W05117

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ICOC 113

TOTAL # PAGES IN DOCUMENT 119

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Rec 3/28/07

Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 34793

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05117	S07-001	B1LNK2	J7B080138-1	JN4X91AA	9JN4X910	7046334
		B1LNK2	J7B080138-1	JN4X91AC	9JN4X910	7046339
	I07-009	B1L220	J7B080164-1	JN43K1AA	9JN43K10	7046334
	S07-001	B1LP87	J7B080172-1	JN5J11AA	9JN5J110	7046332
		B1LP87	J7B080172-1	JN5J11AC	9JN5J110	7046334
		B1LP63	J7B080172-2	JN5J81AA	9JN5J810	7046332
		B1LP63	J7B080172-2	JN5J81AC	9JN5J810	7046334
	I07-027	B1M6K4	J7B090162-1	JN7C71AA	9JN7C710	7046334
	W07-002	B1M8X3	J7B090170-1	JN7FH1AA	9JN7FH10	7046332
		B1M8X3	J7B090170-1	JN7FH1AC	9JN7FH10	7046323
		B1M921	J7B090170-2	JN7FQ1AA	9JN7FQ10	7046332
		B1M921	J7B090170-2	JN7FQ1AC	9JN7FQ10	7046334
		B1M921	J7B090170-2	JN7FQ1AD	9JN7FQ10	7046323
		B1M971	J7B090170-3	JN7F01AA	9JN7F010	7046332
		B1M971	J7B090170-3	JN7F01AC	9JN7F010	7046323

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Report Nbr: 34793

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05117	W07-002	B1M976	J7B090170-4	JN7GD1AA	9JN7GD10	7046332
		B1M976	J7B090170-4	JN7GD1AC	9JN7GD10	7046334
		B1M976	J7B090170-4	JN7GD1AD	9JN7GD10	7046323
		B1M961	J7B090170-5	JN7GJ1AA	9JN7GJ10	7046332
		B1M961	J7B090170-5	JN7GJ1AC	9JN7GJ10	7046334
		B1M961	J7B090170-5	JN7GJ1AD	9JN7GJ10	7046323
		B1M8R8	J7B120113-1	JN92G1AA	9JN92G10	7046332
		B1M8R8	J7B120113-1	JN92G1AC	9JN92G10	7046323
		B1M8R9	J7B120113-2	JN92H1AA	9JN92H10	7046332
		B1M8R9	J7B120113-2	JN92H1AC	9JN92H10	7046323
		B1M8T8	J7B120113-3	JN92J1AA	9JN92J10	7046332
		B1M8T8	J7B120113-3	JN92J1AC	9JN92J10	7046323
		B1M8V3	J7B120113-4	JN92K1AA	9JN92K10	7046332
		B1M8V3	J7B120113-4	JN92K1AC	9JN92K10	7046323
	I07-027	B1M6V6	J7B120141-1	JPAA81AA	9JPAA810	7046332
		B1M6V6	J7B120141-1	JPAA81AC	9JPAA810	7046334
		B1M6V6	J7B120141-1	JPAA81AD	9JPAA810	7046323
		B1M711	J7B120141-2	JPACG1AA	9JPACG10	7046332
		B1M711	J7B120141-2	JPACG1AC	9JPACG10	7046334
		B1M711	J7B120141-2	JPACG1AD	9JPACG10	7046323
	W07-002	B1M8M9	J7B120157-1	JPAH31AA	9JPAH310	7046332
		B1M8M9	J7B120157-1	JPAH31AC	9JPAH310	7046323
		B1M8P4	J7B120157-2	JPAJE1AA	9JPAJE10	7046332
		B1M8P4	J7B120157-2	JPAJE1AC	9JPAJE10	7046323
		B1M895	J7B120157-3	JPAJH1AA	9JPAJH10	7046332
		B1M895	J7B120157-3	JPAJH1AD	9JPAJH10	7046338

Comments:

Report Nbr: 34793

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05117	W07-002	B1M895	J7B120157-3	JPAJH1AE	9JPAJH10	7046335
		B1M895	J7B120157-3	JPAJH1AF	9JPAJH10	7046323
		B1M895	J7B120157-3	JPAJH1AG	9JPAJH10	7046340
		B1M895	J7B120157-3	JPAJH2AC	9JPAJH20	7046336
	I07-027	B1M716	J7B120163-1	JPANE1AA	9JPANE10	7046332
		B1M716	J7B120163-1	JPANE1AC	9JPANE10	7046334
		B1M716	J7B120163-1	JPANE1AD	9JPANE10	7046323

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

April 18, 2007

Attention: Dot Stewart

SAF Number	:	I07-009, S07-001, I07-027, W07-002
Date SDG Closed	:	February 9, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05117
Data Deliverable	:	45-Day / Summary

AMMENDED CASE NARRATIVE

I. Introduction

Between February 7, 2007 and February 9, 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#	MATRIX	DATE OF RECEIPT
B1LNK2	JN4X9	WATER	2/7/07
B1L220	JN43K	WATER	2/7/07
B1LP87	JN5J1	WATER	2/7/07
B1LP63	JN5J8	WATER	2/7/07
B1M6K4	JN7C7	WATER	2/8/07
B1M8X3	JN7FH	WATER	2/8/07
B1M921	JN7FQ	WATER	2/8/07
B1M971	JN7F0	WATER	2/8/07
B1M976	JN7GD	WATER	2/8/07
B1M961	JN7GJ	WATER	2/8/07
B1M8R8	JN92G	WATER	2/8/07
B1M8R9	JN92H	WATER	2/8/07
B1M8T8	JN92J	WATER	2/8/07

B1M8V3	JN92K	WATER	2/8/07
B1M6V6	JPAA8	WATER	2/9/07
B1M711	JPACG	WATER	2/9/07
B1M8M9	JPAH3	WATER	2/9/07
B1M8P4	JPAJE	WATER	2/9/07
B1M895	JPAJH	WATER	2/9/07
B1M716	JPANE	WATER	2/9/07

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
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.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
On the original analysis the duplicates were out. The sample and duplicate were recounted with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1M6K4) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1M8M9), and sample matrix spike (B1M8P4) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1M716) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024
The LCS, batch blank, samples and sample duplicate (B1LNK2) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1M895), and sample matrix spike (B1M895) results are within contractual requirements.

SUPERSEDED

~~MAR. 1 2007~~ 4-20-07

Pacific Northwest National Laboratories
March 27, 2007

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
On the original analysis the duplicates were out. The sample and duplicate were recounted with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1M895) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1M6K4) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1M8M9), and sample matrix spike (B1M8P4) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1M716) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024
The enriched tritium analysis was not completed at the time of reporting.

