Analytical Data Package Prepared For

Pacific Northwest National Lab

REVISED
9/26/08

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Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 35418

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05153	I07-026	B1M6J4	J7D100142-1	JTLP21AA	9JTLP210	7106422
	S07-003	B1MF12	J7D100158-1	JTLVJ1AA	9JTLVJ10	7106430
		B1MF13	J7D100158-2	JTLVV1AA	9JTLVV10	7106430
	G07-003	B1MD51	J7D100168-1	JTLXA1AA	9JTLXA10	7106429
		B1MD56	J7D100168-2	JTLX41AA	9JTLX410	7106431
		B1MD56	J7D100168-2	JTLX41AC	9JTLX410	7106429
		B1MD56	J7D100168-2	JTLX41AD	9JTLX410	7106430
		B1MD57	J7D100168-3	JTLX51AA	9JTLX510	7106431
		B1MD57	J7D100168-3	JTLX51AC	9JTLX510	7106429
		B1MD57	J7D100168-3	JTLX51AD	9JTLX510	7106430
	S07-004	B1MRK5	J7D110296-1	JTP431AA	9JTP4310	7106431
		B1MRK5	J7D110296-1	JTP431AC	9JTP4310	7106425
		B1MRK5	J7D110296-1	JTP431AD	9JTP4310	7106428
		B1MRK5	J7D110296-1	JTP431AE	9JTP4310	7106422
	S07-003	B1MFB7	J7D110306-1	JTP501AA	9JTP5010	7106423

Comments:

0077347 Rev. 1

Report Nbr: 35418

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05153	S07-003	B1MFC4	J7D110306-2	JTP521AA	9JTP5210	7106423
		B1MFC9	J7D110306-3	JTP531AA	9JTP5310	7106423
		B1MFD0	J7D110306-4	JTP541AA	9JTP5410	7106423
		B1MFC7	J7D110306-5	JTP6A1AA	9JTP6A10	7106423
	I07-031	B1MDD2	J7D110315-1	JTP651AA	9JTP6510	7106428
		B1MDD2	J7D110315-1	JTP651AC	9JTP6510	7106430
		B1MDD1	J7D110315-2	JTP7E1AA	9JTP7E10	7106428
		B1MDD1	J7D110315-2	JTP7E1AC	9JTP7E10	7106430
	S07-004	B1MRJ3	J7D110321-1	JTP7T1AA	9JTP7T10	7106431
		B1MRJ3	J7D110321-1	JTP7T1AC	9JTP7T10	7106425
		B1MRJ3	J7D110321-1	JTP7T1AD	9JTP7T10	7106428
		B1MRJ3	J7D110321-1	JTP7T1AE	9JTP7T10	7106429
		B1MRJ3	J7D110321-1	JTP7T1AF	9JTP7T10	7106422
		B1MRD5	J7D110321-2	JTP711AA	9JTP7110	7106431
		B1MRD5	J7D110321-2	JTP711AC	9JTP7110	7106425
		B1MRD5	J7D110321-2	JTP711AD	9JTP7110	7106428
		B1MRD5	J7D110321-2	JTP711AE	9JTP7110	7106429
		B1MRD5	J7D110321-2	JTP711AF	9JTP7110	7106422
	W07-004	B1MNN7	J7D120226-1	JTRWN1AA	9JTRWN10	7106425
		B1MNN7	J7D120226-1	JTRWN1AC	9JTRWN10	7106428
		B1MNW2	J7D120226-2	JTRWV1AA	9JTRWV10	7106425
		B1MNW2	J7D120226-2	JTRWV1AC	9JTRWV10	7106428
		B1MNW2	J7D120226-2	JTRWV1AE	9JTRWV10	7106423
		B1MNW2	J7D120226-2	JTRWV2AD	9JTRWV20	7122528
	S07-004	B1MR12	J7D120229-1	JTRXG1AA	9JTRXG10	7106422
		B1MR19	J7D130261-1	JTWT31AA	9JTWT310	7106422

Comments:

SEVERN TRENT STL

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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

May 29, 2007

Attention: Dot Stewart

SAF Number	:	I07-026, S07-003, G07-003, S07-004, I07-031, W07-004
Date SDG Closed	:	April 12, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05153
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between April 9, 2007 and April 12, 2007 twenty 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#	DATE OF RECEIPT	MATRIX
B1M6J4	JTLP2	4/09/07	WATER
B1MF12	JTLVJ	4/09/07	WATER
B1MF13	JTLVV	4/09/07	WATER
B1MD51	JTLXA	4/09/07	WATER
B1MD56	JTLX4	4/09/07	WATER
B1MD57	JTLX5	4/09/07	WATER
B1MRK5	JTP43	4/10/07	WATER
B1MFB7	JTP50	4/10/07	WATER
B1MFC4	JTP52	4/10/07	WATER
B1MFC9	JTP53	4/10/07	WATER
B1MFD0	JTP54	4/10/07	WATER
B1MFC7	JTP6A	4/10/07	WATER
B1MDD2	JTP65	4/10/07	WATER
B1MDD1	JTP7E	4/10/07	WATER
B1MRJ3	JTP7T	4/10/07	WATER

B1MRD5	JTP71	4/10/07	WATER
B1MNN7	JTRWN	4/11/07	WATER
B1MNW2	JTRWV	4/11/07	WATER
B1MR12	JTRXG	4/11/07	WATER
B1MR19	JTWT3	4/12/07	WATER

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
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by method RICH-RC-5078
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058

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.

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
Reduced volumes were analyzed for samples B1MNN7, B1MNW2 and B1MNN7 (DUP) based on elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1D6R6) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1MDD2 and B1MDD1 did not meet the CRDL; reduced volumes were analyzed based on an elevated screen results. The detected activities exceed the achieved MDAs. The LCS, batch blank, samples and sample duplicate (B1D170) results are within contractual requirements.

Amended Case Narrative
Pacific Northwest National Laboratories
August 7, 2007

Samples B1MDD2 and B1MDD1 did not meet the CRDL; reduced volumes were analyzed based on an elevated screen results. The detected activities exceed the achieved MDAs. The LCS, batch blank, samples and sample duplicate (B1D170) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1MF12) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017:
The duplicate sample (B1MD51 DUP) had a reduced aliquot (1906.60 ml). There was insufficient volume for the normal 2L aliquot. The MDA of 6 pCi/L was achieved. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MD51) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1M6J4) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RICH-RC-5078:
The blank activity was above the CRDL at 31.3 pCi/L. The batch was reanalyzed. Except as noted, the LCS, batch blank, samples, sample duplicate (B1MNW2), and sample matrix spike (B1MNW2) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1MRJ3) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The matrix spike (JTP521CW) was out of limits (245.1%). A "N" qualifier was add to all the total uranium results. Except as noted, the LCS, batch blank, samples, sample duplicate (B1MFB7), and sample matrix spike (B1MFC4) results are within contractual requirements.

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

Reviewed and approved:

Sandra Segar
Sherryl A. Adam
for Project Manager

REVISED
D Hayes
2/26/08

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.

5/25/2007 12:47:32 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35418 File Name: h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.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:
9JTLP210	B1M6J4		MW6-SBB-A1	I07-026	W05153					04/09/2007 09:29

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106422	I-129L	15046-84-1	3.76E-01	pCi/L	2.0E-01	2.0E-01	U	3.54E-01	101.4	I129LL_SEP_LEPS	3.9376E+00	L	05/22/2007 22:09	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:
9JTLVJ10	B1MF12		MW6-SBB-A1	S07-003	W05153					04/09/2007 09:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106430	SR-90	10098-97-2	9.19E+00	pCi/L	5.8E-01	1.4E+00		4.73E-01	81.5	SRISO_SEP_PRE	1.0049E+00	L	05/11/2007 06:58	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:
9JTLVV10	B1MF13		MW6-SBB-A1	S07-003	W05153					04/09/2007 07:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106430	SR-90	10098-97-2	2.83E-01	pCi/L	2.8E-01	2.9E-01	U	5.80E-01	65.5	SRISO_SEP_PRE	9.91E-01	L	05/11/2007 06:58	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:
9JTLX410	B1MD56		MW6-SBB-A1	G07-003	W05153					04/09/2007 11:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106431	H-3	10028-17-8	2.06E+03	pCi/L	2.0E+02	2.4E+02		3.25E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 05:00	I
7106429	BE-7	13966-02-4	-4.24E+00	pCi/L	1.5E+01	1.5E+01	U	2.64E+01		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	CO-60	10198-40-0	8.89E-01	pCi/L	1.9E+00	1.9E+00	U	3.90E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	CS-134	13967-70-9	3.66E-01	pCi/L	1.9E+00	1.9E+00	U	3.65E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	CS-137	10045-97-3	4.15E-01	pCi/L	1.7E+00	1.7E+00	U	3.20E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	EU-152	14683-23-9	-9.84E-01	pCi/L	4.0E+00	4.0E+00	U	6.90E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	EU-154	15585-10-1	7.85E-01	pCi/L	3.7E+00	3.7E+00	U	7.91E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	EU-155	14391-16-3	-1.22E+00	pCi/L	3.7E+00	3.7E+00	U	6.41E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	K-40	13966-00-2	-4.28E+00	pCi/L	2.7E+01	2.7E+01	U	5.56E+01		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	RU-106	13967-48-1	8.13E+00	pCi/L	1.4E+01	1.4E+01	U	2.85E+01		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106429	SB-125	14234-35-6	3.32E+00	pCi/L	4.7E+00	4.7E+00	U	8.97E+00		GAMMALL_GS	1.9987E+00	L	04/30/2007 16:05	I
7106430	SR-90	10098-97-2	2.61E-01	pCi/L	2.3E-01	2.3E-01	U	4.62E-01	81.1	SRISO_SEP_PRE	1.0007E+00	L	05/11/2007 06:58	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:
9JTLX510	B1MD57		MW6-SBB-A1	G07-003	W05153					04/09/2007 08:00

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.

5/25/2007 12:47:32 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35418 File Name: h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106431	H-3	10028-17-8	-2.11E+01	pCi/L	1.3E+02	1.5E+02	U	3.28E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 06:22	I
7106429	BE-7	13966-02-4	-2.26E+00	pCi/L	1.9E+01	1.9E+01	U	3.44E+01		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	CO-60	10198-40-0	6.36E-01	pCi/L	3.0E+00	3.0E+00	U	5.89E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	CS-134	13967-70-9	-1.11E+00	pCi/L	2.5E+00	2.5E+00	U	4.32E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	CS-137	10045-97-3	1.56E+00	pCi/L	2.2E+00	2.2E+00	U	4.39E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	EU-152	14683-23-9	-2.11E+00	pCi/L	4.9E+00	4.9E+00	U	8.45E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	EU-154	15585-10-1	3.28E+00	pCi/L	7.8E+00	7.8E+00	U	1.57E+01		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	EU-155	14391-16-3	-3.55E+00	pCi/L	3.5E+00	3.5E+00	U	5.70E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	K-40	13966-00-2	-2.88E+01	pCi/L	4.9E+01	4.9E+01	U	1.08E+02		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	RU-106	13967-48-1	-5.83E+00	pCi/L	2.2E+01	2.2E+01	U	3.94E+01		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106429	SB-125	14234-35-6	-2.44E+00	pCi/L	5.6E+00	5.6E+00	U	9.54E+00		GAMMALL_GS	1.9988E+00	L	04/30/2007 16:06	I
7106430	SR-90	10098-97-2	4.60E-01	pCi/L	2.6E-01	2.9E-01	U	5.39E-01	72.6	SRISO_SEP_PRE	1.0052E+00	L	05/11/2007 06:58	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:
9JTLXA10	B1MD51		MW6-SBB-A1	G07-003	W05153					04/09/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106429	BE-7	13966-02-4	1.61E+01	pCi/L	2.2E+01	2.2E+01	U	4.04E+01		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	CO-60	10198-40-0	-1.11E+00	pCi/L	2.7E+00	2.7E+00	U	4.84E+00		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	CS-134	13967-70-9	2.13E+00	pCi/L	2.5E+00	2.5E+00	U	4.91E+00		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	CS-137	10045-97-3	1.86E+00	pCi/L	2.3E+00	2.3E+00	U	4.48E+00		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	EU-152	14683-23-9	-1.76E+00	pCi/L	5.4E+00	5.4E+00	U	9.37E+00		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	EU-154	15585-10-1	-1.12E+00	pCi/L	7.1E+00	7.1E+00	U	1.27E+01		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	EU-155	14391-16-3	3.18E-01	pCi/L	6.7E+00	6.7E+00	U	1.18E+01		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	K-40	13966-00-2	-4.73E+01	pCi/L	6.5E+01	6.5E+01	U	1.41E+02		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	RU-106	13967-48-1	2.30E+01	pCi/L	2.0E+01	2.0E+01	U	4.00E+01		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	I
7106429	SB-125	14234-35-6	-4.36E+00	pCi/L	5.6E+00	5.6E+00	U	9.13E+00		GAMMALL_GS	1.998E+00	L	04/30/2007 14:05	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:
9JTP4310	B1MRK5		MW6-SBB-A1	S07-004	W05153					04/10/2007 11:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106431	H-3	10028-17-8	2.61E+03	pCi/L	2.1E+02	2.6E+02		3.26E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 07:45	I
7106425	ALPHA	12587-46-1	1.08E+00	pCi/L	9.9E-01	1.0E+00	U	1.62E+00	100.0	9310_ALPHABETA	2.011E-01	L	05/24/2007 19:31	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.

