec: 20ML,6XLP	#Containers: 7				Scr:	Alpha:	Beta:
2 JGA23-1-AA J6J120336-1-SAMP 10/12/2006 10:29	AmtRec: 20ML,2X500ML,5XLP	#Containers: 8				Scr:	Alpha:	Beta:
3 JGA3R-1-AA J6J120336-2-SAMP 10/12/2006 07:30	AmtRec: 20ML,2X500ML,5XLP	#Containers: 8				Scr:	Alpha:	Beta:
4 JGKEW-1-AC J6J160207-2-SAMP 10/16/2006 09:51	AmtRec: 20ML,6XLP	#Containers: 7				Scr:	Alpha:	Beta:
5 JGKEW-1-AE-X J6J160207-2-DUP 10/16/2006 09:51	AmtRec: 20ML,6XLP	#Containers: 7				Scr:	Alpha:	Beta:
6 JGMKP-1-AA-B J6J170000-562-BLK 10/16/2006 09:51	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
7 JGMKP-1-AC-C J6J170000-562-LCS 10/16/2006 09:51	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

STL RICHLAND

10/17/2006 3:44:42 PM

Sample Preparation/Analysis

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 11-14-06 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 11/27/2006

Batch: 6290562 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JGMKP-1-AD-BN J6J170000-562-IBLK 10/16/2006 09:51	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JGAQ41AD-SAMP Constituent List:

C-14	RDL:2.00E+02	pCi/L	LCL:70	UCL:130	RPD:20
JGMKP1AA-BLK:					
C-14	RDL:2.00E+02	pCi/L	LCL:	UCL:	RPD:
JGMKP1AC-LCS:					
C-14	RDL:200	pCi/L	LCL:70	UCL:130	RPD:20
JGMKP1AD-IBLK:					
C-14	RDL:2.00E+02	pCi/L	LCL:	UCL:	RPD:

JGAQ41AD-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JGMKP1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JGMKP1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JGMKP1AD-IBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

124

11/22/2006 3:56:27 PM

ICOC Fraction Transfer/Status Report

ByDate: 11/22/2005, 11/27/2006, Batch: '6290562', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290562						
AC		**CalcC**	**McDowellD**	11/14/2006 9:46:19		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			McDowellD	InSep1	11/14/2006 9:46:19 AM	RICH-RC-5022 REVISION 3
SC			McDowellD	Sep1C	11/21/2006 4:20:03 PM	RICH-RC-5022 REVISION 3
SC			DAWKINSO	InCnt1	11/21/2006 4:46:56 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	11/22/2006 7:06:58 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	11/21/2006 4:20:03		
AC			**DAWKINSO**	11/21/2006 4:46:56		
AC			**BlackCL**	11/22/2006 7:06:58		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.18

STL RICHLAND

11/17/2006 11:07:03 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 11/27/2006 W05033

Sep1 DT/Tm Tech:

Batch: 6290573 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6290562 5SS3, 6290569 CLTL, 6290571 DHSS, 6290573 FPS5,