Total Uranium

Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1M895), and sample matrix spike (B1M895) 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.

Pacific Northwest National Laboratories
April 18, 2007

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

Reviewed and approved:

Sherryl A. Adam
for Project Manager

SUPERSEDED 4/20/07

MAR 1 1992

Pacific Northwest National Laboratories
March 27, 2007

Reviewed and approved:

Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) *u_c - Combined Uncertainty.*	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty.* The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

3/27/2007 9:09:23 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34793 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.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:
9JN43K10	B1L220		MW6-SBB-A1	I07-009	W05117					02/07/2007 08:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046334	I-129L	15046-84-1	4.20E-01	pCi/L	2.3E-01	2.3E-01	U	3.34E-01	95.7	I129LL_SEP_LEPS	3.9117E+00	L	03/06/2007 14:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JN4X910	B1LNK2		MW6-SBB-A1	S07-001	W05117					02/07/2007 13:07

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046334	I-129L	15046-84-1	2.95E-02	pCi/L	1.3E-01	1.3E-01	U	2.40E-01	101.4	I129LL_SEP_LEPS	3.9136E+00	L	03/06/2007 14:48	I
7046339	H-3	10028-17-8	4.86E+00	pCi/L	4.9E+00	7.6E+00	U	5.96E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	03/22/2007 05:01	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:
9JN5J110	B1LP87		MW6-SBB-A1	S07-001	W05117					02/07/2007 09:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	1.61E+02	pCi/L	1.3E+02	1.5E+02	U	3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 02:50	I
7046334	I-129L	15046-84-1	-4.22E-02	pCi/L	9.5E-02	9.5E-02	U	1.69E-01	97.6	I129LL_SEP_LEPS	3.9526E+00	L	03/06/2007 14:50	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:
9JN5J810	B1LP63		MW6-SBB-A1	S07-001	W05117					02/07/2007 10:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	-2.04E+01	pCi/L	1.3E+02	1.4E+02	U	3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 04:12	I
7046334	I-129L	15046-84-1	2.05E-01	pCi/L	1.5E-01	1.5E-01	U	3.14E-01	98.6	I129LL_SEP_LEPS	3.9577E+00	L	03/06/2007 16:38	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:
9JN7C710	B1M6K4		MW6-SBB-A1	I07-027	W05117					02/08/2007 09:24

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046334	I-129L	15046-84-1	7.06E-01	pCi/L	3.1E-01	3.1E-01	U	4.53E-01	97.0	I129LL_SEP_LEPS	3.9247E+00	L	03/06/2007 16:39	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JN7F010	B1M971		MW6-SBB-A1	W07-002	W05117					02/08/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	5.11E+03	pCi/L	2.6E+02	3.5E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 08:19	I
7046323	TC-99	14133-76-7	1.12E+02	pCi/L	7.0E+00	1.3E+01		9.63E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	02/24/2007 12:10	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.

3/27/2007 9:09:24 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34793 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.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:
9JN7FH10	B1M8X3		MW6-SBB-A1	W07-002	W05117					02/08/2007 11:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	4.78E+03	pCi/L	2.5E+02	3.3E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 05:34	I
7046323	TC-99	14133-76-7	1.91E+03	pCi/L	2.4E+01	1.3E+02		9.68E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	02/24/2007 12:10	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:
9JN7FQ10	B1M921		MW6-SBB-A1	W07-002	W05117					02/08/2007 12:14

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	1.28E+06	pCi/L	3.6E+03	4.7E+04		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 06:57	I
7046334	I-129L	15046-84-1	3.31E+01	pCi/L	3.6E+00	3.6E+00		6.05E-01	94.9	I129LL_SEP_LEPS	3.8284E+00	L	03/06/2007 18:23	I
7046323	TC-99	14133-76-7	6.43E+03	pCi/L	4.4E+01	4.4E+02		9.70E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	02/24/2007 12:10	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:
9JN7GD10	B1M976		MW6-SBB-A1	W07-002	W05117					02/08/2007 10:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	7.89E+04	pCi/L	9.1E+02	3.1E+03		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 09:40	I
7046334	I-129L	15046-84-1	3.08E+00	pCi/L	5.3E-01	5.3E-01		3.00E-01	88.6	I129LL_SEP_LEPS	3.9506E+00	L	03/06/2007 18:24	I
7046323	TC-99	14133-76-7	1.52E+03	pCi/L	2.1E+01	1.1E+02		9.60E+00	100.0	TC99_ETVDSK_LS	1.262E-01	L	02/24/2007 12:10	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:
9JN7GJ10	B1M961		MW6-SBB-A1	W07-002	W05117					02/08/2007 09:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	6.66E+03	pCi/L	2.9E+02	4.1E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 11:02	I
7046334	I-129L	15046-84-1	1.96E-01	pCi/L	1.5E-01	1.5E-01	U	3.16E-01	94.3	I129LL_SEP_LEPS	3.8515E+00	L	03/06/2007 18:24	I
7046323	TC-99	14133-76-7	6.41E+02	pCi/L	1.4E+01	4.9E+01		9.69E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	02/24/2007 12:10	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:
9JN92G10	B1M8R8		MW6-SBB-A1	W07-002	W05117					02/08/2007 09:24

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	3.09E+03	pCi/L	2.2E+02	2.7E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 12:24	I
7046323	TC-99	14133-76-7	8.89E+02	pCi/L	1.7E+01	6.6E+01		9.56E+00	100.0	TC99_ETVDSK_LS	1.264E-01	L	02/24/2007 12:10	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.

3/27/2007 9:09:24 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34793 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.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:
9JN92H10	B1M8R9		MW6-SBB-A1	W07-002	W05117					02/08/2007 07:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	-6.56E+01	pCi/L	1.2E+02	1.4E+02	U	3.11E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 17:51	I
7046323	TC-99	14133-76-7	-5.48E-02	pCi/L	4.0E+00	5.6E+00	U	9.62E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	02/24/2007 12:10	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:
9JN92J10	B1M8T8		MW6-SBB-A1	W07-002	W05117					02/08/2007 12:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	4.72E+03	pCi/L	2.5E+02	3.3E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 19:12	I
7046323	TC-99	14133-76-7	1.05E+02	pCi/L	6.8E+00	1.3E+01		9.64E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	02/24/2007 12:10	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:
9JN92K10	B1M8V3		MW6-SBB-A1	W07-002	W05117					02/08/2007 11:29