7106428	BETA	12587-47-2	6.82E+00	pCi/L	1.7E+00	1.9E+00		2.61E+00	100.0	9310_ALPHABETA	2.001E-01	L	05/23/2007	18:15	I
7106422	I-129L	15046-84-1	3.11E+00	pCi/L	5.3E-01	5.3E-01	U	8.60E-01	99.2	I129LL_SEP_LEPS	3.9531E+00	L	05/22/2007	22:12	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:
9JTP5010	B1MFB7		MW6-SBB-A1	S07-003	W05153					04/10/2007 09:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106423	Uranium	7440-61-1	2.64E+01	ug/L	3.1E+00	3.1E+00	N	8.00E-02		UTOT_KPA	2.62E-02	ML	05/24/2007 13:51	R

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTP5210	B1MFC4		MW6-SBB-A1	S07-003	W05153					04/10/2007 10:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106423	Uranium	7440-61-1	5.03E+01	ug/L	5.9E+00	5.9E+00	N	8.25E-02		UTOT_KPA	2.54E-02	ML	05/24/2007 13:55	R

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTP5310	B1MFC9		MW6-SBB-A1	S07-003	W05153					04/10/2007 11:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106423	Uranium	7440-61-1	9.65E+01	ug/L	1.1E+01	1.1E+01	N	8.35E-02		UTOT_KPA	2.51E-02	ML	05/24/2007 13:58	R

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTP5410	B1MFD0		MW6-SBB-A1	S07-003	W05153					04/10/2007 11:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106423	Uranium	7440-61-1	9.66E+01	ug/L	1.1E+01	1.1E+01	N	8.35E-02		UTOT_KPA	2.51E-02	ML	05/24/2007 14:00	R

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTP6510	B1MDD2		MW6-SBB-A1	I07-031	W05153					04/10/2007 11:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106428	BETA	12587-47-2	2.03E+03	pCi/L	2.5E+01	3.8E+02		5.67E+00	100.0	9310_ALPHABETA	6.93E-02	L	05/23/2007 17:10	I
7106430	SR-90	10098-97-2	1.06E+03	pCi/L	6.4E+00	1.5E+02		5.58E-01	71.1	SRISO_SEP_PRE	9.966E-01	L	05/11/2007 08:42	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:
9JTP6A10	B1MFC7		MW6-SBB-A1	S07-003	W05153					04/10/2007 13:18

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106423	Uranium	7440-61-1	5.15E+01	ug/L	6.1E+00	6.1E+00	N	8.12E-02		UTOT_KPA	2.58E-02	ML	05/24/2007 14:02	R

REVISED

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.

5/25/2007 12:47:32 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35418 File Name: h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.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:
9JTP7110	B1MRD5		MW6-SBB-A1	S07-004	W05153					04/10/2007 12:37

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106431	H-3	10028-17-8	2.53E+03	pCi/L	2.1E+02	2.6E+02		3.28E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 11:53	I
7106425	ALPHA	12587-46-1	1.68E+00	pCi/L	1.1E+00	1.1E+00		1.23E+00	100.0	9310_ALPHABETA	1.988E-01	L	05/24/2007 19:31	I
7106428	BETA	12587-47-2	5.89E+00	pCi/L	1.6E+00	1.8E+00		2.62E+00	100.0	9310_ALPHABETA	1.995E-01	L	05/23/2007 18:15	I
7106429	BE-7	13966-02-4	7.33E-01	pCi/L	2.1E+01	2.1E+01	U	3.69E+01		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	CO-60	10198-40-0	1.91E+00	pCi/L	2.7E+00	2.7E+00	U	5.43E+00		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	CS-134	13967-70-9	6.03E-02	pCi/L	2.5E+00	2.5E+00	U	4.51E+00		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	CS-137	10045-97-3	4.78E-01	pCi/L	2.5E+00	2.5E+00	U	4.51E+00		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	EU-152	14683-23-9	-3.79E+00	pCi/L	5.6E+00	5.6E+00	U	9.42E+00		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	EU-154	15585-10-1	-5.41E-01	pCi/L	7.3E+00	7.3E+00	U	1.33E+01		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	EU-155	14391-16-3	-1.56E+00	pCi/L	5.8E+00	5.8E+00	U	1.02E+01		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	K-40	13966-00-2	-5.97E+01	pCi/L	6.4E+01	6.4E+01	U	1.38E+02		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	RU-106	13967-48-1	6.19E+00	pCi/L	1.9E+01	1.9E+01	U	3.57E+01		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106429	SB-125	14234-35-6	-1.31E+00	pCi/L	5.5E+00	5.5E+00	U	9.52E+00		GAMMALL_GS	1.9995E+00	L	04/30/2007 16:07	I
7106422	I-129L	15046-84-1	3.36E+00	pCi/L	6.0E-01	6.0E-01		3.23E-01	99.2	I129LL_SEP_LEPS	3.9273E+00	L	05/23/2007 05:28	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:
9JTP7E10	B1MDD1		MW6-SBB-A1	I07-031	W05153					04/10/2007 11:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106428	BETA	12587-47-2	2.12E+03	pCi/L	2.5E+01	3.1E+02		5.36E+00	100.0	9310_ALPHABETA	7.42E-02	L	05/23/2007 17:10	I
7106430	SR-90	10098-97-2	1.13E+03	pCi/L	6.9E+00	1.6E+02		6.42E-01	60.7	SRISO_SEP_PRE	1.004E+00	L	05/11/2007 06:58	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:
9JTP7T10	B1MRJ3		MW6-SBB-A1	S07-004	W05153					04/10/2007 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106431	H-3	10028-17-8	3.43E+02	pCi/L	1.5E+02	1.7E+02		3.26E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 09:08	I
7106425	ALPHA	12587-46-1	8.31E-01	pCi/L	7.6E-01	7.9E-01	U	1.12E+00	100.0	9310_ALPHABETA	1.998E-01	L	05/24/2007 19:31	I
7106428	BETA	12587-47-2	4.72E+00	pCi/L	1.5E+00	1.7E+00		2.67E+00	100.0	9310_ALPHABETA	2.019E-01	L	05/23/2007 18:15	I
7106429	BE-7	13966-02-4	2.86E+00	pCi/L	1.7E+01	1.7E+01	U	3.31E+01		GAMMALL_GS	2.0003E+00	L	04/30/2007 16:06	I
7106429	CO-60	10198-40-0	9.95E-01	pCi/L	2.0E+00	2.0E+00	U	4.55E+00		GAMMALL_GS	2.0003E+00	L	04/30/2007 16:06	I
7106429	CS-134	13967-70-9	1.12E+00	pCi/L	2.2E+00	2.2E+00	U	4.60E+00		GAMMALL_GS	2.0003E+00	L	04/30/2007 16:06	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.

7106429	CS-137	10045-97-3	-3.61E-01	pCi/L	2.2E+00	2.2E+00	U	3.93E+00		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	EU-152	14683-23-9	-1.29E+00	pCi/L	6.0E+00	6.0E+00	U	1.04E+01		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	EU-154	15585-10-1	9.27E-01	pCi/L	4.8E+00	4.8E+00	U	1.06E+01		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	EU-155	14391-16-3	1.16E+00	pCi/L	4.1E+00	4.1E+00	U	7.43E+00		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	K-40	13966-00-2	2.10E-01	pCi/L	4.3E+01	4.3E+01	U	9.43E+01		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	RU-106	13967-48-1	2.21E+01	pCi/L	1.9E+01	1.9E+01	U	4.14E+01		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106429	SB-125	14234-35-6	3.32E+00	pCi/L	4.6E+00	4.6E+00	U	9.42E+00		GAMMALL_GS	2.0003E+00	L	04/30/2007	16:06	I
7106422	I-129L	15046-84-1	2.73E+00	pCi/L	4.8E-01	4.8E-01		3.08E-01	99.7	I129LL_SEP_LEPS	3.945E+00	L	05/23/2007	05:26	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:
9JTRWN10	B1MNN7		MW6-SBB-A1	W07-004	W05153					04/11/2007 12:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106425	ALPHA	12587-46-1	1.80E+00	pCi/L	1.4E+00	1.5E+00	U	2.18E+00	100.0	9310_ALPHABETA	1.856E-01	L	05/25/2007 06:38	I
7106428	BETA	12587-47-2	7.14E+00	pCi/L	1.7E+00	1.9E+00		2.68E+00	100.0	9310_ALPHABETA	2.008E-01	L	05/23/2007 18:15	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:
9JTRWV10	B1MNW2		MW6-SBB-A1	W07-004	W05153					04/11/2007 13:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106425	ALPHA	12587-46-1	2.70E+00	pCi/L	1.6E+00	1.7E+00		1.68E+00	100.0	9310_ALPHABETA	1.714E-01	L	05/25/2007 06:38	I
7106428	BETA	12587-47-2	1.12E+01	pCi/L	2.0E+00	2.9E+00		2.80E+00	100.0	9310_ALPHABETA	1.983E-01	L	05/23/2007 19:45	I
7106423	Uranium	7440-61-1	3.08E+00	ug/L	3.2E-01	3.2E-01	N	8.32E-02		UTOT_KPA	2.52E-02	ML	05/24/2007 14:04	R

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTRWV20	B1MNW2		MW6-SBB-A1	W07-004	W05153					04/11/2007 13:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7122528	TC-99	14133-76-7	1.61E+01	pCi/L	4.7E+00	6.8E+00		1.02E+01	100.0	TC99_SEP_LSC	1.261E-01	L	05/10/2007 01:22	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:
9JTRXG10	B1MR12		MW6-SBB-A1	S07-004	W05153					04/11/2007 09:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106422	I-129L	15046-84-1	1.99E-01	pCi/L	1.3E-01	1.3E-01	U	2.85E-01	100.5	I129LL_SEP_LEPS	3.9097E+00	L	05/23/2007 05:28	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:
9JTWT310	B1MR19		MW6-SBB-A1	S07-004	W05153					04/12/2007 12:21

REVISED 8/7/08 Version 3.48

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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.