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JGA23-1-AD J6J120336-1-SAMP 10/12/2006 10:29			126.20g,in	126.20g		60				
	AmtRec: 20ML,2X500ML,5XLP		#Containers: 8					Scr:	Alpha: 1.11E-03 uCi/Sa	Beta: -8.81E-04 uCi/Sa
2 JGA23-1-AG-S J6J120336-1-MS 10/12/2006 10:29			124.50g,in	124.50g	TCSG1703 09/20/06,pd 01/10/06,r					
	AmtRec: 20ML,2X500ML,5XLP		#Containers: 8					Scr:	Alpha: 1.11E-03 uCi/Sa	Beta: -8.81E-04 uCi/Sa
3 JGA23-1-AH-X J6J120336-1-DUP 10/12/2006 10:29			128.10g,in	128.10g						
	AmtRec: 20ML,2X500ML,5XLP		#Containers: 8					Scr:	Alpha: 1.11E-03 uCi/Sa	Beta: -8.81E-04 uCi/Sa
4 JGA3R-1-AD J6J120336-2-SAMP 10/12/2006 07:30			126.00g,in	126.00g						
	AmtRec: 20ML,2X500ML,5XLP		#Containers: 8					Scr:	Alpha: -1.36E-03 uCi/Sa	Beta: 1.46E-03 uCi/Sa
5 JGMLG-1-AA-B J6J170000-573-BLK 10/12/2006 10:29			125.30g,in	125.30g						
	AmtRec:		#Containers: 1					Scr:	Alpha:	Beta:
6 JGMLG-1-AC-C J6J170000-573-LCS 10/12/2006 10:29			125.00g,in	125.00g	TCSE2020 09/20/06,pd 01/10/06,r					
	AmtRec:		#Containers: 1					Scr:	Alpha:	Beta:
7 JGMLG-1-AD-BN J6J170000-573-IBLK 10/12/2006 10:29										
	AmtRec:		#Containers: 1					Scr:	Alpha:	Beta:

11/17/2006 11:07:05 AM

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 11/27/2006

Batch: 6290573 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: pH <2.0 SB 11-17-06

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JGA231AD-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JGA231AG-MS Constituent List:

JGMLG1AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JGMLG1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JGMLG1AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JGA231AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGA231AG-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLG1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLG1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLG1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/27/2006 10:39:51 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/27/2005, 12/2/2006, Batch: '6290573', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290573						
AC		**CalcC**	**BockJ**	11/17/2006 10:32:08		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	InPrep	11/17/2006 10:32:08 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	11/17/2006 11:07:31 AM	RICH-RC-5016 REVISION 6
SC			FABREM	Sep1C	11/22/2006 5:37:24 PM	RICH-RC-5065 REVISION 5
SC			DAWKINSO	InCnt1	11/22/2006 5:43:47 PM	RICH-RD-0001 REVISION 3
SC			DAWKINSO	CalcC	11/25/2006 2:33:10 PM	RICH-RD-0001 REVISION 3
AC			**BockJ**	11/17/2006 11:07:31		
AC			**FABREM**	11/22/2006 5:37:24		
AC			**DAWKINSO**	11/22/2006 5:43:47		
AC			**DAWKINSO**	11/25/2006 2:33:10		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.18

STL RICHLAND

10/17/2006 3:44:50 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
T0 Tritium - Midlevel, by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 11/24/2006 WO5033

Batch: 6290575 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 11-14-06 pm
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 JF706-1-AA J6J110353-1-SAMP 10/11/2006 11:43		AmtRec: 20ML,4XLP	#Containers: 5			Scr:	Alpha:	Beta:
2 JF706-1-AD-X J6J110353-1-DUP 10/11/2006 11:43		AmtRec: 20ML,4XLP	#Containers: 5			Scr:	Alpha:	Beta:
3 JF71C-1-AA J6J110353-2-SAMP 10/11/2006 11:43		AmtRec: 20ML,4XLP	#Containers: 5			Scr:	Alpha:	Beta:
4 JGMLK-1-AA-B J6J170000-575-BLK 10/11/2006 11:43		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JGMLK-1-AC-C J6J170000-575-LCS 10/11/2006 11:43		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JGMLK-1-AD-BN J6J170000-575-IBLK 10/11/2006 11:43		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

10/17/2006 3:44:51 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
T0 Tritium - Midlevel, by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 11-14-06 DM
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 11/24/2006

Batch: 6290575 pCi/L
SEQ Batch, Test: None

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

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF7061AA-SAMP Constituent List:
H-3 RDL:25 pCi/L LCL: UCL: RPD:
JGMLK1AA-BLK:
H-3 RDL:25 pCi/L LCL: UCL: RPD:
JGMLK1AC-LCS:

JGMLK1AD-IBLK:
H-3 RDL:25 pCi/L LCL: UCL: RPD:

JF7061AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLK1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLK1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLK1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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11/21/2006 9:34:50 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/21/2005, 11/26/2006, Batch: '6290575', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290575						
AC		**InCnt1**	**McDowellD**	11/14/2006 10:55:26		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			McDowellD	InSep1	11/14/2006 10:55:26 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	11/14/2006 2:00:46 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	11/14/2006 2:36:47 PM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	11/14/2006 2:00:46		
AC			**DAWKINSO**	11/14/2006 2:36:47		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 3

ICOCFractions v4.8.18

STL RICHLAND

10/17/2006 3:44:42 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 11/24/2006 W05033

Batch: 6290567 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 10-30-06 4pm
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 JF6CG-1-AA J6J110172-1-SAMP 10/10/2006 11:50		AmtRec: 20ML,5XLP	#Containers: 6			Scr:	Alpha:	Beta:
2 JF6DJ-1-AA J6J110172-2-SAMP 10/10/2006 10:57		AmtRec: 20ML,500MLP,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
3 JF6DT-1-AA J6J110172-3-SAMP 10/10/2006 11:33		AmtRec: 20ML,500MLP,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
4 JF6DT-1-AE-X J6J110172-3-DUP 10/10/2006 11:33		AmtRec: 20ML,500MLP,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
5 JGKEW-1-AA J6J160207-2-SAMP 10/16/2006 09:51		AmtRec: 20ML,6XLP	#Containers: 7			Scr:	Alpha:	Beta:
6 JGMKV-1-AA-B J6J170000-567-BLK 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JGMKV-1-AC-C J6J170000-567-LCS 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

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STL RICHLAND

10/17/2006 3:44:43 PM

Sample Preparation/Analysis

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

Balance Id: 172445
Pipet #:
Sep1 DT/Tm Tech: 10-30-06 pm
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 11/24/2006

Batch: 6290567 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JGMKV-1-AD-BX J6J170000-567-MBLK 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JGMKV-1-AE-CM J6J170000-567-MLCS 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JGMKV-1-AF-BN J6J170000-567-IBLK 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JGMKV-1-AG-BN J6J170000-567-IBLK 10/10/2006 11:33		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF6CG1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JGMKV1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JGMKV1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JGMKV1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

10/17/2006 3:44:44 PM

Sample Preparation/Analysis

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

Balance Id: 1.2445
Pipet #:
Sep1 DT/Tm Tech: 10-20-06 pm
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 11/24/2006