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	3.88E+04	pCi/L	6.4E+02	1.6E+03		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 20:34	I
7046323	TC-99	14133-76-7	1.86E+02	pCi/L	8.4E+00	1.8E+01		9.61E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	02/24/2007 12:10	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:
9JPAA810	B1M6V6		MW6-SBB-A1	I07-027	W05117					02/09/2007 12:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	8.39E+03	pCi/L	3.2E+02	4.7E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 21:56	I
7046334	I-129L	15046-84-1	6.49E-02	pCi/L	1.4E-01	1.4E-01	U	2.74E-01	93.2	I129LL_SEP_LEPS	3.9288E+00	L	03/06/2007 20:25	I
7046323	TC-99	14133-76-7	3.38E+03	pCi/L	3.2E+01	2.3E+02		9.63E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	02/24/2007 12:10	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:
9JPACG10	B1M711		MW6-SBB-A1	I07-027	W05117					02/09/2007 08:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	1.11E+04	pCi/L	3.6E+02	5.8E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/08/2007 23:18	I
7046334	I-129L	15046-84-1	3.92E-01	pCi/L	2.6E-01	2.6E-01	U	3.98E-01	92.2	I129LL_SEP_LEPS	3.8707E+00	L	03/06/2007 20:26	I
7046323	TC-99	14133-76-7	4.00E+03	pCi/L	3.4E+01	2.8E+02		9.67E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	02/24/2007 12:10	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:

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.

3/27/2007 9:09:24 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34793 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

9JPAH310 B1M8M9 MW6-SBB-A1 W07-002 W05117 02/09/2007 10:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	1.17E+03	pCi/L	1.7E+02	1.9E+02		3.06E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/09/2007 00:40	I
7046323	TC-99	14133-76-7	6.94E+01	pCi/L	5.9E+00	1.0E+01		9.48E+00	100.0	TC99_ETVDSK_LS	1.276E-01	L	02/24/2007 12:10	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:
9JPAJE10	B1M8P4		MW6-SBB-A1	W07-002	W05117					02/09/2007 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	2.92E+03	pCi/L	2.1E+02	2.6E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/09/2007 02:01	I
7046323	TC-99	14133-76-7	1.39E+03	pCi/L	2.1E+01	1.0E+02		9.66E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	02/24/2007 12:10	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:
9JPAJH10	B1M895		MW6-SBB-A1	W07-002	W05117					02/09/2007 07:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	4.89E+03	pCi/L	2.6E+02	3.4E+02		3.05E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/09/2007 03:23	I
7046338	BETA	12587-47-2	7.47E+02	pCi/L	1.6E+01	9.8E+01		4.62E+00	100.0	9310_ALPHABETA	1.226E-01	L	03/20/2007 19:23	I
7046335	BE-7	13966-02-4	-9.47E+00	pCi/L	1.7E+01	1.7E+01	U	3.01E+01		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	CO-60	10198-40-0	-1.30E+00	pCi/L	2.9E+00	2.9E+00	U	5.07E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	CS-134	13967-70-9	1.67E+00	pCi/L	2.3E+00	2.3E+00	U	4.83E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	CS-137	10045-97-3	2.34E+00	pCi/L	2.5E+00	2.5E+00	U	5.13E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	EU-152	14683-23-9	1.58E-01	pCi/L	5.2E+00	5.2E+00	U	9.54E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	EU-154	15585-10-1	-5.24E+00	pCi/L	7.0E+00	7.0E+00	U	1.15E+01		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	EU-155	14391-16-3	-2.31E+00	pCi/L	4.8E+00	4.8E+00	U	8.13E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	K-40	13966-00-2	-2.95E+01	pCi/L	5.5E+01	5.5E+01	U	1.24E+02		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	RU-106	13967-48-1	1.02E+01	pCi/L	1.9E+01	1.9E+01	U	3.72E+01		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046335	SB-125	14234-35-6	3.60E-01	pCi/L	5.2E+00	5.2E+00	U	9.51E+00		GAMMALL_GS	1.9821E+00	L	02/22/2007 10:55	I
7046323	TC-99	14133-76-7	3.02E+03	pCi/L	3.0E+01	2.1E+02		9.66E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	02/24/2007 12:10	I
7046340	Uranium	7440-61-1	4.74E+01	ug/L	5.8E+00	5.8E+00		8.35E-02		UTOT_KPA	2.51E-02	ML	03/20/2007 14:30	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:
9JPAJH20	B1M895		MW6-SBB-A1	W07-002	W05117					02/09/2007 07:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046336	ALPHA	12587-46-1	3.18E+01	pCi/L	4.9E+00	8.7E+00		1.52E+00	100.0	9310_ALPHABETA	9.53E-02	L	03/22/2007 09:11	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.

3/27/2007 9.09:24 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34793 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.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:
9JPANE10	B1M716		MW6-SBB-A1	I07-027	W05117					02/09/2007 12:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7046332	H-3	10028-17-8	7.21E+03	pCi/L	3.0E+02	4.3E+02		3.07E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/09/2007 04:45	I
7046334	I-129L	15046-84-1	3.65E+00	pCi/L	5.7E-01	5.7E-01		3.33E-01	94.3	I129LL_SEP_LEPS	3.9321E+00	L	03/06/2007 20:27	I
7046323	TC-99	14133-76-7	2.35E+04	pCi/L	8.3E+01	1.6E+03		9.59E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	02/24/2007 12:10	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.

Tuesday, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG0G1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 12:22
Sample On Date:
Received Date: 02/09/2007

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
7046332	H-3	-5.44E+01	pCi/L	1.4E+02	U	3.06E+02	100.0		906.0_H3_LSC	5.00E-03	03/08/2007				D
BLK	10028-17-8			1.2E+02						L	00:07				

STL Richland
rptFeadRadEdd v3.68

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG0G1DX
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 12:22
Sample On Date:
Received Date: 02/09/2007

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
7046332	H-3	6.47E+01	pCi/L	1.4E+02	U	3.11E+02	100.0		906.0_H3_LSC	5.00E-03	03/08/2007				D
BLK	10028-17-8			1.3E+02						L	15:07				

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1D1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/08/2007 09:24
Sample On Date:
Received Date: 02/08/2007

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
7046334	I-129L	1.09E-01	pCi/L	1.6E-01	U	2.40E-01	92.4		I129LL_SEP_L	3.9023E+00	03/07/2007				D
BLK	15046-84-1			1.6E-01						L	05:34				

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1H1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