5/25/2007 12:47:32 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 35418 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7106422	I-129L	15046-84-1	9.09E-02	pCi/L	1.3E-01	1.3E-01	U	2.58E-01	99.5	I129LL_SEP_LEPS	3.9562E+00	L	05/23/2007 07:09	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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H11AB **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 11:21

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106428	BETA	5.20E-01	pCi/L	9.1E-01	U	1.80E+00	100.0		9310_ALPHAB	1.995E-01	05/23/2007				D
BLK	12587-47-2			9.1E-01						L	17:10				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H21AB **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 12:36

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106429	BE-7	-5.36E+00	pCi/L	1.4E+01	U	2.47E+01			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	13966-02-4			1.4E+01						L	17:50				
7106429	CO-60	-1.09E+00	pCi/L	1.8E+00	U	3.08E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	10198-40-0			1.8E+00						L	17:50				
7106429	CS-134	-9.59E-01	pCi/L	1.8E+00	U	3.20E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	13967-70-9			1.8E+00						L	17:50				
7106429	CS-137	-8.47E-01	pCi/L	1.5E+00	U	2.49E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	10045-97-3			1.5E+00						L	17:50				
7106429	EU-152	2.80E+00	pCi/L	3.8E+00	U	7.48E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	14683-23-9			3.8E+00						L	17:50				
7106429	EU-154	-3.71E-01	pCi/L	4.0E+00	U	7.76E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	15585-10-1			4.0E+00						L	17:50				
7106429	EU-155	9.54E-01	pCi/L	2.8E+00	U	5.38E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	14391-16-3			2.8E+00						L	17:50				
7106429	K-40	-1.91E+01	pCi/L	3.2E+01	U	6.82E+01			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	13966-00-2			3.2E+01						L	17:50				
7106429	RU-106	4.55E+00	pCi/L	1.3E+01	U	2.47E+01			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	13967-48-1			1.3E+01						L	17:50				
7106429	SB-125	1.93E-01	pCi/L	3.8E+00	U	6.88E+00			GAMMALL_GS	1.9997E+00	04/30/2007				D
BLK	14234-35-6			3.8E+00						L	17:50				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JT1H51AB	**Sdg/Rept Nbr:**	W05153	35418	**Collection Date:** 04/09/2007 09:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106430	SR-90	3.77E-01	pCi/L	2.4E-01	U	4.57E-01	80.1		SRISO_SEP_P	1.0003E+00	05/11/2007				D
BLK	10098-97-2			2.4E-01						L	06:58				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JT1H61AB	**Sdg/Rept Nbr:**	W05153 35418	**Collection Date:**	04/10/2007 10:56
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/10/2007

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
7106431	H-3	-1.82E+02	pCi/L	1.4E+02	U	3.24E+02	100.0		906.0_H3_LSC	5.00E-03	05/08/2007				D
BLK	10028-17-8			1.3E+02						L	23:29				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H61DX **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 10:56

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/10/2007

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
7106431	H-3	7.57E+01	pCi/L	1.5E+02	U	3.29E+02	100.0		906.0_H3_LSC	5.00E-03	05/09/2007				D
BLK	10028-17-8			1.4E+02						L	02:15				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JT1HM1AB	**Sdg/Rept Nbr:**	W05153	35418	**Collection Date:**	04/09/2007 09:29
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:**	04/09/2007

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
7106422	I-129L	8.61E-02	pCi/L	1.3E-01	U	2.67E-01	100.0		I129LL_SEP_L	3.8919E+00	05/23/2007				D
BLK	15046-84-1			1.3E-01						L	07:11				

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.

Tuesday, August 07, 2007

TAL Richland QC Blank Report

AMENDED DATA

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1HQ1AB **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 09:21

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/10/2007

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
7106423	Uranium	0.00E+00	ug/L	0.0E+00	UN	2.10E-01			UTOT_KPA	2.52E-02	05/24/2007				D
BLK	7440-61-1			0.0E+00						ML	13:42				

REVISED
8/26/08

20

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JT1HV1AB	**Sdg/Rept Nbr:**	W05153 35418	**Collection Date:**	04/11/2007 12:06
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/11/2007

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
7106425	ALPHA	-3.08E-02	pCi/L	3.1E-01	U	1.00E+00	100.0		9310_ALPHAB	1.991E-01	05/25/2007				D
BLK	12587-46-1			3.1E-01						L	06:38				

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.

Friday, May 25, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JV5001AB **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/11/2007 13:03

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BW	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
7122528	TC-99	1.22E+01	pCi/L	6.6E+00		1.01E+01	100.0		TC99_SEP_LS	1.262E-01	05/10/2007				D
BLK	14133-76-7			4.6E+00						L	02:24				

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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H11CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 11:21

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106428	BETA	2.21E+01	pCi/L	4.5E+00		1.65E+00	100.0	2.29E+01	9310_ALPHAB	1.983E-01	05/23/2007			70	D
BS	12587-47-2			1.6E+00				96.5		L	17:10			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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H21CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 12:36

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106429	CO-60	3.49E+01	pCi/L	8.1E+00		3.18E+00		3.80E+01	GAMMALL_GS	1.996E+00	04/30/2007			75	D
BS	10198-40-0			8.1E+00				92.0		L	19:26			125	
7106429	CS-137	2.77E+01	pCi/L	7.1E+00		4.28E+00		2.50E+01	GAMMALL_GS	1.996E+00	04/30/2007			70	D
BS	10045-97-3			7.1E+00				110.7		L	19:26			130	
7106429	EU-152	7.81E+01	pCi/L	1.7E+01		1.04E+01		7.70E+01	GAMMALL_GS	1.996E+00	04/30/2007			70	D
BS	14683-23-9			1.7E+01				101.4		L	19:26			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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H51CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 09:27

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7106430	SR-90	1.50E+01	pCi/L	2.3E+00		6.07E-01	67.5	1.38E+01	SRISO_SEP_P	1.0027E+00	05/11/2007			70	D
BS	10098-97-2			8.2E-01				108.7		L	06:58			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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H61CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 10:56

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/10/2007

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
7106431	H-3	2.44E+03	pCi/L	2.5E+02		3.25E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/09/2007			75	D
BS	10028-17-8			2.1E+02				89.8		L	00:52			125	

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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1H61EM **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 10:56

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/10/2007

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
7106431	H-3	2.41E+03	pCi/L	2.5E+02		3.28E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/09/2007			75	D
BS	10028-17-8			2.1E+02				88.8		L	03:37			125	

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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1HM1CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 09:29

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/09/2007

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
7106422	I-129L	9.51E+00	pCi/L	1.2E+00		2.85E-01	100.1	9.72E+00	I129LL_SEP_L	3.9841E+00	05/23/2007			70	D
BS	15046-84-1			1.2E+00				97.8		L	07:12			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.

TAL Richland QC Control Sample Report

AMENDED DATA

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JT1HQ1CS	**Sdg/Rept Nbr:**	W05153	35418	**Collection Date:** 04/10/2007 09:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 04/10/2007

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
7106423	Uranium	3.63E+01	ug/L	4.3E+00	N	8.25E-02		3.55E+01	UTOT_KPA	2.54E-02	05/24/2007			70	D
BS	7440-61-1			4.3E+00				102.2		ML	13:47			130	

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29

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.

AMENDED DATA

Tuesday, August 07, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1HQ1DS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 09:21

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/10/2007

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
7106423	Uranium	3.48E+00	ug/L	3.6E-01	N	8.35E-02		3.63E+00	UTOT_KPA	2.51E-02	05/24/2007			70	D
BS	7440-61-1			3.6E-01				95.7		ML	13:49			130	

REVISED
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2/26/08

30

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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JT1HV1CS **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/11/2007 12:06

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/11/2007

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
7106425	ALPHA	2.17E+01	pCi/L	5.8E+00		9.00E-01	100.0	2.27E+01	9310_ALPHAB	1.993E-01	05/25/2007			70	D
BS	12587-46-1			3.0E+00				95.5		L	06:38			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.

Friday, May 25, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JV5001CS	**Sdg/Rept Nbr:**	W05153 35418	**Collection Date:**	04/11/2007 13:03
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BX	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
7122528	TC-99	4.45E+02	pCi/L	3.2E+01		1.09E+01	100.0	5.37E+02	TC99_SEP_LS	1.259E-01	05/10/2007			70	D
BS	14133-76-7			1.3E+01				83.0		L	03:26			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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTLP21CR **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 09:29
Client Id: B1M6J4 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-026	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
7106422	I-129L	3.33E-01	pCi/L	2.7E-01	U	3.77E-01	100.5		I129LL_SEP_L	3.9415E+00	05/22/2007	12.2	0.2		D
DUP	15046-84-1	3.76E-01		2.7E-01						L	22:12	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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTLVJ1CR **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 09:27

Client Id: B1MF12 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7106430	SR-90	9.21E+00	pCi/L	1.4E+00		4.63E-01	86.4		SRISO_SEP_P	1.0073E+00	05/11/2007	.1	0.		D
DUP	10098-97-2	9.19E+00		5.6E-01						L	06:58	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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTLXA1CR **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/09/2007 12:36
Client Id: B1MD51 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G07-003	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
7106429	BE-7	1.17E+01	pCi/L	2.0E+01	U	3.94E+01			GAMMALL_GS	1.9066E+00	04/30/2007	31.8	0.3		D
DUP	13966-02-4	1.61E+01		2.0E+01						L	14:43	20.0	3		
7106429	CO-60	1.94E+00	pCi/L	2.2E+00	U	5.17E+00			GAMMALL_GS	1.9066E+00	04/30/2007	735.1	1.9		D
DUP	10198-40-0	-1.11E+00		2.2E+00						L	14:43	20.0	3		
7106429	CS-134	1.34E+00	pCi/L	2.2E+00	U	4.63E+00			GAMMALL_GS	1.9066E+00	04/30/2007	45.4	0.5		D
DUP	13967-70-9	2.13E+00		2.2E+00						L	14:43	20.0	3		
7106429	CS-137	-5.71E-01	pCi/L	1.9E+00	U	3.45E+00			GAMMALL_GS	1.9066E+00	04/30/2007	377.0	1.8		D
DUP	10045-97-3	1.86E+00		1.9E+00						L	14:43	20.0	3		
7106429	EU-152	-4.83E-01	pCi/L	5.5E+00	U	9.71E+00			GAMMALL_GS	1.9066E+00	04/30/2007	0.0	0.3		D
DUP	14683-23-9	-1.76E+00		5.5E+00						L	14:43	20.0	3		
7106429	EU-154	-2.56E+00	pCi/L	7.2E+00	U	1.29E+01			GAMMALL_GS	1.9066E+00	04/30/2007	0.0	0.3		D
DUP	15585-10-1	-1.12E+00		7.2E+00						L	14:43	20.0	3		
7106429	EU-155	6.10E-01	pCi/L	4.9E+00	U	8.65E+00			GAMMALL_GS	1.9066E+00	04/30/2007	62.7	0.1		D
DUP	14391-16-3	3.18E-01		4.9E+00						L	14:43	20.0	3		
7106429	K-40	1.76E+00	pCi/L	2.7E+01	U	5.98E+01			GAMMALL_GS	1.9066E+00	04/30/2007	0.0	2.6		D
DUP	13966-00-2	-4.73E+01		2.7E+01						L	14:43	20.0	3		
7106429	RU-106	-7.42E+00	pCi/L	1.9E+01	U	3.31E+01			GAMMALL_GS	1.9066E+00	04/30/2007	390.7	2.3		D
DUP	13967-48-1	2.30E+01		1.9E+01						L	14:43	20.0	3		
7106429	SB-125	-9.73E-01	pCi/L	5.4E+00	U	9.55E+00			GAMMALL_GS	1.9066E+00	04/30/2007	0.0	0.9		D
DUP	14234-35-6	-4.36E+00		5.4E+00						L	14:43	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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTP431FR **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/10/2007 11:21
Client Id: B1MRK5 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7106428	BETA	6.13E+00	pCi/L	1.8E+00		2.73E+00	100.0		9310_ALPHAB	1.984E-01	05/23/2007	10.6	0.5		D
DUP	12587-47-2	6.82E+00		1.7E+00						L	18:15	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.