Batch: 6290567 pCi/L
SEQ Batch, Test: None

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

```
JGMKV1AE-MLCS:
  H-3          RDL:400          pCi/L     LCL:70      UCL:130     RPD:20
JGMKV1AF-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JGMKV1AG-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JF6CG1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AF-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JGMKV1AG-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

11/2/2006 4:05:52 PM

ICOC Fraction Transfer/Status Report

ByDate: 11/2/2005, 11/7/2006, Batch: '6290567', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290567						
AC		**CalcC**	**McDowellD**	10/30/2006 11:01:42		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			McDowellD	InSep1	10/30/2006 11:01:42 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	10/30/2006 3:52:00 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	10/30/2006 5:02:52 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	11/1/2006 12:41:22 PM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	10/30/2006 3:52:00		
AC			**DAWKINSO**	10/30/2006 5:02:52		
AC			**StringerR**	11/1/2006 12:41:22		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.18

STL RICHLAND

11/17/2006 9:10:22 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 11/24/2006 W05033

Sep1 DT/Tm Tech:

Batch: 6290571 WATER ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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 JF6DJ-1-AE J6J110172-2-SAMP 10/10/2006 10:57		25.80g,in AmtRec: 20ML,500MLP,2XLP	#Containers: 4			Scr:	Alpha: 6.38E-04 uCi/Sa	Beta: -1.89E-04 uCi/Sa
2 JF6DT-1-AD J6J110172-3-SAMP 10/10/2006 11:33		25.80g,in AmtRec: 20ML,500MLP,2XLP	#Containers: 4			Scr:	Alpha: 3.80E-04 uCi/Sa	Beta: -3.35E-04 uCi/Sa
3 JF72H-1-AD J6J110357-1-SAMP 10/11/2006 10:26		25.70g,in AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -1.76E-04 uCi/Sa	Beta: 1.17E-04 uCi/Sa
4 JGA23-1-AE 2 J6J120336-1-SAMP 10/12/2006 10:29		25.40g,in AmtRec: 20ML,2X500ML,5XLP	#Containers: 8			Scr:	Alpha: 1.11E-03 uCi/Sa	Beta: -8.81E-04 uCi/Sa
5 JGA23-1-AF-X J6J120336-1-DUP 10/12/2006 10:29		25.20g,in AmtRec: 20ML,2X500ML,5XLP	#Containers: 8			Scr:	Alpha: 1.11E-03 uCi/Sa	Beta: -8.81E-04 uCi/Sa
6 JGA3R-1-AE J6J120336-2-SAMP 10/12/2006 07:30		25.20g,in AmtRec: 20ML,2X500ML,5XLP	#Containers: 8			Scr:	Alpha: -1.36E-03 uCi/Sa	Beta: 1.46E-03 uCi/Sa
7 JGA3R-1-AF-S J6J120336-2-MS 10/12/2006 07:30		25.10g,in AmtRec: 20ML,2X500ML,5XLP	unsf3407 11/13/06,pd 03/22/05,r #Containers: 8			Scr:	Alpha: -1.36E-03 uCi/Sa	Beta: 1.46E-03 uCi/Sa

STL RICHLAND

11/17/2006 9:10:24 AM

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 11/24/2006

Sep1 DT/Tm Tech:

Batch: 6290571 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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 JGMLA-1-AA-B J6J170000-571-BLK 10/12/2006 10:29		25.60g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JGMLA-1-AC-C J6J170000-571-LCS 10/12/2006 10:29		25.00g,in AmtRec:	unsf3408 11/13/06,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:
10 JGMLA-1-AD-C J6J170000-571-LCS 10/12/2006 10:29		25.20g,in AmtRec:	unsc1371 11/13/06,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: PH < 2.0 JB 11-17-06

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JF6DJ1AE-SAMP Constituent List:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:

JGA3R1AF-MS:

JGMLA1AA-BLK:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:

JGMLA1AC-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20

JGMLA1AD-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20

JF6DJ1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JGA3R1AF-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

11/17/2006 9:10:25 AM

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 11/24/2006

Sep1 DT/Tm Tech:

Batch: 6290571 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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:

JGMLA1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLA1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGMLA1AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/30/2006 10:31:13 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/30/2005, 12/5/2006, Batch: '6290571', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6290571						
AC		**Cnt1C**	**BockJ**	11/17/2006 6:54:15		
SC			wagarr	IsBatched	10/17/2006 3:47:48 PM	ICOC_RADCALC v4.8.24
SC			BockJ	InPrep	11/17/2006 6:54:15 AM	RICH-RC-5015 Revision 4
SC			BockJ	Prep1C	11/17/2006 9:10:30 AM	RICH-RC-5015 REVISION 4
SC			AntonsonL	Sep1C	11/27/2006 1:52:14 PM	RICH-RC-5015 REVISION 4
SC			AndersonE	Cnt1C	11/30/2006 9:10:38 AM	RICH-RC-5058 REV 7
AC			**BockJ**	11/17/2006 9:10:30		
AC			**AntonsonL**	11/27/2006 1:52:14		
AC			**AndersonE**	11/30/2006 9:10:38		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.18

STL RICHLAND

10/3/2006 12:22:23 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 11/16/2006

5I CLIENT: HANFORD

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Batch: 6276387 **WATER** **mg/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None All Tests: 88EA, 6276387 88EA,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JFHRH-1-AA J6J020227-1-SAMP 10/02/2006 10:07		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha:	Beta:
2 JFHRH-1-AC-S J6J020227-1-MS 10/02/2006 10:07		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha:	Beta:
3 JFHRH-1-AD-D J6J020227-1-MSD 10/02/2006 10:07		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha:	Beta:
4 JFHRH-1-AE-X J6J020227-1-DUP 10/02/2006 10:07		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha:	Beta:
5 JFHRN-1-AA J6J020228-1-SAMP 10/02/2006 10:57		AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha:	Beta:
6 JFKAT-1-AA-B J6J030000-387-BLK 10/02/2006 10:07		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JFKAT-1-AC-C J6J030000-387-LCS 10/02/2006 10:07		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

10/3/2006 12:22:25 PM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

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

AnalyDueDate: 11/16/2006

Batch: 6276387 mg/L
SEQ Batch, Test: None

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

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JFHRH1AA-SAMP Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JFHRH1AC-MS Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JFHRH1AD-MSD:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JFKAT1AA-BLK:
HEXCHROME RDL:0.002 mg/L LCL: UCL: RPD:
JFKAT1AC-LCS:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20

JFHRH1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JFHRH1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JFHRH1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JFKAT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JFKAT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

10/13/2006 11:04:35 AM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 11/27/2006

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Batch: 6286296 **WATER** **mg/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None All Tests: 5SS3, 88EA, AWTA, AZS7, BCS8, 6286296 88EA,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JGAPX-1-AA J6J120305-2-SAMP 10/12/2006 07:30		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
2 JGAPX-1-AC-S J6J120305-2-MS 10/12/2006 07:30		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
3 JGAPX-1-AD-D J6J120305-2-MSD 10/12/2006 07:30		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
4 JGAPX-1-AE-X J6J120305-2-DUP 10/12/2006 07:30		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
5 JGAQ0-1-AA J6J120305-4-SAMP 10/12/2006 11:39		AmtRec: 500MLP	#Containers: 1			Scr:	Alpha:	Beta:
6 JGDQD-1-AA-B J6J130000-296-BLK 10/12/2006 07:30		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JGDQD-1-AC-C J6J130000-296-LCS 10/12/2006 07:30		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

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10/13/2006 11:04:37 AM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

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

AnalyDueDate: 11/27/2006

Batch: 6286296 mg/L
SEQ Batch, Test: None

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

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JGAPX1AA-SAMP Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGAPX1AC-MS Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGAPX1AD-MSD:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGDQD1AA-BLK:
HEXCHROME RDL:0.002 mg/L LCL: UCL: RPD:
JGDQD1AC-LCS:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20

JGAPX1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGAPX1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGAPX1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGDQD1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGDQD1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

10/17/2006 11:23:59 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 11/30/2006

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Batch: 6290297 **WATER** **mg/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None All Tests: 5SS3, 88EA, ARS6, AWTA, CLTL, 6290297 88EA,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JGKEM-1-AA J6J160207-1-SAMP 10/16/2006 09:51		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
2 JGKEM-1-AC-S J6J160207-1-MS 10/16/2006 09:51		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
3 JGKEM-1-AD-D J6J160207-1-MSD 10/16/2006 09:51		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
4 JGKEM-1-AE-X J6J160207-1-DUP 10/16/2006 09:51		AmtRec: 500G	#Containers: 1			Scr:	Alpha:	Beta:
5 JGLG0-1-AA-B J6J170000-297-BLK 10/16/2006 09:51		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JGLG0-1-AC-C J6J170000-297-LCS 10/16/2006 09:51		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

10/17/2006 11:24:00 AM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

AnalyDueDate: 11/30/2006

Sep1 DT/Tm Tech:

Batch: 6290297 mg/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:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JGKEM1AA-SAMP Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGKEM1AC-MS Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGKEM1AD-MSD:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JGLG01AA-BLK:
HEXCHROME RDL:0.002 mg/L LCL: UCL: RPD:
JGLG01AC-LCS:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20

JGKEM1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGKEM1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGKEM1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGLG01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JGLG01AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____