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
7046335	BE-7	-3.34E+00	pCi/L	1.7E+01	U	3.08E+01			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	13966-02-4			1.7E+01						L	10:57				
7046335	CO-60	-3.54E-01	pCi/L	2.3E+00	U	4.36E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	10198-40-0			2.3E+00						L	10:57				
7046335	CS-134	-2.51E-01	pCi/L	2.5E+00	U	4.63E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	13967-70-9			2.5E+00						L	10:57				
7046335	CS-137	5.16E-01	pCi/L	2.0E+00	U	3.84E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	10045-97-3			2.0E+00						L	10:57				
7046335	EU-152	-2.73E+00	pCi/L	5.1E+00	U	8.60E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	14683-23-9			5.1E+00						L	10:57				
7046335	EU-154	2.24E+00	pCi/L	7.2E+00	U	1.45E+01			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	15585-10-1			7.2E+00						L	10:57				
7046335	EU-155	1.89E+00	pCi/L	3.5E+00	U	6.72E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	14391-16-3			3.5E+00						L	10:57				
7046335	K-40	-4.72E+01	pCi/L	4.8E+01	U	1.01E+02			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	13966-00-2			4.8E+01						L	10:57				
7046335	RU-106	1.98E+01	pCi/L	2.1E+01	U	4.28E+01			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	13967-48-1			2.1E+01						L	10:57				
7046335	SB-125	2.15E+00	pCi/L	5.2E+00	U	9.92E+00			GAMMALL_GS	2.0036E+00	02/22/2007				D
BLK	14234-35-6			5.2E+00						L	10:57				

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1J1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046336	ALPHA	1.34E-01	pCi/L	3.1E-01	U	6.97E-01	100.0		9310_ALPHAB	2.002E-01	03/21/2007				D
BLK	12587-46-1			3.1E-01						L	08:06				

STL Richland
rptFeadRadEdd v3.68

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPG1L1AB	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 07:51
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046338	BETA	2.79E-01	pCi/L	1.1E+00	U	2.47E+00	100.0		9310_ALPHAB	2.017E-01	03/20/2007				D
BLK	12587-47-2			1.1E+00						L	19:23				

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

Tuesday, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPG1M1AB	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/07/2007 13:07
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	02/07/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046339	H-3	1.79E+00	pCi/L	7.7E+00	U	6.00E+00	100.0		TRITIUM_ELE	1.50E-01	03/22/2007				D
BLK	10028-17-8			5.2E+00						L	02:26				

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, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1P1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046340	Uranium	1.68E-02	ug/L	2.3E-03	U	8.03E-02			UTOT_KPA	2.61E-02	03/20/2007				D
BLK	7440-61-1			2.3E-03						ML	14:22				

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

Tuesday, March 27, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPGXM1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/09/2007 10:57
Sample On Date:
Received Date: 02/09/2007

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
7046323	TC-99	5.93E+00	pCi/L	6.0E+00	U	9.67E+00	100.0		TC99_ETVDSK	1.252E-01	02/24/2007				
BLK	14133-76-7			4.2E+00						L	12:11				D

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, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG0G1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BS

Collection Date: 02/09/2007 12:22
Sample On Date:
Received Date: 02/09/2007

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
7046332	H-3	2.48E+03	pCi/L	2.4E+02		3.07E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	03/08/2007			70	D
BS	10028-17-8			2.0E+02				91.4		L	01:29			130	

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

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPG0G1EM	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 12:22
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/09/2007

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
7046332	H-3	2.24E+03	pCi/L	2.4E+02		3.11E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	03/08/2007			70	D
BS	10028-17-8			2.0E+02				82.5		L	16:29			130	

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

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1D1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BS

Collection Date: 02/08/2007 09:24
Sample On Date:
Received Date: 02/08/2007

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
7046334	I-129L	8.19E+00	pCi/L	1.1E+00		3.73E-01	92.6	9.94E+00	I129LL_SEP_L	3.8908E+00	03/07/2007			70	D
BS	15046-84-1			1.1E+00				82.4		L	05:35			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.

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1H1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BS

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046335	CO-60	3.53E+01	pCi/L	7.7E+00		4.03E+00		3.86E+01	GAMMALL_GS	2.00E+00	02/22/2007			70	D
BS	10198-40-0			7.7E+00				91.5		L	10:57			130	
7046335	CS-137	2.12E+01	pCi/L	6.8E+00		5.63E+00		2.49E+01	GAMMALL_GS	2.00E+00	02/22/2007			70	D
BS	10045-97-3			6.8E+00				85.4		L	10:57			130	
7046335	EU-152	8.15E+01	pCi/L	2.1E+01	U	2.66E+01		7.69E+01	GAMMALL_GS	2.00E+00	02/22/2007			70	D
BS	14683-23-9			2.1E+01				106.1		L	10:57			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.

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPG1J1CS	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 07:51
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046336	ALPHA	2.20E+01	pCi/L	5.5E+00		5.68E-01	100.0	2.22E+01	9310_ALPHAB	2.035E-01	03/21/2007			70	D
BS	12587-46-1			2.1E+00				99.2		L	08:06			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.

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1L1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: BS

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046338	BETA	2.23E+01	pCi/L	3.7E+00		2.52E+00	100.0	2.25E+01	9310_ALPHAB	2.014E-01	03/20/2007			70	D
BS	12587-47-2			2.3E+00				99.2		L	19:23			130	

STL Richland
rptFeadRadEdd v3.68

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, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1M1CS **Sdg/Rept Nbr:** W05117 34793 **Collection Date:** 02/07/2007 13:07

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/07/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046339	H-3	4.11E+02	pCi/L	7.3E+01		5.97E+00	100.0	4.53E+02	TRITIUM_ELE	1.5002E-01	03/22/2007			70	D
BS	10028-17-8			1.7E+01				90.7		L	03:44			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.

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPG1P1CS	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 07:51
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046340	Uranium	3.55E+01	ug/L	4.3E+00		8.42E-02		3.62E+01	UTOT_KPA	2.49E-02	03/20/2007			70	D
BS	7440-61-1			4.3E+00				98.0		ML	14:26			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.