AMENDED DATA

Tuesday, August 07, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JTP501CR	**Sdg/Rept Nbr:**	W05153	35418	**Collection Date:** 04/10/2007 09:21
Client Id:	B1MFB7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7106423	Uranium	2.63E+01	ug/L	3.1E+00	N	8.32E-02			UTOT_KPA	2.52E-02	05/24/2007	.1	0.		D
DUP	7440-61-1	2.64E+01		3.1E+00						ML	13:53	20.0	3		

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37

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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JTP7T1GR	**Sdg/Rept Nbr:**	W05153 35418	**Collection Date:**	04/10/2007 10:56
Client Id:	B1MRJ3	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7106431	H-3	2.83E+02	pCi/L	1.6E+02	U	3.25E+02	100.0		906.0_H3_LSC	5.00E-03	05/09/2007	19.1	0.5		D
DUP	10028-17-8	3.43E+02		1.4E+02						L	10:30	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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTRWN1DR **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/11/2007 12:06

Client Id: B1MNN7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	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
7106425	ALPHA	2.09E+00	pCi/L	1.5E+00		1.66E+00	100.0		9310_ALPHAB	1.849E-01	05/25/2007	14.9	0.3		D
DUP	12587-46-1	1.80E+00		1.4E+00						L	06:38	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.

Friday, May 25, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JTRWV1JR	**Sdg/Rept Nbr:**	W05153 35418	**Collection Date:**	04/11/2007 13:03
Client Id:	B1MNW2	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	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
7122528	TC-99	1.77E+01	pCi/L	7.0E+00		1.01E+01	100.0		TC99_SEP_LS	1.25E-01	05/10/2007	9.4	0.3		D
DUP	14133-76-7	1.61E+01		4.8E+00						L	00:19	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.

TAL Richland Qc Matrix Spike Report

AMENDED DATA

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id:	JTP521CW	**Sdg/Rept Nbr:**	W05153	35418	**Collection Date:** 04/10/2007 10:22
Client Id:	B1MFC4	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 04/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7106423	Uranium	8.57E+01	ug/L	1.0E+01	N	8.22E-02		3.50E+01	UTOT_KPA	2.55E-02	05/24/2007			60	D
MS	7440-61-1			1.0E+01				245.1		ML	13:56			140	

REVISED
Dlyxu
8/26/08

41

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.

Friday, May 25, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05153.Edd, h:\Reportdb\edd\FeadIV\Rad\35418.Edd

Lab Sample Id: JTRWV1HW **Sdg/Rept Nbr:** W05153 35418 **Collection Date:** 04/11/2007 13:03
Client Id: B1MNW2 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	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
7122528	TC-99	3.07E+03	pCi/L	1.9E+02		1.02E+01	100.0	3.54E+03	TC99_SEP_LS	1.267E-01	05/09/2007			60	D
MS	14133-76-7			3.1E+01				86.8		L	23:17			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

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/25/2007 9:22:31 AM

Lot No., Due Date: J7D110296,J7D110321,J7D120226; 05/29/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106425; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05153; 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 => JTRWN1AA 185.60<200.00 JTRWV1AA 171.40<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 => JTP711AC ALPHA 1.7E+00 L:1.2E+00 JTRWV1AA ALPHA 2.7E+00 L:1.7E+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. 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 Lisa Autenson Date 5/25/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106425
W05153

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 K Kilam Date: 5-25-07

STL RICHLAND, Rev. 10, 8/02

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/24/2007 1:25:30 PM

Lot No., Due Date: J7D110296,J7D110315,J7D110321,J7D120226; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106428; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05153; WATER

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

6.0 Comments on any No response:
See NCM# 10-09964

First Level Review John Morton **Date** 5-24-7

STL RICHLAND

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106428
W25153

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: 5-24-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09964**
NCM Initiated By: John Norton
Date Opened: 05/24/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: None
Lot #'s (Sample #'s): J7D110315 (1,2),
QC Batches: None.

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

Problem Description / Root Cause

Name	Date	Description
John Norton	05/24/2007	Gross beta in water. The samlpes did not meet the RDL because of reduced aliquot sizes due to hight residual weights.

Corrective Action

Name	Date	Corrective Action
John Norton	05/24/2007	The samples were counted for the longest time frame appropriate to this analysis, and the activity detected was greater than the IDC, therfore the data can be accepted.

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: 5/24/2007

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/16/2007 9:30:41 AM

Lot No., Due Date: J7D100158,J7D100168,J7D110315; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106430; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05153; 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:

First Level Review Matt Lordy **Date** 5-16-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106430

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: Kerry R Allen Date: 5-16-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/2/2007 11:34:07 AM

Lot No., Due Date: J7D100168,J7D110321; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106429; RGAMMA Gamma by GER

SDG, Matrix: W05153; 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 #10-09833 for additional information.

First Level Review Mary Randy **Date** 5-2-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106429

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: Sherryl A Adam Date: 5-2-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09833**
NCM Initiated By: Matt Lardy
Date Opened: 05/02/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7D100168 (1),
QC Batches: 7106429

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

Problem Description / Root Cause

Name	Date	Description
Matt Lardy	05/02/2007	Samples JTLXA1AA and JTLXA1AC are duplicate samples. The volume for JTLXA1AC was about 100 mL less than the normal amount of 2 liters used. The MDA of 6 pCi/L was still achieved .

Corrective Action

Name	Date	Corrective Action
Matt Lardy	05/02/2007	Report the results.

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

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/24/2007 1:29:17 PM

Lot No., Due Date: J7D100142,J7D110296,J7D110321,J7D120229,J7D130261; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106422; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05153; WATER

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

6.0 Comments on any No response:

First Level Review Kirsten Antonson **Date** 5/24/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106422
W05153

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: Sherry L. R. Wilson Date: 5-24-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/15/2007 1:46:20 PM

Lot No., Due Date: J7D120226; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7122528; RTC99 Tc-99 by LSC

SDG, Matrix: W05153; WATER

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

6.0 Comments on any No response:
See NCM # 10-09910

First Level Review John Norton **Date** 5-15-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 112528
W05153

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 R Adam Date: 5-15-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09910**
NCM Initiated By: John Norton
Date Opened: 05/15/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Nona
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J7D120226 (2), J7D160000 (424),
QC Batches: 7106424

Nonconformance: Blank result above Contract Limit
Subcategory: Method blank contamination

Problem Description / Root Cause

Name	Date	Description
John Norton	05/15/2007	Tc-99 in water. The blank activity was above the RDL at 31.3 pci/L

Corrective Action

Name	Date	Corrective Action
John Norton	05/15/2007	The batch was re-analyzed and the second analysis is acceptable.

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

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/11/2007 4:56:36 PM

Lot No., Due Date: J7D100168,J7D110296,J7D110321; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106431; RTRITIUM H-3 by LSC

SDG, Matrix: W05153; 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 => JTLX41AA 5.00<10.00 JTLX51AA 5.00<10.00 JTP431AA 5.00<10.00 JTP7T1AA 5.00<10.00 JTP711AA 5.00<10.00 Q:VB OK AL 5/11/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JT1H61AF SVP15/5<>SVP10/10 JT1H61AG SVP15/5<>SVP10/10 JT1H61AA SVP15/5<>SVP10/10 JT1H61AC SVP15/5<>SVP10/10 JT1H61AD SVP15/5<>SVP10/10 JT1H61AE SVP15/5<>SVP10/10 JTLX41AA SVP15/5<>SVP10/10 JTLX51AA SVP15/5<>SVP10/10 JTP431AA SVP15/5<>SVP10/10 JTP7T1AA SVP15/5<>SVP10/10 JTP7T1AG SVP15/5<>SVP10/10 JTP711AA SVP15/5<>SVP10/10 Q:VC OK AL 5/11/07		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JTP7T1AG H-3 68.0 (RPD) OK AL 5/11/07		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			

8.21 Result < Lc, Activity Not Detected, U Flag. 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 Angela Long **Date** 5/11/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106431
W05153

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

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 5-14-07

STL RICHLAND, Rev. 10, 8/02

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/24/2007 3:21:50 PM

Lot No., Due Date: J7D110306,J7D120226; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7106423; RUNAT UNat by KPA

SDG, Matrix: W05153; 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:

First Level Review John Worth **Date** 5-24-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7106423
WC5153

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: Darryl R Adam Date: 5-25-07

PNNL J7D100142 W05153 due 05-24-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-026-16

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-026	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1-LOI, FEBRUARY 2007	HNF-N-506-8	Ice Chest No.: 595 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M6J4		W	4/9/7	0929	1x20-mL P	Activity Scan	None
B1M6J4		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTLP2	

ADDITIONAL DATA

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		APR 09 2007	1445	Eric Darby		Eric Darby	APR 09 2007 1445
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

REVISED Rhynes 2/26/08

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

63A

SEVERN TRENT STL

ADDITIONAL DATA

Sample Check-in List

Date/Time Received: 4/9/07 1445

Client: PGW SDG #: W05153 NA [ ] SAF #: I07-026 NA [ ]

Work Order Number: J7D100142 Chain of Custody #: I07-026-16

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? Yes [ ] No [✓]
2. Custody Seals dated and signed? Yes [ ] No [✓]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing material: 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 label
   - ✓ appropriate sample labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples with head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Darby Date 4/9/07 1445

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

REVISED Daynes 2/26/08

638

PNNL J7D100158
W05153
Due 05-24-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-67

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-6	**Ice Chest No.** ERC-02-403 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MF12		W	4/9/07	0927	1x20-mL P	Activity Scan	None
B1MF12		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

JTLVJ

4/9/07

Relinquished By Fluor Hanford R. T. SICKLE Print Sign Date/Time 1435 APR 0 9 2007	Received By Eric Darby Print Sign Date/Time 1435 APR 0 9 2007	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liquid, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

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

STL RICHLAND

STL RICHLAND

PNNL J7D100158
W05153
Due 05 24 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-68

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-6	**Ice Chest No.** ERC-02-403 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MF13		W	4/9/07	0730	1x20-mL P	Activity Scan	None
B1MF13		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

JTLVV

L Wall 4/9/07

Relinquished By ~~Print~~ Fluor Hanford R. T. SICKLE ~~Sign~~ Date/Time 1435 APR 0 9 2007	Received By Print Eric Darby Sign Eric Darby Date/Time 1435 APR 0 9 2007	Matrix *	
Relinquished By Date/Time	Received By Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air	DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By Date/Time	Received By Date/Time		
Relinquished By Date/Time	Received By Date/Time		

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/9/07 1435

Client: PGW SDG # W05153 NA: S07-003

Work Order Number: J7D100158 Chain of Custody: S07-003-67,68

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? ✓
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature: _____ NA ✓ ✓
6. Number of samples in shipping container: 2
7. Sample holding times exceeded: ✓
8. Samples have:
   _____ tape
   _____ custody seals ✓
9. Samples are:
   ✓ in good condition
   _____ broken
10. Sample pH taken? NA pH: ✓
11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes No ✓
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Darby 4/9/07 1435

Client Sample ID	Analysis Requested	Condition

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____

LS-023, 12/05, Rev. 6

STL RICHLAND

PNNL-J7D100168
W05153
Due 05.24.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G07-003-96

Page 1 of 1

Collector: Fluor Hanford ~~R. T. SICKLE~~	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: G07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: ERC-02-403 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD51		W	4/9/07	1236	1x20-mL P	Activity Scan	None
B1MD51		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

JTLXA

R. Wall 4/9/07

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford R. T. SICKLE (Print) (Sign)	4-9-07 1435	Eric Dorley (Print) (Sign)	4/9/07 1435

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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PNNL J7D100168
W05153
Due 05.24.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **G07-003-104**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-6	**Ice Chest No.** ERC-02-403 **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 samples submitted under A, G, L S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD56		W	4/9/07	1150	1x20-mL P	Activity Scan	None
B1MD56		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MD56		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MD56		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JTLX4	

K. Wall 4/9/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			1435 APR 09 2007	Eric Darby		Eric Darby	1435 APR 09 2007
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

68

PNNL JTD100168
W05153
Due 05-24-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G07-003-105

Page 1 of 1

Collector: ~~Fluor Hanford~~ R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: G07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: ERC-07-403 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD57		W	4/9/07	0800	1x20-mL P	Activity Scan	None
B1MD57		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MD57		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MD57		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JTLX5	
						L Wells 4/9/07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ R. T. SICKLE			APR 0 9 2007 1435	Eric Dailey			APR 0 9 2007 1435
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

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SEVERN TRENT STL

Sample Checklist

Date/Time Received: 4/9/07 1445

Client: PGW SDG # W05153 NA [ ] SAF # G07-003 [ ]

Work Order Number: J7D100168 Chain of Custody # G07-003-96,104,105

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? ED ✓ 4/9/07 ✓
2. Custody Seals dated and signed? ED ✓ ✓
3. Chain of Custody record present? ✓
4. Cooler temperature: _____ NA ✓ 5. Vermiculite/packing material present? [ ] ✓ Yes [ ] No
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? Yes ✓ [ ] No
8. Samples have:
   _____ tape
   _____ custody seals ✓
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ bubble in VOA vials
   (Only for samples requiring zero headspace)
10. Sample pH taken? NA [ ] pH<2 ✓ pH>2 [ ]
11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action required.
12. Were any anomalies identified in sample receipt? ✓
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 4/9/07 1445

Client Sample ID	Analysis Requested	Condition

Client Informed on _____ by _____

[ ] No action necessary; process as is

Project Manager _____ Date _____

LS-023, 12/05, Rev 6

STL RICHLAND

PNNL JTP110296
WC5153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-234

Page 1 of 1

Collector: Fluor Hanford F.M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, APRIL 2007	HNF-N-506-8	Ice Chest No.: 137 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MRK5		W	4/10/7	1121	1x20-mL P	Activity Scan	None
B1MRK5		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRK5		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRK5		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTP43	

Relinquished By	Received By
Print: Fluor Hanford F.M. HALL Sign: APR 10 2007 Date/Time: 1400	Print: Eric Darby Sign: Eric Darby APR 10 2007 Date/Time: 1400
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

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SEVERN TRENT STL

Sample Checklist

Date/Time Received: 4/10/07

Client: PGW SDG # W05153 S07-004

Work Order Number: J7D110296 Chain of Custody S07-004-234

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? Yes ✓
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature _____ NA ✓ ✓
6. Number of samples in shipping container 1
7. Sample holding times exceeded? ✓
8. Samples have:
   _____ tape
   _____ custody seals ✓
9. Samples are:
   ✓ in good condition
   _____ broken
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓]
11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action needed
12. Were any anomalies identified in sample receipt? ✓
13. Description of anomalies (check all that apply):

Sample Custodian: Eu Darby Date 4/10/07 1400

Client Sample ID	Analysis Requested	Condition

Client Informed on _____ by _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev 6

STL RICHLAND

PNNL J70110306 W05153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-141

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506-1	**Ice Chest No.** SML 24 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFB7		W	4-10-07	0921	1x20-mL P	Activity Scan	None
B1MFB7		W	—		1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTP50	
						4-10-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			APR 10 2007 1435		S. Smith	S. Smith	APR 10 2007 1435
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

SIT RICHLAND

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PNNL J7D110306
W05153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-153

Page 1 of 1

Collector: Fluor Hanford D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, MARCH 2007	HNF-N-506 9	Ice Chest No.: SML 24 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFC4		W	4-10-07	1022	1x20-mL P	Activity Scan	None
B1MFC4		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTP52	

Relinquished By: Fluor Hanford D. E. PARCHEN (Print) (Sign) Date/Time: APR 10 2007 1435	Received By: S. Smith (Print) (Sign) Date/Time: APR 10 2007 1435	Matrix *	
Relinquished By: Date/Time	Received By: Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air	DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By: Date/Time	Received By: Date/Time		
Relinquished By: Date/Time	Received By: Date/Time		

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

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PNNL JTD110306
W08153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-165

Page 1 of 1

Collector: Fluor Hanford D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, MARCH 2007	HNF-N-506 9	Ice Chest No.: SWL 24 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFC9		W	4-10-07	1159	1x20-mL P	Activity Scan	None
B1MFC9		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTP53	

Relinquished By: Fluor Hanford D. E. PARCHEN Print Sign Date/Time 1435 APR 10 2007	Received By: S. Smith Print Sign Date/Time 1435 APR 10 2007	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

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

SIL RICHLAND

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PNNL J7D110306
W05153
due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-166**

Page 1 of 1

Collector Fluor Hanford ~~D. E. PARCHEN~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506 9	**Ice Chest No.** SML 24 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFD0		W	4-10-07	1159	1x20-mL P	Activity Scan	None
B1MFD0		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTP54	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford ~~D. E. PARCHEN~~			APR 10 2007 1435				APR 10 2007 1435
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 J7D110306
W05153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-159

Page 1 of 1

Collector: Fluor Hanford D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. MARCH 2007	HMF-N-506 9	Ice Chest No. SML 24 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFC7		W	4-10-07	1318	1x20-mL P	Activity Scan	None
B1MFC7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JT PLA

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			APR 19 2007 1435		S. Smith	S. Smith	APR 19 2007 1435
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: 04/10/07 1435

Client: PGW SDG # W03153 NA [ ] DAF # 807-003

Work Order Number: J7D110306 Chain of Custody # 807-003-141, 153, 165, 166, 159

Shipping Container ID: _____ Air Bill # _____

1 Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]

2 Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4 Cooler temperature: _____ NA [✓] Vermiculite/packing material is NA [✓]

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
_____ broken bottles
(Only for samples requiring headspace)

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

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): _____

Sample Custodian: L. Smith Date: 04.10.07 1435

Client Sample ID	Analysis Requested	Condition	Comments/Corr.

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is

Project Manager _____ Date _____

LS-023, 9/03, Rev 5

STL RICHLAND

PNNL J7D116315
WO 5153
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-031-18

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-031	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100NR2IAM-LOI MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: ERC-07-403 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDD2		W	4/10/07	1141	1x20-mL P	Activity Scan	None
B1MDD2		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MDD2		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
						JTPGS	

R. Woell 4/10/07

Relinquished By: Fluor Hanford R. T. SICKLE (Print) (Sign)	Date/Time: APR 10 2007 1510	Received By: S. Smith (Print) S. Smith (Sign)	Date/Time: APR 10 2007 1510
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 J7D110315
W05153
Due 05-25-07
Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-031-17

Collector R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-031	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100NR2IAM-LOI MARCH 2007	Logbook: HNF-N-506-6	**Ice Chest No.** ERC-02-403 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDD1		W	4/10/07	1141	1x20-mL P	Activity Scan	None
B1MDD1		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MDD1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
						JTP7E	
						R. Wall 4/10/07	

Relinquished By Print Fluor Hanford R. T. SICKLE Sign	Date/Time 1510 APR 10 2007	Received By Print S. Smith Sign	Date/Time 1510 APR 10 2007
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

STL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 04-10-07 1510

Client: PGW SDG #: W05153 NA [ ] SAF #: I07-031 NA [ ]

Work Order Number: J7D110315 Chain of Custody # I07-031-17,18

Shipping Container ID: _____ Air Bill # _____

1 Custody Seals on shipping container intact? NA [ ] Yes [✓] No

2 Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4 Cooler temperature: _____ NA [✓] 5 Vermiculite/packing materials is NA [✓] W[illegible] [ ]

6. Number of samples in shipping container: 2

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

8. Samples have:
_____tape
_____custody seals
_____hazard labels
✓ appropriate samples labels

9 Samples are:
✓ in good condition
_____broken
_____leaking
_____have air bubbles
(Only for samples requiring head space)

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

11 Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
*For documentation only. No corrective action needed

12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]

13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 04-10-07 15:10

Client Sample ID	Analysis Requested	Condition	Comments

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev 5

STL RICHLAND

PNNL J7D110321
W05153
due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-216

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-566-7	**Ice Chest No.** GW0-06-08 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MRJ3		W	4-10-07	0.5t	1x20-mL P	Activity Scan	None
B1MRJ3		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MRJ3		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRJ3		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRJ3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTPTT	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			APR 10 2007 1510		S. Smith	S. Smith	APR 10 2007 1510
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

PNNL J7D110321
W05153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-178

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. APRIL 2007	HAI-A-356-7	Ice Chest No.: GWC-CC-8 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MRD5		W	4-10-07	1231	1x20-mL P	Activity Scan	None
B1MRD5		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MRD5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRD5		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRD5		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTP71	

Relinquished By	Received By
Print: Fluor Hanford K. B. HULSE; Sign: [signature]; Date/Time: APR 10 2007 1510	Print: S. Smith; Sign: S. Smith; Date/Time: APR 10 2007 1510
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: 04-10-07 15:10

Client: PGW SDG # W05153 NA [ ] SAF # 507-004

Work Order Number: JTD110321 Chain of Custody # 507-004-178,216

Shipping Container ID: _____ Air Bill # _____

1 Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]

2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4 Cooler temperature _____ NA [✓] 5 Vermiculite/packing materials is N[illegible] [✓] [illegible]

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[illegible]

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

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): _____

Sample Custodian: S. Smith Date 04-10-07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary: process as is.

Project Manager _____ Date _____

LS-023 9/03, Rev 5

PNNL JTD120226
W05153
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-004-174

Page 1 of 1

Collector Fluor Hanford C. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, APRIL 2007	HNF-N-506-9	**Ice Chest No.** GW0-06-8 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.** N/A

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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MNN7		W	4-11-07	1206	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MNN7		W	↓	↓	1x20-mL P	Activity Scan	None
						JTRWN	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford C. E. PARCHEN			APR 11 2007 1530	Eric Darby			APR 11 2007 1530
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

85

PNNL J7D120226
W05753
due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-004-188**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, APRIL 2007	HNF-N-506-9	**Ice Chest No.** GW0-06-8 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.** N/A

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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MNW2		W	4-11-07	1303	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MNW2		W	↓	↓	1x20-mL P	Activity Scan	None
B1MNW2		W			3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1MNW2		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTRWV	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			APR 11 2007 1530		Eric Darch		APR 11 2007 1530
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: 4/11/07 1530

Client: PGW SDG #: WO 5153 NA [ ] SAF #: W07-004

Work Order Number: J7D120226 Chain of Custody: W07-004-174,188

Shipping Container ID: _____ Air Bill #: ...

1. Custody Seals on shipping container intact? ✓
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature: _____ NA ✓ 5 Vermiculite/peckin ✓
6. Number of samples in shipping container: 2
7. Sample holding times exceeded ✓
8. Samples have:
   _____ tape
   _____ custody seals
   ✓ NO Vermiculite/anomalies/seals
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ Broken
   (Chain ...
10. Sample pH taken? NA pH<2 ✓ ... ✓
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed ✓
12. Were any anomalies identified in sample receipt? ✓
13. Description of anomalies (include sample numbers): ...

Sample Custodian: Ev Darby 4/11/07 ~~1530~~ 1530

Client Sample ID	Analyses Requested	Comments

Client Informed on _____ by _____ Person ...

[ ] No action necessary; process as is.

Project Manager _____ Date ...