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPG1P1DS **Sdg/Rept Nbr:** W05117 34793 **Collection Date:** 02/09/2007 07:51

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/09/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046340	Uranium	3.47E+00	ug/L	3.5E-01		8.25E-02		3.58E+00	UTOT_KPA	2.54E-02	03/20/2007			70	D
BS	7440-61-1			3.5E-01				96.9		ML	14:28			130	

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

Tuesday, March 27, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPGXM1CS	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 10:57
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/09/2007

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
7046323	TC-99	5.22E+02	pCi/L	4.1E+01		9.52E+00	100.0	5.38E+02	TC99_ETVDSK	1.269E-01	02/24/2007			70	D
BS	14133-76-7			1.3E+01				97.1		L	12:11			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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JN4X91DR	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/07/2007 13:07
Client Id:	B1LNK2	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	02/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-001	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
7046339	H-3	4.45E+00	pCi/L	7.6E+00	U	6.01E+00	100.0		TRITIUM_ELE	1.50E-01	03/22/2007	8.8	0.1		D
DUP	10028-17-8	4.86E+00		4.9E+00						L	06:19	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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JN7C71CR	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/08/2007 09:24
Client Id:	B1M6K4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	02/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-027	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
7046334	I-129L	7.64E-01	pCi/L	3.0E-01	U	4.70E-01	95.1		I129LL_SEP_L	3.9544E+00	03/06/2007	8.0	0.3		D
DUP	15046-84-1	7.06E-01		3.0E-01						L	16:40	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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPAH31DR **Sdg/Rept Nbr:** W05117 34793 **Collection Date:** 02/09/2007 10:57

Client Id: B1M8M9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7046323	TC-99	6.94E+01	pCi/L	1.0E+01		9.66E+00	100.0		TC99_ETVDSK	1.25E-01	02/24/2007	.0	0.		D
DUP	14133-76-7	6.94E+01		6.0E+00						L	12:10	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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPAJH1HR **Sdg/Rept Nbr:** W05117 34793 **Collection Date:** 02/09/2007 07:51

Client Id: B1M895 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046335	BE-7	-8.75E+00	pCi/L	1.9E+01	U	3.25E+01			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	0.1		D
DUP	13966-02-4	-9.47E+00		1.9E+01						L	10:53	20.0	3		
7046335	CO-60	2.95E-02	pCi/L	2.1E+00	U	4.23E+00			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	0.9		D
DUP	10198-40-0	-1.30E+00		2.1E+00						L	10:53	20.0	3		
7046335	CS-134	-2.55E+00	pCi/L	3.1E+00	U	4.96E+00			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	1.9		D
DUP	13967-70-9	1.67E+00		3.1E+00						L	10:53	20.0	3		
7046335	CS-137	1.49E+00	pCi/L	2.3E+00	U	4.66E+00			GAMMALL_GS	1.9662E+00	02/22/2007	44.6	0.5		D
DUP	10045-97-3	2.34E+00		2.3E+00						L	10:53	20.0	3		
7046335	EU-152	7.59E-01	pCi/L	6.0E+00	U	1.10E+01			GAMMALL_GS	1.9662E+00	02/22/2007	131.2	0.1		D
DUP	14683-23-9	1.58E-01		6.0E+00						L	10:53	20.0	3		
7046335	EU-154	2.89E+00	pCi/L	6.3E+00	U	1.37E+01			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	1.8		D
DUP	15585-10-1	-5.24E+00		6.3E+00						L	10:53	20.0	3		
7046335	EU-155	4.37E-01	pCi/L	4.5E+00	U	7.87E+00			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	0.9		D
DUP	14391-16-3	-2.31E+00		4.5E+00						L	10:53	20.0	3		
7046335	K-40	3.10E+01	pCi/L	6.3E+01	U	4.15E+01			GAMMALL_GS	1.9662E+00	02/22/2007	7892.2	1.4		D
DUP	13966-00-2	-2.95E+01		6.3E+01						L	10:53	20.0	3		
7046335	RU-106	-2.23E+01	pCi/L	2.2E+01	U	3.44E+01			GAMMALL_GS	1.9662E+00	02/22/2007	0.0	2.1		D
DUP	13967-48-1	1.02E+01		2.2E+01						L	10:53	20.0	3		
7046335	SB-125	6.89E+00	pCi/L	5.8E+00	U	1.18E+01			GAMMALL_GS	1.9662E+00	02/22/2007	180.1	1.6		D
DUP	14234-35-6	3.60E-01		5.8E+00						L	10:53	20.0	3		

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

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPAJH1KR
Client Id: B1M895
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: DUP

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046338	BETA	7.10E+02	pCi/L	9.3E+01		4.60E+00	100.0		9310_ALPHAB	1.239E-01	03/20/2007	5.1	0.6		D
DUP	12587-47-2	7.47E+02		1.6E+01						L	19:23	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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPAJH1MR	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 07:51
Client Id:	B1M895	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7046340	Uranium	4.81E+01	ug/L	5.8E+00		8.42E-02			UTOT_KPA	2.49E-02	03/20/2007	1.3	0.1		D
DUP	7440-61-1	4.74E+01		5.8E+00						ML	14:34	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.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPAJH2JR
Client Id: B1M895
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: DUP

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7046336	ALPHA	3.44E+01	pCi/L	9.4E+00		2.05E+00	100.0		9310_ALPHAB	9.44E-02	03/22/2007	7.9	0.4		D
DUP	12587-46-1	3.18E+01		5.1E+00						L	09:11	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
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B Qual- Analyte was found in the associated laboratory blank above the MDC.

Tuesday, March 27, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPANE1ER	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 12:22
Client Id:	B1M716	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-027	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
7046332	H-3	7.37E+03	pCi/L	4.3E+02		3.07E+02	100.0		906.0_H3_LSC	5.00E-03	03/09/2007	2.2	0.5		D
DUP	10028-17-8	7.21E+03		3.0E+02						L	07:29	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.

Tuesday, March 27, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id:	JPAJE1DW	**Sdg/Rept Nbr:**	W05117 34793	**Collection Date:**	02/09/2007 09:55
Client Id:	B1M8P4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	MS	**Received Date:**	02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7046323	TC-99	3.61E+03	pCi/L	3.6E+02		9.61E+00	100.0	3.69E+03	TC99_ETVDSK	1.257E-01	02/24/2007			60	D
MS	14133-76-7			3.8E+01				97.8		L	12:10			140	

STL Richland

rptFeadRadEdd v3.68

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, March 27, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05117.Edd, h:\Reportdb\edd\FeadIV\Rad\34793.Edd

Lab Sample Id: JPAJH1LW
Client Id: B1M895
Moisture/Solids%*:

Sdg/Rept Nbr: W05117 34793
Matrix: WATER WATER
QC Type: MS

Collection Date: 02/09/2007 07:51
Sample On Date:
Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7046340	Uranium	3.54E+01	ug/L	1.2E+01		7.94E-02		3.43E+01	UTOT_KPA	2.64E-02	03/20/2007			60	D
MS	7440-61-1			1.2E+01				103.0		ML	14:32			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.

Lot No., Due Date: J7B120157; 03/26/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046336; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05117; 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 => JPAJH1AC 95.30<200.00 JPAJH2AC 95.30<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: See NCM 10-09626			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JPAJH1AJ ALPHA 33.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JPAJH1AC ALPHA 3.4E+01 L:2.0E+00 JPAJH2AC ALPHA 3.2E+01 L:1.5E+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	✓		

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 Cluterson Date 3/26/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046336
W05117

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 Nelson Date: 3-26-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09626**
NCM Initiated By: Lisa Antonson
Date Opened: 03/26/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Alpha by GPC-Am
Lot #'s (Sample #'s): J7B120157 (3), J7B150000 (336),
QC Batches: 7046336

Nonconformance: Dups not within acceptance limits
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	03/26/2007	In the first count, the dups for this alpha batch were out. The sample and duplicate were recounted and are in within limits. Data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	03/26/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 3/26/2007

Lot No., Due Date: J7B120157; 03/26/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046338; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05117; 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 => JPAJH1AD 122.60<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JPAJH1AD BETA 4.6E+00>4.0E+00 JPAJH1AK BETA 4.6E+00>4.0E+00 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JPAJH1AD BETA 7.5E+02 L:4.6E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

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: NCM 10-096603

8.31 Results Blank Subtracted as Appropriate. Yes No N/A ✓
OK

First Level Review Lisa Anderson Date 3/21/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046338
W05117

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: Cheryl A Adam Date: 7-22-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09603**
NCM Initiated By: Lisa Antonson
Date Opened: 03/21/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J7B120157 (3), J7B150000 (338),
QC Batches: 7046338

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	03/21/2007	The samples in this Beta batch didn't meet CRDL due to reduced aliqots based on weight screens. Sample results exceed the MDA achieved, data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	03/21/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 3/21/2007

TRENT STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

2/22/2007 4:34:18 PM

Lot No., Due Date: J7B120157; 03/26/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046335; RGAMMA Gamma by GER
SDG, Matrix: W05117; WATER

1.0 COC

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

2.0 QC Batch

	Yes	No	N/A
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		

3.0 QC & Samples

	Yes	No	N/A
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		

4.0 Raw Data

	Yes	No	N/A
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		

5.0 Other

	Yes	No	N/A
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review [signature] **Date** 2/22/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046335
W05117

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

Comments on any "No" response:

Second Level Review: Sheryl R Adam Date: 2-23-07

Lot No., Due Date:	J7B080164,J7B080138,J7B080172,J7B090162,J7B090170,J7B120141,J7B120163;
Client, Site:	384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test:	7046334; RGAMLEPS Gamma by LEPS
SDG, Matrix:	W05117; 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 Pam Anderson Date 3-9-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046334
W05117

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: 5-15-07

Lot No., Due Date: J7B090170,J7B120113,J7B120141,J7B120157,J7B120163; 03/26/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046323; RTC99 Tc-99 by LSC
SDG, Matrix: W05117; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JPAJE1AD TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. 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. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Antonson **Date** 2/24/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 704323
W05117

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

Comments on any "No" response:

Second Level Review: Sheryl R. Wilson Date: 2-27-07

Lot No., Due Date: J7B080172,J7B090170,J7B120113,J7B120141,J7B120157,J7B120163; 03/23/2007,03/26/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7046332; RTRITIUM H-3 by LSC

SDG, Matrix: W05117; WATER

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

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

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

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

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

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

8.06 At Least the Minimum Sample Volume Was Used Yes No N/A
Analysis Volume => JN5J11AA 5.00<10.00
JN5J81AA 5.00<10.00
JN7FH1AA 5.00<10.00
JN7FQ1AA 5.00<10.00
JN7F01AA 5.00<10.00
JN7GD1AA 5.00<10.00
JN7GJ1AA 5.00<10.00
JN92G1AA 5.00<10.00
JN92H1AA 5.00<10.00
JN92J1AA 5.00<10.00
JN92K1AA 5.00<10.00
JPAA81AA 5.00<10.00
JPACG1AA 5.00<10.00
JPAH31AA 5.00<10.00
JPAJE1AA 5.00<10.00
JPAJH1AA 5.00<10.00
JPANE1AA 5.00<10.00 Q:VB

OK AL
3/12/07

8.07 The Correct Count Geometry was Used. Yes No N/A
Count Geometry => JPG0G1AF SVP15/5<>SVP10/10
JPG0G1AG SVP15/5<>SVP10/10
JPG0G1AA SVP15/5<>SVP10/10
JPG0G1AC SVP15/5<>SVP10/10
JN5J11AA SVP15/5<>SVP10/10
JN5J81AA SVP15/5<>SVP10/10
JN7FH1AA SVP15/5<>SVP10/10
JN7FQ1AA SVP15/5<>SVP10/10
JN7F01AA SVP15/5<>SVP10/10
JN7GD1AA SVP15/5<>SVP10/10
JN7GJ1AA SVP15/5<>SVP10/10
JN92G1AA SVP15/5<>SVP10/10
JPG0G1AH SVP15/5<>SVP10/10
JPG0G1AD SVP15/5<>SVP10/10
JPG0G1AE SVP15/5<>SVP10/10
JN92H1AA SVP15/5<>SVP10/10
JN92J1AA SVP15/5<>SVP10/10
JN92K1AA SVP15/5<>SVP10/10
JPAA81AA SVP15/5<>SVP10/10
JPACG1AA SVP15/5<>SVP10/10
JPAH31AA SVP15/5<>SVP10/10
JPAJE1AA SVP15/5<>SVP10/10
JPAJH1AA SVP15/5<>SVP10/10
JPANE1AA SVP15/5<>SVP10/10
JPG0G1AJ SVP15/5<>SVP10/10
JPANE1AE SVP15/5<>SVP10/10 Q:VC

OK AL
3/12/07

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

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

8.1 Comments:

OK

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

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

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

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

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

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

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

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

8.2 Comments:

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

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

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

OK; No Callin Level Found => H-3

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

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes No N/A
OK

First Level Review Angela Long **Date** 3/12/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046332
W05117

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

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 3-13-07

Lot No., Due Date: J7B120157; 03/26/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7046340; RUNAT UNat by KPA
SDG, Matrix: W05117; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JPG1P1AD UNSC<>UNSF Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JPAJH1AG Uranium 4.7E+01 L:8.3E-02		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

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

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes No N/A
OK ✓

First Level Review Pam Anderson Date 3-20-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 704340
W05117

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?	3-21-07		√
9. Do the duplicate sample results and yields meet acceptance criteria?	√		
C. Other 1. Are all Nonconformances included and noted?			√
2. Are all required forms filled out?	√		
3. Was the correct methodology used?	√		
4. Was transcription checked?	√		
5. Were all calculations checked at a minimum frequency?	√		
6. Were units checked?	√		

Comments on any "No" response:

Second Level Review: Cheryl A Adam Date: 3-21-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/22/2007 4:17:58 PM

Lot No., Due Date: J7B080138; 03/23/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7046339; RH3EE H3EE by LSC