LS-023, 12/05, Rev 6

PNNL JTD120229
W05153
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-252

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-9	**Ice Chest No.** SML 24 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.** N/A

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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MR12		W	4-11-07	0951	1x20-mL P	Activity Scan	None
B1MR12		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTRXG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			APR 11 2007 1530		Eric Darby		APR 11 2007 1530
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

SIL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/11/07 1530

Client: PGW SDG # W05753 S07-004

Work Order Number: VTD120229 Chain of Custody: S07-004-252

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? ✓

2. Custody Seals dated and signed? ✓

3. Chain of Custody record present? ✓

4. Cooler temperature: _____ NA ✓ ✓

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? ✓

8. Samples have:
   _____ tape
   _____ custody seals ✓

9. Samples are:
   ✓ in good condition
   _____ broken

10. Sample pH taken? NA ✓ ED ✓

11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? No ✓

13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eu Darby Date 4/11/07 1530

Client Sample ID	Analysis Requested	Container	Preservative

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev 6

STL RICHLAND

PNNL J7D130261
W05153
Due 05.28.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-266

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, APRIL 2007	HNF-N-506-7	Ice Chest No. TI-2 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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MR19		W	4-12-07	1221	1x20-mL P	Activity Scan	None
B1MR19		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTWT3	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
D. R. BREWINGTON D.R. Brewington	APR 12 2007/1330	J.G. Hogan Fluor Hanford J Hogan	APR 12 2007/1330
J.G. Hogan Fluor Hanford J Hogan	4-12-07 1450	Eric Dakey Eric Dakey	4-12-07 1450
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: 4/12/07 1330

Client: PNA SDG # W05153 NA [ ] SAF # S07-004

Work Order Number: J7D130261 Chain of Custody # S07-004-246

Shipping Container ID: [illegible]

[illegible]

2. Custody Seals dated and signed? [illegible] Yes ✓ [illegible]

3. Chain of Custody record present? NA [ ] Yes ✓ No [ ]

4. Cooler temperature: _____ NA ✓ 5. Vermiculite/packing materials is No ✓ [illegible]

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? [illegible] ✓ [illegible]

8. Samples have
_____ tape
_____ custody seals
_____ [illegible] seals
✓ appropriate sample [illegible]

9. Samples are:
✓ in good condition
_____ broken
_____ leaking
_____ have air bubbles
(Only for samples requiring [illegible])

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

11. Sample Location, Sample Collector, Listed? *
*For documentation only. No correction [illegible] Yes ✓ [illegible]

12. Were any anomalies identified in sample receipt? Yes [ ] No ✓

13. Description of anomalies (include sample numbers): _____

Sample Custodian: [illegible] 4/12/07 1330

Client Sample ID	Analysis Requested	[illegible]

Client informed on _____ by _____ Person contacted _____

[ ] No action necessary, process as is.

Project Manager _____ Date _____

LS-023 9/03, Rev 5

STL RICHLAND

5/11/2007 7:30:55 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: 235

AnalyDueDate: 05/28/2007 WO5153

Sep1 DT/Tm Tech:

Batch: 7106425 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

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 JTP43-1-AC J7D110296-1-SAMP 04/10/2007 11:21		201.10g,in AmtRec: 20ML,2XLP,2X4LP	#Containers: 5	1.5	31.5	.50	10C Scr:	1957 Alpha: -9.81E-04 uCi/Sa	5/24/07 R Beta: 1.62E-03 uCi/Sa	
2 JTP7T-1-AC J7D110321-1-SAMP 04/10/2007 10:56		199.80g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		21.6		10d Scr:	Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa	
3 JTP71-1-AC J7D110321-2-SAMP 04/10/2007 12:37		198.80g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		23.1		10F Scr:	Alpha: 2.34E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa	
4 JTRWN-1-AA J7D120226-1-SAMP 04/11/2007 12:06		185.60g,in AmtRec: 20ML,LP	#Containers: 2		44.0		10A Scr:	0704 Alpha: 3.93E-06 uCi/Sa	5/25/07 R Beta: 2.66E-05 uCi/Sa	
5 JTRWN-1-AD-X J7D120226-1-DUP 04/11/2007 12:06		184.90g,in AmtRec: 20ML,LP	#Containers: 2		41.7		10B Scr:	Alpha: 3.93E-06 uCi/Sa	Beta: 2.66E-05 uCi/Sa	
6 JTRWV-1-AA J7D120226-2-SAMP 04/11/2007 13:03		171.40g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6		34.4		10C Scr:	Alpha: 4.60E-05 uCi/Sa	Beta: 4.41E-04 uCi/Sa	
7 JT1HV-1-AA-B J7D160000-425-BLK 04/11/2007 12:06		199.10g,in AmtRec:	#Containers: 1		0.2		10d 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 v4.8.26

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STL RICHLAND

5/11/2007 7:30:58 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106425 pCi/L

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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JT1HV-1-AC-C J7D160000-425-LCS 04/11/2007 12:06		199.30g,in	ASD4174 03/23/07,pd 06/01/01,r	1.5	0.9	.50	10F	0704	5/25/07	

AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments: JTRWN-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 05/11/07"
JTRWV-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 05/11/07"
pH<2.0 SB 5-11-07

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

JTP431AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JT1HV1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JT1HV1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JTP431AC-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT1HV1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT1HV1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

5/25/2007 9:21:55 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/25/2006, 5/30/2007, Batch: '7106425', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106425						
AC		CalcC	BockJ	5/11/2007 7:21:22		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/11/2007 7:21:22 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/11/2007 7:31:00 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/22/2007 8:37:02 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/24/2007 4:00:48 PM	RICH-RC-5014 REVISION 6
SC			StringerR	InCnt1	5/24/2007 4:12:45 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/25/2007 8:00:28 AM	RICH-RD-0003 REVISION 4
AC			BockJ	5/11/2007 7:31:00		
AC			AshworthA	5/22/2007 8:37:02		
AC			AshworthA	5/24/2007 4:00:48 PM		
AC			StringerR	5/24/2007 4:12:45 PM		
AC			StringerR	5/24/2007 4:13:43 PM		
AC			StringerR	5/25/2007 8:00:28		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

STL RICHLAND

STL RICHLAND

5/11/2007 7:20:53 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 05/28/2007 WO5153

Sep1 DT/Tm Tech:

Batch: 7106428 WATER pCi/L **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7106422 BNTB, 7106425 AZS7, 7106428 BCS8, 7106431 ARS6,

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 JTP43-1-AD J7D110296-1-SAMP 04/10/2007 11:21		200.10g,in AmtRec: 20ML,2XLP,2X4LP	#Containers: 5	1.5	57.8	~~50~~ 100	26D	1904	5/23/07 OKD Scr: Alpha: -9.81E-04 uCi/Sa	Beta: 1.62E-03 uCi/Sa
2 JTP43-1-AF-X J7D110296-1-DUP 04/10/2007 11:21		198.40g,in AmtRec: 20ML,2XLP,2X4LP	#Containers: 5		53.5	100	27A		Scr: Alpha: -9.81E-04 uCi/Sa	Beta: 1.62E-03 uCi/Sa
3 JTP65-1-AA J7D110315-1-SAMP 04/10/2007 11:41		69.30g,in AmtRec: 20ML,4XLP	#Containers: 5		79.2	200.	31A	1849	5/23/07 OKD Scr: Alpha: 1.39E-03 uCi/Sa	Beta: 1.55E-03 uCi/Sa
4 JTP7E-1-AA J7D110315-2-SAMP 04/10/2007 11:41		74.20g,in AmtRec: 20ML,4XLP	#Containers: 5		86.8	200.	31B		Scr: Alpha: 5.61E-04 uCi/Sa	Beta: 3.34E-03 uCi/Sa 1.1E-01L
5 JTP7T-1-AD J7D110321-1-SAMP 04/10/2007 10:56		201.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		43.7	~~50~~ 100	27B	1904	5/23/07 OKD Scr: Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa
6 JTP71-1-AD J7D110321-2-SAMP 04/10/2007 12:37		199.50g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		41.1		27C		Scr: Alpha: 2.34E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa
7 JTRWN-1-AC J7D120226-1-SAMP 04/11/2007 12:06		200.80g,in AmtRec: 20ML,LP	#Containers: 2		64.2		27D		Scr: Alpha: 3.93E-06 uCi/Sa	Beta: 2.66E-05 uCi/Sa

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 v4.8.26

95

STL RICHLAND

5/11/2007 7:20:56 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106428 WATER pCi/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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JTRWV-1-AC J7D120226-2-SAMP 04/11/2007 13:03		198.30g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6		1.5	66.3	~~50~~ 100	3:A ~~28A~~ 5/23/07	2035	5/23/07	Scr: Alpha: 4.60E-05 uCi/Sa Beta: 4.41E-04 uCi/Sa
9 JT1H1-1-AA-B J7D160000-428-BLK 04/10/2007 11:21		199.50g,in AmtRec:	#Containers: 1		0.1	200	31C	1849		Scr: Alpha: Beta:
10 JT1H1-1-AC-C J7D160000-428-LCS 04/10/2007 11:21		198.30g,in AmtRec:	BESB3053 03/23/07,pd 08/08/06,r #Containers: 1		0.4	4.	31D			Scr: Alpha: Beta:

Comments: JTP65-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 05/11/07"
JTP7E-SAMP "Comments. Aliquot reduced due to weight screen activity. Recommended to reduce to 110 mls. due to high screen results.JB" 5-11-07
pH <2.0 JB 5-11-07

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

JTP431AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JT1H11AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JT1H11AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JTP431AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1H11AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1H11AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

5/24/2007 1:17:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/24/2006, 5/29/2007, Batch: '7106428', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7106428							
AC			CalcC	BockJ	5/11/2007 7:04:10		
SC				wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	5/11/2007 7:04:10 AM	rich-rc-5014 rEVISION 6
SC				BockJ	Prep1C	5/11/2007 7:21:04 AM	RICH-RC-5014 REVISION 6
SC				AshworthA	InPrep2	5/22/2007 2:24:37 PM	RICH-RC-5014 REVISION 6
SC				AshworthA	Prep2C	5/23/2007 3:11:52 PM	RICH-RC-5014 REVISION 6
SC				DAWKINSO	InCnt1	5/23/2007 3:38:37 PM	RICH-RD-0003 REVISION 4
SC				DAWKINSO	CalcC	5/23/2007 9:28:27 PM	RICH-RD-0003 REVISION 4
AC				BockJ	5/11/2007 7:21:04		
AC				AshworthA	5/22/2007 2:24:37 PM		
AC				AshworthA	5/23/2007 3:11:52 PM		
AC				DAWKINSO	5/23/2007 3:38:37 PM		
AC				DAWKINSO	5/23/2007 9:28:27 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

STL RICHLAND

STL RICHLAND

4/24/2007 8:51:21 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: DRM

AnalyDueDate: 05/28/2007 W05153

Sep1 DT/Tm Tech: 4/30/07 2:46:39 PM

Batch: 7106430 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 5/9/07 8:56:51 AM DRM

SEQ Batch, Test: None

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 JTLVJ-1-AA J7D100158-1-SAMP		1004.90g,in YTA17228 Ex:1/3/2008	SRTB14684 04/19/07,pd 09/11/06,r	1.702 2.0136 0.8453	24.5		100	9" 6A 5A	0513 0750 0743	5/1/07 5/1/07 5/1/07	
04/09/2007 09:27		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -5.02E-04 uCi/Sa	Beta: 8.63E-04 uCi/Sa	
2 JTLVJ-1-AC-X J7D100158-1-DUP		1007.30g,in YTA17229 Ex:1/3/2008	SRTB14685 04/19/07,pd 09/11/06,r	1.763 2.0153 0.8748	25.1			3" 6B 5B	0513 0750 0743	5/1/07 5/1/07 5/1/07	
04/09/2007 09:27		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -5.02E-04 uCi/Sa	Beta: 8.63E-04 uCi/Sa	
3 JTLVV-1-AA J7D100158-2-SAMP		991.00g,in YTA17230 Ex:1/3/2008	SRTB14686 04/19/07,pd 09/11/06,r	1.362 2.0307 0.6740	24.7			9" 6C 5C	0525 0750 0743	5/1/07 5/1/07 5/1/07	
04/09/2007 07:30		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 1.41E-04 uCi/Sa	Beta: 1.51E-04 uCi/Sa	
4 JTLX4-1-AD J7D100168-2-SAMP		1000.70g,in YTA17231 Ex:1/3/2008	SRTB14687 04/19/07,pd 09/11/06,r	1.651 2.0279 0.8144	25.3			3" 6D 5D	0525 0750 0743	5/1/07 5/1/07 5/1/07	
04/09/2007 11:50		AmtRec: 20ML,4XLP,4LP	#Containers: 6					Scr:	Alpha: 1.10E-04 uCi/Sa	Beta: 1.77E-03 uCi/Sa	