SDG, Matrix: W05117; WATER

1.0 COC

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

2.0 QC Batch

	Yes	No	N/A
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓

3.0 QC & Samples

	Yes	No	N/A
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		

4.0 Raw Data

	Yes	No	N/A
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		

5.0 Other

	Yes	No	N/A
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Pam Anderson **Date** 3-22-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7046339
W05117

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

Comments on any "No" response:

Second Level Review: Sheryl R. Adam Date: 5-23-07

64B

PNNL J7B080138
W05117
Due 03.23.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-001-408

Page 1 of 1

Collector: D. P. CONNOLLY	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, JANUARY 2007	HNF-N-506-2	Ice Chest No.: 115 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
B1LNK2		W	2.7.07	1307	1x20-mL P	Activity Scan	None
B1LNK2		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
B1LNK2		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

JN4X9

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. P. CONNOLLY			FEB 07 2007 1335	Eric Darby	Eric Darby		FEB 07 2007 1335
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 2/7/07 1335

Client: PNL SDG #: W05117 NA ( ) SAF #: S07-001 NA ( )

Work Order Number: J7B080138 Chain of Custody # S07 001- 408

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? NA ( ) Yes (✓) No ( )

4 Cooler temperature: _____ NA (✓) 5 Vermiculite/packing materials is NA (✓) Wet ( ) Dry ( ) Yes ( ) No ( )

6 Number of samples in shipping container: 1

7. Sample holding times exceeded? NA (✓) Yes ( ) No ( )

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

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

10. Sample pH taken? NA ( ) pH<2 ( ) pH>2 (✓) 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: Eve Darby Date: 2/7/07 1335

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 J7B080164
W05117
Due 03/23/07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-009-93**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1-LOI, NOVEMBER 2006	HNF-N-506 1	**Ice Chest No.** SAWS-109 **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
B1L220		W	2-7-07	0820	1x20-mL P	Activity Scan	None
B1L220		W	1	1	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

JN43K

2-7-07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		FEB 07 2007 1445	S. Smith	S. Smith		FEB 07 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

SITE RECORDS

SEVERN TRENT STL

Sample Check-In List

Date/Time Received: 02.07.07 1445

Client: PGW SDG # W05117 NA [ ] SAF # I07-009 NA [ ]

Work Order Number: J7B080164 Chain of Custody # I07-009-93

Shipping Container ID: _____ Air Bill # _____

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

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

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

4. Cooler temperature: _____ NA [ ] 5 Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6 Number of samples in shipping container: 1

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

8. Samples have:
_____ tape
_____ custody seals
_____ hazard labels
1 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? *
*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: 02.07.07 1445

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

PNNL J7B080227M2 S8-2/7/07
W05117
Due 03-23-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-001-220**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-001	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, JANUARY 2007	HNF-N-5061	**Ice Chest No.** SAWS-109 **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
B1LP87		W	2-7-07	0942	1x20-mL P	Activity Scan	None
B1LP87		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1LP87		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JN5J1

2-7-07

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford D. R. BREWINGTON D.R. Brewington	FEB 07 2007 1445	S. Smith S. Smith	FEB 07 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

SFT PLOTTED

PNNL J7B080172
W05117
Due 03-23-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-001-184

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, JANUARY 2007	HNF-N-5061	Ice Chest No.: SAWS-109 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
B1LP63		W	2-7-07	1053	1x20-mL P	Activity Scan	None
B1LP63		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1LP63		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JN5J8

2-7-07

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford D. R. BREWINGTON (Print) D R Brewington (Sign)	FEB 07 2007 1445	S. Smith (Print) S. Smith (Sign)	FEB 07 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 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

SFL RICHLAND

70

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 02-07-07 1445

Client: PGW SDG #: W05117 NA [ ] SAF #: 507-001 NA [ ]

Work Order Number: J7B080227 172 88 Chain of Custody # 507-001-184,220

Shipping Container ID: _____ Air Bill # _____

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

Sample Custodian: L. Smith Date: 02-07-07 1445

Client Sample ID	Analysis Requested	Container	Comments

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J7B090162
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-027-2

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-027	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, FEBRUARY 2007	HNF-N-506 3	Ice Chest No.: Ross 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
B1M6K4		W	2-8-07	0224	1x20-mL P	Activity Scan	None
B1M6K4		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JN7C7	

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford F. M. HALL (Print) (Sign)	FEB 0 8 2007 1445	Eric Darby (Print) (Sign)	FEB 0 8 2007 1445

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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STL

Sample Check-in List

Date/Time Received: 2/8/07 1415

Client: PNL SDG # W05117 NA [ ] SAF # E07-027 NA [ ]

Work Order Number: J7B090162 Chain of Custody # E07-027-2

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? NA [ ] Yes [✓] No [ ]

4 Cooler temperature: _____ NA [✓] 5 Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

5 Number of samples in shipping container: 1

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

7 Samples have:
_____ tape
_____ custody seals
_____ hazard labels
✓ appropriate samples labels

8 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? *
*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: Eric Dailey Date: 2/8/07 1415

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 J7B090170
W05117
Due 03-26-07
FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-334**

Page 1 of 1

Collector M.R. WEIL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	HNF-N-506-1	**Ice Chest No.** SHWS-109 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**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
B1M8X3		W	2-8-07	1104	1x20-mL P	Activity Scan	None
B1M8X3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8X3		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JN7FH	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD	M.R. WEIL	[signature]	1415 FEB 08 2007	[signature]	Eric Darby	[signature]	1415 FEB 08 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 = 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 J78090170
W05717
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-374

Page 1 of 1

Collector FLUOR HANFORD M.R. WEIL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-002	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, FEBRUARY 2007	HNF-506-1	Ice Chest No. S4405109 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	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
B1M921		W	2-8-07	1214	1x20-mL P	Activity Scan	None
B1M921		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M921		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M921		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						~~JNF~~ SS 2/8/07	
						JN7F9	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD M.R. WEIL			FEB 08 2007 1415		Eric Darley		FEB 08 2007 1415
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

SIL RICHLAND

75

PNNL J7B090170
WO 5117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-382

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	Logbook: HNF-N-506-4	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: RCRA	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
B1M971		W	2/8/07	1236	1x20-mL P	Activity Scan	None
B1M971		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M971		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JN7F0

R. Wall 2/8/07

Relinquished By	Received By
Print: K.J. YOUNG Sign: [signature] Date/Time: 1415 FEB 08 2007	Print: Eric Dayley Sign: [signature] Date/Time: 1415 FEB 08 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 = 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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PNNL JTB090170
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-390

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	Logbook: HNF-N-506-4	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: RCRA	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
B1M976		W	2/8/07	1033	1x20-mL P	Activity Scan	None
B1M976		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M976		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M976		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