STL RICHLAND

4/24/2007 8:51:23 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106430 WATER pCi/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	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JTLX5-1-AD J7D100168-3-SAMP YTA17232 Ex:1/3/2008		1005.20g,in	SRTB14688 04/19/07,pd 09/11/06,r	1.496 2.0879 0.7379		25.0	100	9" 6A 6A	0617 0847 0943	5/1/07 5/1/07 5/1/07	
04/09/2007 08:00		AmtRec: 20ML,4XLP,4LP	#Containers: 6					Scr:	Alpha: -2.55E-03 uCi/Sa	Beta: 2.34E-03 uCi/Sa	
6 JTP65-1-AC J7D110315-1-SAMP YTA17233 Ex:1/3/2008		996.60g,in	SRTB14689 04/19/07,pd 09/11/06,r	1.439 2.0207 0.7111		25.5		3" 5B 5A	0617 0847 0929	5/1/07 5/1/07 5/1/07	1031
04/10/2007 11:41		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: 1.39E-03 uCi/Sa	Beta: 1.55E-03 uCi/Sa	
7 JTP7E-1-AC J7D110315-2-SAMP YTA17234 Ex:1/3/2008		1004.00g,in	SRTB14690 04/19/07,pd 09/11/06,r	1.234 2.0153 0.6123		25.2		9" 5E 6B	0648 0847 0943	5/1/07 5/1/07 5/1/07	
04/10/2007 11:41		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: 5.61E-04 uCi/Sa	Beta: 3.34E-03 uCi/Sa	1.1E-01L
8 JT1H5-1-AA-B J7D160000-430-BLK YTA17235 Ex:1/3/2008		1000.30g,in	SRTB14691 04/19/07,pd 09/11/06,r	1.641 2.0171 0.8185		25.0		9" 5D 6C	0649 0847 0943	5/1/07 5/1/07 5/1/07	
04/09/2007 09:27		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

STL RICHLAND

4/24/2007 8:51:25 AM

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

AnalyDueDate: 05/28/2007

Batch: 7106430 pCi/L
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 JT1H5-1-AC-C J7D160000-430-LCS		1002.70g,in YTA17238 Ex:1/3/2008	SRSG1340 04/19/07,pd 09/11/06,r	1.360 2.0150 0.6749	25.4		100	3" 6A 6D	0723 0537 0745	5/1/07 5/1/07 5/1/07	
04/09/2007 09:27		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments: pH <2.0 JS 4-24-07

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

JTLVJ1AA-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

JT1H51AA-BLK:

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

JT1H51AC-LCS:

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

JTLVJ1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1H51AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1H51AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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5/16/2007 9:28:36 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/16/2006, 5/21/2007, Batch: '7106430', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106430						
AC		CalcC	BockJ	4/23/2007 7:17:55		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/23/2007 7:17:55 AM	rich-rc-5016 rEVISION 6
SC			ManisD	InSep1	4/24/2007 7:40:15 AM	RICH-RC-5006 REVISION 6
SC			BockJ	Prep1C	4/24/2007 8:51:59 AM	RICH-RC-5016 REVISION 6
SC			ManisD	Sep1C	4/30/2007 4:56:34 PM	RICH-RC-5006 REVISION 6
SC			DAWKINSO	InCnt1	4/30/2007 6:03:01 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	Cnt1C	5/1/2007 7:28:05 AM	RICH-RD-0007 REVISION 5
SC			ManisD	InSep2	5/9/2007 7:46:18 AM	RICH-RC-5071 REVISION 4
SC			ManisD	Sep2C	5/9/2007 3:46:13 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	5/9/2007 4:17:41 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/11/2007 9:55:05 AM	RICH-RD-0003 REVISION 4
AC			ManisD	4/24/2007 7:40:15		
AC			BockJ	4/24/2007 8:51:59		
AC			ManisD	4/30/2007 4:56:34 PM		
AC			DAWKINSO	4/30/2007 6:03:01 PM		
AC			BlackCL	5/1/2007 7:28:05 AM		
AC			ManisD	5/9/2007 7:46:18 AM		
AC			ManisD	5/9/2007 3:46:13 PM		
AC			DAWKINSO	5/9/2007 4:17:41 PM		
AC			StringerR	5/11/2007 9:55:05		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 10

ICOCFractions v4.8.26

STL RICHLAND

4/26/2007 10:54:54 AM

Sample Preparation/Analysis

Balance Id:I4 A

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 05/28/2007 W05153

Sep1 DT/Tm Tech:

Batch: 7106429 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

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 JTLXA-1-AA J7D100168-1-SAMP 04/09/2007 12:36		1998.00g,in AmtRec: 20ML,4LP	#Containers: 2		100mL/100		613	1545	4/30/07	
							Scr:	Alpha: 4.43E-04 uCi/Sa	Beta: 3.57E-03 uCi/Sa	1.0E-01L
2 JTLXA-1-AC-X J7D100168-1-DUP 04/09/2007 12:36		1906.60g,in AmtRec: 20ML,4LP	#Containers: 2				614	1623	4/30/07 B	
							Scr:	Alpha: 4.43E-04 uCi/Sa	Beta: 3.57E-03 uCi/Sa	1.0E-01L
3 JTLX4-1-AC J7D100168-2-SAMP 04/09/2007 11:50		1998.70g,in AmtRec: 20ML,4XLP,4LP	#Containers: 6				G10	1745	4/30/07	
							Scr:	Alpha: 1.10E-04 uCi/Sa	Beta: 1.77E-03 uCi/Sa	
4 JTLX5-1-AC J7D100168-3-SAMP 04/09/2007 08:00		1998.80g,in AmtRec: 20ML,4XLP,4LP	#Containers: 6				G6	1746	4/30/07	
							Scr:	Alpha: -2.55E-03 uCi/Sa	Beta: 2.34E-03 uCi/Sa	
5 JTP7T-1-AE J7D110321-1-SAMP 04/10/2007 10:56		2000.30g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6				G7	1746	4/30/07	
							Scr:	Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa	
6 JTP71-1-AE J7D110321-2-SAMP 04/10/2007 12:37		1999.50g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6				G13	1747	4/30/07	
							Scr:	Alpha: 2.34E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa	
7 JT1H2-1-AA-B J7D160000-429-BLK 04/09/2007 12:36		1999.70g,in AmtRec:	#Containers: 1				G12	1930	4/30/07	
							Scr:	Alpha:	Beta:	

STL RICHLAND

4/26/2007 10:54:58 AM

Sample Preparation/Analysis

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

Balance Id:I4 A

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106429 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:
8 JT1H2-1-AC-C J7D160000-429-LCS		1996.00g,in	QCAG1358 03/23/07,pd 03/07/05,r		100mL	100	TS	4/30/2007 2106	4/30/2007	
04/09/2007 12:36		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: JTLXA-SAMP "Comments. DUP. not full aliquot due to insufficient sample. JB 04/26/07"

pH < 2.0 JB 4-26-07

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

JTLXA1AA-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JT1H21AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JT1H21AC-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						

JTLXA1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT1H21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT1H21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

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STL RICHLAND

4/26/2007 10:55:00 AM

Sample Preparation/Analysis

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

Balance Id:I4 A

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106429 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:

Approved By _____ Date: _____

5/2/2007 11:23:33 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/2/2006, 5/7/2007, Batch: '7106429', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106429						
AC		CalcC	BockJ	4/26/2007 10:18:29		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/26/2007 10:18:29 AM	RICH-RC-5017 Revision 5
SC			BockJ	Prep1C	4/26/2007 10:54:58 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	4/27/2007 10:57:05 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	4/30/2007 1:55:43 PM	RICH-RC-5017 REVISION 4
SC			BlackCL	InCnt1	4/30/2007 2:03:55 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	Cnt1C	4/30/2007 9:53:57 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	CalcC	4/30/2007 9:54:17 PM	RICH-RD-0007 REVISION 5
AC			BockJ	4/26/2007 10:54:58		
AC			AshworthA	4/27/2007 10:57:05		
AC			AshworthA	4/30/2007 1:55:43 PM		
AC			BlackCL	4/30/2007 2:03:55 PM		
AC			DAWKINSO	4/30/2007 9:53:57 PM		
AC			DAWKINSO	4/30/2007 9:54:17 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.26

STL RICHLAND

5/15/2007 12:56:28 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/28/2007 W005153

Sep1 DT/Tm Tech:

Batch: 7106422 WATER pCi/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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JTLP2-1-AA J7D100142-1-SAMP 04/09/2007 09:29		3937.60g,in AmtRec: 20ML,2X4LP	ita6233 05/08/07 #Containers: 3		37.5	100	L2	2349	5/22/07 DD Scr: Alpha: 6.82E-03 uCi/Sa 2.1E-01L	Beta: 1.18E-04 uCi/Sa
2 JTLP2-1-AC-X J7D100142-1-DUP 04/09/2007 09:29		3941.50g,in AmtRec: 20ML,2X4LP	ita6234 05/08/07 #Containers: 3		37.2		L4	2351	Scr: Alpha: 6.82E-03 uCi/Sa 2.1E-01L	Beta: 1.18E-04 uCi/Sa
3 JTP43-1-AE J7D110296-1-SAMP 04/10/2007 11:21		3953.10g,in AmtRec: 20ML,2XLP,2X4LP	ita6235 05/08/07 #Containers: 5		36.7		L5	2352	D Scr: Alpha: -9.81E-04 uCi/Sa	Beta: 1.62E-03 uCi/Sa
4 JTP7T-1-AF J7D110321-1-SAMP 04/10/2007 10:56		3945.00g,in AmtRec: 20ML,2XLP,3X4LP	ita6236 05/08/07 #Containers: 6		36.9		L2	0706	5/23/07 Scr: Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa
5 JTP71-1-AF J7D110321-2-SAMP 04/10/2007 12:37		3927.30g,in AmtRec: 20ML,2XLP,3X4LP	ita6237 05/08/07 #Containers: 6		36.7		L4	0708	Scr: Alpha: 2.34E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa
6 JTRXG-1-AA J7D120229-1-SAMP 04/11/2007 09:51		3909.70g,in AmtRec: 20ML,2X4LP	ita6238 05/08/07 #Containers: 3		37.2		L5	0707	Scr: Alpha: 4.80E-04 uCi/Sa	Beta: 1.19E-04 uCi/Sa
7 JTWT3-1-AA J7D130261-1-SAMP 04/12/2007 12:21		3956.20g,in AmtRec: 20ML,2X4LP	ita6239 05/08/07 #Containers: 3		36.8		L2	0849	5/23/07 Scr: Alpha: -6.81E-04 uCi/Sa	Beta: 2.38E-05 uCi/Sa

STL Richland
Richland Wa.

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

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

STL RICHLAND

5/15/2007 12:56:31 PM

Sample Preparation/Analysis

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

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

AnalyDueDate: 05/28/2007

Batch: 7106422 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 JT1HM-1-AA-B J7D160000-422-BLK 04/09/2007 09:29		3891.90g,in AmtRec:	ita6240 05/08/07 #Containers: 1		37.0	100	L4	0851 Scr:	5/23/07 Alpha:	Beta:
9 JT1HM-1-AC-C J7D160000-422-LCS 04/09/2007 09:29		3984.10g,in AmtRec:	isd0745 04/25/07,pd 04/11/07,r #Containers: 1		37.9	↓	L5	0852 Scr:	↓ Alpha:	Beta:

Comments: pH-neutral JB 5-15-07

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

JTLP21AA-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JT1HM1AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JT1HM1AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

JTLP21AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1HM1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT1HM1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/24/2007 1:26:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/24/2006, 5/29/2007, Batch: '7106422', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106422						
AC		CalcC	BockJ	4/19/2007 10:23:42		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/19/2007 10:23:42 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/15/2007 12:56:31 PM	RICH-RC-5017 REVISION 5
SC			BostedD	InPrep2	5/21/2007 6:02:15 PM	RICHRC5025 REV3
SC			BostedD	Prep2C	5/22/2007 8:03:53 PM	RICHRC5025 REV3
SC			DAWKINSO	InCnt1	5/22/2007 10:11:55 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	5/23/2007 11:03:15 AM	RICH-RD-0007 REVISION 5
AC			BockJ	5/15/2007 12:56:31		
AC			BostedD	5/21/2007 6:02:15 PM		
AC			BostedD	5/22/2007 8:03:53 PM		
AC			DAWKINSO	5/22/2007 10:11:55		
AC			StringerR	5/23/2007 11:03:15		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 5/28/07

CUSTOMER PGW

ANALYSIS TC99

MATRIX Water

LOT NUMBER J7D170226

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7101421

NEW BATCH NUMBER 7122528

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) All	High blank
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

5/9/2007 2:00:53 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7122528 WATER pCi/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 JTRWV-1-AH-S J7D120226-2-MS 04/11/2007 13:03		126.70g,in AmtRec: 20ML,500ML,4XLP	TCSG1798 02/28/07,pd 01/10/06,r #Containers: 6			Scr:	Alpha: 4.60E-05 uCi/Sa	Beta: 4.41E-04 uCi/Sa
2 JTRWV-1-AJ-X J7D120226-2-DUP 04/11/2007 13:03		125.00g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 4.60E-05 uCi/Sa	Beta: 4.41E-04 uCi/Sa
3 JTRWV-2-AD J7D120226-2-SAMP 04/11/2007 13:03		126.10g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 4.60E-05 uCi/Sa	Beta: 4.41E-04 uCi/Sa
4 JV500-1-AA-B J7E020000-528-BLK 04/11/2007 13:03		126.20g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JV500-1-AC-C J7E020000-528-LCS 04/11/2007 13:03		125.90g,in AmtRec:	TCSE2105 04/05/07,pd 01/10/06,r #Containers: 1			Scr:	Alpha:	Beta:
6 JV500-1-AD-BN J7E020000-528-IBLK 04/11/2007 13:03		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

110

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 05/28/2007

Batch: 7122528 pCi/L
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC 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

JTRWV1AH-MS Constituent List:

JV5001AA-BLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:
JV5001AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JV5001AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JTRWV1AH-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JV5001AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JV5001AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JV5001AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/15/2007 1:43:36 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/15/2006, 5/20/2007, Batch: '7122528', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7122528						
AC		CalcC	BockJ	5/3/2007 7:31:26 AM		
SC			antonsonl	IsBatched	5/2/2007 3:15:22 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/3/2007 7:31:26 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/3/2007 7:36:53 AM	RICH-RC-5016 REVISION 6
SC			FABREM	InSep1	5/3/2007 9:49:44 AM	RICH-RC-5078 REVISION 3
SC			FABREM	Sep1C	5/9/2007 4:13:13 PM	RICH-RC-5078 REVISION 3
SC			DAWKINSO	InCnt1	5/9/2007 4:23:50 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	5/10/2007 6:42:26 AM	RICH-RD-0001 REVISION 3
AC			BockJ	5/3/2007 7:36:53 AM		
AC			FABREM	5/3/2007 9:49:44 AM		
AC			FABREM	5/9/2007 4:13:13 PM		
AC			DAWKINSO	5/9/2007 4:23:50 PM		
AC			BlackCL	5/10/2007 6:42:26		

AC: Accepting Entry, SC: Status Change

STL RICHLAND

4/16/2007 2:29:01 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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-8-07 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/28/2007 W05153

Batch: 7106431 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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JTLX4-1-AA J7D100168-2-SAMP 04/09/2007 11:50		AmtRec: 20ML,4XLP,4LP	#Containers: 6			Scr:	Alpha: 1.10E-04 uCi/Sa	Beta: 1.77E-03 uCi/Sa
2 JTLX5-1-AA J7D100168-3-SAMP 04/09/2007 08:00		AmtRec: 20ML,4XLP,4LP	#Containers: 6			Scr:	Alpha: -2.55E-03 uCi/Sa	Beta: 2.34E-03 uCi/Sa
3 JTP43-1-AA J7D110296-1-SAMP 04/10/2007 11:21		AmtRec: 20ML,2XLP,2X4LP	#Containers: 5			Scr:	Alpha: -9.81E-04 uCi/Sa	Beta: 1.62E-03 uCi/Sa
4 JTP7T-1-AA J7D110321-1-SAMP 04/10/2007 10:56		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa
5 JTP7T-1-AG-X J7D110321-1-DUP 04/10/2007 10:56		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 5.42E-05 uCi/Sa	Beta: 4.56E-04 uCi/Sa
6 JTP71-1-AA J7D110321-2-SAMP 04/10/2007 12:37		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 2.34E-05 uCi/Sa	Beta: 1.45E-03 uCi/Sa
7 JT1H6-1-AA-B J7D160000-431-BLK 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

4/16/2007 2:29:04 PM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-8-07
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/28/2007

Batch: 7106431 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 JT1H6-1-AC-C J7D160000-431-LCS 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JT1H6-1-AD-BX J7D160000-431-MBLK 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JT1H6-1-AE-CM J7D160000-431-MLCS 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JT1H6-1-AF-BN J7D160000-431-IBLK 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
12 JT1H6-1-AG-BN J7D160000-431-IBLK 04/10/2007 10:56		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JTLX41AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20

114

4/16/2007 2:29:11 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 05/28/2007

Batch: 7106431 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:

```
JT1H61AA-BLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JT1H61AC-LCS:
  H-3          RDL:400          pCi/L     LCL:70      UCL:130     RPD:20
JT1H61AD-MBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JT1H61AE-MLCS:
  H-3          RDL:400          pCi/L     LCL:70      UCL:130     RPD:20
JT1H61AF-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JT1H61AG-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JTLX41AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AF-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1H61AG-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

5/11/2007 4:56:04 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/11/2006, 5/16/2007, Batch: '7106431', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106431						
AC		CalcC	McDowellD	5/8/2007 8:25:47 AM		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	5/8/2007 8:25:47 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	5/8/2007 2:30:19 PM	RICH-RC-5007 REVISION 6
SC			BlackCL	InCnt1	5/8/2007 2:33:59 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/9/2007 12:51:17 PM	RICH-RD-0001 REVISION 3
AC			McDowellD	5/8/2007 2:30:19 PM		
AC			BlackCL	5/8/2007 2:33:59 PM		
AC			StringerR	5/9/2007 12:51:17 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

STL RICHLAND

STL RICHLAND

4/20/2007 12:17:26 PM

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: 05/28/2007 W005153

Sep1 DT/Tm Tech:

Batch: 7106423 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 JTP50-1-AA J7D110306-1-SAMP 04/10/2007 09:21		26.20g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 2.08E-05 uCi/Sa	Beta: 3.96E-05 uCi/Sa
2 JTP50-1-AC-X J7D110306-1-DUP 04/10/2007 09:21		25.20g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 2.08E-05 uCi/Sa	Beta: 3.96E-05 uCi/Sa
3 JTP52-1-AA J7D110306-2-SAMP 04/10/2007 10:22		25.40g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -2.59E-05 uCi/Sa	Beta: 1.57E-04 uCi/Sa
4 JTP52-1-AC-S J7D110306-2-MS 04/10/2007 10:22		25.50g,in AmtRec: 20ML,500MLP	unsf3688 04/19/07,pd 01/23/07,r #Containers: 2			Scr:	Alpha: -2.59E-05 uCi/Sa	Beta: 1.57E-04 uCi/Sa
5 JTP53-1-AA J7D110306-3-SAMP 04/10/2007 11:59		25.10g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 1.11E-04 uCi/Sa	Beta: 2.80E-05 uCi/Sa
6 JTP54-1-AA J7D110306-4-SAMP 04/10/2007 11:59		25.10g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -7.78E-05 uCi/Sa	Beta: 1.81E-04 uCi/Sa
7 JTP6A-1-AA J7D110306-5-SAMP 04/10/2007 13:18		25.80g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -8.67E-05 uCi/Sa	Beta: 2.70E-04 uCi/Sa 1.7E-01L

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STL RICHLAND

4/20/2007 12:17:30 PM

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: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7106423 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:
8 JTRWV-1-AE J7D120226-2-SAMP 04/11/2007 13:03		25.20g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 4.60E-05 uCi/Sa	Beta: 4.41E-04 uCi/Sa
9 JT1HQ-1-AA-B J7D160000-423-BLK 04/10/2007 09:21		25.20g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JT1HQ-1-AC-C J7D160000-423-LCS 04/10/2007 09:21		25.40g,in AmtRec:	unsf3689 04/19/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
11 JT1HQ-1-AD-C J7D160000-423-LCS 04/10/2007 09:21		25.10g,in AmtRec:	unsc1635 04/05/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: pH < 2 JB 4-20-07

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

JTP501AA-SAMP Constituent List:

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

JTP521AC-MS:

JT1HQ1AA-BLK:

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

JT1HQ1AC-LCS:

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

STL RICHLAND

4/20/2007 12:17:34 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 05/28/2007

Batch: 7106423 ug/L
SEQ Batch, Test: None

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

```
JT1HQ1AD-LCS:
 Uranium      RDL:0.144343    ug/L     LCL:70     UCL:130     RPD:20
JTP501AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JTP521AC-MS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1HQ1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1HQ1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT1HQ1AD-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

5/24/2007 3:15:11 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/24/2006, 5/29/2007, Batch: '7106423', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7106423						
AC		Cnt1C	BockJ	4/20/2007 12:10:12		
SC			wagarr	IsBatched	4/16/2007 2:30:51 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/20/2007 12:10:12 PM	RICH-RC-5017 Revision 5
SC			BockJ	Prep1C	4/20/2007 12:17:58 PM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	5/23/2007 2:03:53 PM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	5/24/2007 12:56:30 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	5/24/2007 2:42:11 PM	RICH-RC-5058 REV 7
AC			BockJ	4/20/2007 12:17:58		
AC			AshworthA	5/23/2007 2:03:53 PM		
AC			AshworthA	5/24/2007 12:56:30		
AC			NelsonT	5/24/2007 2:42:11 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

STL RICHLAND

PNNL JTD100142 W05153 due 05-24-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-026-16

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-026	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 21UP1-LOI FEBRUARY 2007	HNF-H-506-8	**Ice Chest No.** 595 **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 samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M6J4		W	4/9/7	0929	1x20-mL P	Activity Scan	None
B1M6J4		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JTLP2	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		APR 09 2007	1445	Eric Dalby		Eric Dalby	APR 09 2007 1445
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

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SEVERN TRENT STL

Sample Checklist

Date/Time Received: 4/2/07 1445

Client: PGW SDG #: W05153 NA [ ] SAF #: I07-026 NA [ ]

Work Order Number: J7D100142 Chain of Custody: I07-026-16

Shipping Container ID: _____ Air Bill #: _____

1. Custody Seals on shipping container intact?
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature: _____ NA [✓] 5 Vermiculite/packing material present? ✓
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? ✓
8. Samples have:
   _____ tape
   _____ custody seals ✓
9. Samples are:
   ✓ in good condition
   _____ broken
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ]
11. Sample Location, Sample Collector Listed?
    *For documentation only. No corrective action needed. ✓
12. Were any anomalies identified in sample receipt? No ✓
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Darby 4/2/07 1445

Client Sample ID	Analysis Requested

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev 6