JN7GD

A. Wall 2/8/07

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
K.J. YOUNG	FEB 08 2007 1415	Ed Darby	FEB 08 2007 1415

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

S.L. RICHLAND

77

PNNL J78090170
W05117
Aug 03 26 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-414

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	Logbook: HNF-N-506-4	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: RCRA	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
B1M961		W	2/8/07	0923	1x20-mL P	Activity Scan	None
B1M961		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M961		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M961		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

JN7GJ

R. Wall 2/8/07

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
K.J. YOUNG [signature]	FEB 0 8 2007 1415	Eric Dealy [signature]	FEB 0 8 2007 1415

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

SIL RICHLAND

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SEVERN TRENT STL

Sample Check-in List

Date/Time Received 2/8/07 1415

Client: PNL SDG #: W05117 NA [ ] SAF #: W07-002 NA [ ]

Work Order Number: J7B090170 Chain of Custody #: W07-002-334,374,382,390 414

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   ____ tape
   ____ custody seals
   ____ hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   ____ broken
   ____ leaking
   ____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] 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: E. Darby Date: 2/8/07 1415

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 J7B120113
W05117
Due 03.26.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-286**

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	HnF-N-506 3	**Ice Chest No.** Ross **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**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
B1M8R8		W	2-8-07	0924	1x20-mL P	Activity Scan	None
B1M8R8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8R8		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JN92G	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			1415 FEB 0 8 2007	Eric Dusby	Eric Dusby		1415 FEB 0 8 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

SHI RICHLAND

80

STL RICHLAND

PNNL J7B120113
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-287

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	HNF-N-506 3	Ice Chest No.: Ross Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	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
B1M8R9		W	2-8-07	0730	1x20-mL P	Activity Scan	None
B1M8R9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8R9		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JN92H	

Relinquished By	Received By
Print: Fluor Hanford F. M. HALL Sign: [signature] Date/Time: 1415 FEB 08 2007	Print: Eric Dailey Sign: [signature] Date/Time: 1415 FEB 08 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

PNNL J7B120113
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-294

Page 1 of 1

Collector: ~~Fluor Hanford~~ F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	HNF-N-506 3	Ice Chest No.: Ross Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	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
B1M8T8		W	2-8-07	1256	1x20-mL P	Activity Scan	None
B1M8T8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8T8		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JN92J

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford F. M. HALL [signature]	FEB 0 8 2007 1415	Print: Eric Darby Sign: [signature]	FEB 0 8 2007 1415
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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PNNL J7B120113
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-002-302

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	HNF-N-506 3	Ice Chest No.: Ross Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	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
B1M8V3		W	2-8-07	1129	1x20-mL P	Activity Scan	None
B1M8V3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8V3		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JN92K

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			1415 FEB 08 2007		Eric Darby		1415 FEB 08 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

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STL

Sample Check-in List

Date/Time Received: 2/8/07 1415

Client: PNL SDG #: W05117 NA ( ) SAF #: W07-002 NA ( )

Work Order Number: JTB120113 Chain of Custody #: W07-002-286,287,294,302

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? NA ( ) Yes (✓) No ( )
4. Cooler temperature: _____ NA (✓) 5. Vermiculite/packing materials is NA (✓) Wet ( ) Dry ( )
6. Number of samples in shipping container: 4
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? *
    *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: [signature] Date: 2/8/07 1415

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

( ) No action necessary; process as is.

Project Manager _____ Date _____

CS-003 9/03, Rev 5

PNNL J7B120141
WO 5117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-027-126**

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-027	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI FEBRUARY 2007	HNF-N-506-2	Ice Chest No.: 115 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
B1M6V6		W	2907	1208	1x20-mL P	Activity Scan	None
B1M6V6		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1M6V6		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M6V6		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JPAA8	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE		K B Hulse	FEB 09 2007 1420		Eric Dorly	Eric Dorly	FEB 09 2007 1420
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

RIDS/HIS

PNNL J7B120140 RW 3/12/07
WO 5117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-027-20**

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-027	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL FEBRUARY 2007	HNF-N-506-2	Ice Chest No.: 115 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
B1M711		W	2-9-07	0859	1x20-mL P	Activity Scan	None
B1M711		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1M711		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M711		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

JPACG

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			FEB 09 2007 1420		Eric Dooley		FEB 09 2007 1420
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

Sample Check-in List

Date/Time Received: 2/9/07 1420

Client: PNL SDG #: W05117 NA [ ] SAF #: I07-027 NA [ ]

Work Order Number: J7B120141 Chain of Custody #: I07-027-126

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? NA [ ] Yes [✓] No [ ]

4 Cooler temperature _____ NA [✓] 5 Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

5 Number of samples in shipping container: 2

6 Sample holding times exceeded? Yes [ ] No [✓]

8 Samples have: NA [✓] Yes [ ] No [ ]
_____ 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? *
*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: [signature] Date: 2/9/07 1420

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 J7B120157
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-222**

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	HNF-N-506-2	**Ice Chest No.** 115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**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
B1M8M9		W	2907	1057	1x20-mL P	Activity Scan	None
B1M8M9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8M9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JPAH3	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			FEB 09 2007 1420		Eric Dooley		FEB 09 2007 1420
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 J7B120157
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-246**

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	14NF-N-506-2	**Ice Chest No.** 115 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**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
B1M8P4		W	2907	0955	1x20-mL P	Activity Scan	None
B1M8P4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8P4		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JPAJE	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			FEB 09 2007 1420		Eric Dorley		FEB 09 2007 1420
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SIL RICHLAND

89

PNNL JTB120157
W05717
Due 03-26-07

Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-162**

Page 1 of 1

Collector: K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2007	HNF-N-506-2	Ice Chest No.: 115 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	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
B1M895		W	2-9-07	0759	1x20-mL P	Activity Scan	None
B1M895		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1M895		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1M895		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M895		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M895		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						JPAJH	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford K. B. HULSE / K. B. Hulse	FEB 09 2007 1420	Eric Darby / Eric Darby	FEB 09 2007 1420
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

SLL RICHLAND

90

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 2/9/07 1420

Client: PNL SDG #: W05117 NA [ ] SAF #: W07-002 NA [ ]

Work Order Number: J7B120157 Chain of Custody #: W07-002-222, 246, 162

Shipping Container ID: 3 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? NA [ ] Yes [✓] No [ ]

4 Cooler temperature: _____ NA [✓] Yes [✓] No [ ]

5 Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6 Number of samples in shipping container: 3

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

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

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

10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] 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: Eric Darby Date: 2/9/07 1420

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 J7B120163
W05117
Due 03-26-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-027-16

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. I07-027	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI FEBRUARY 2007	HNF-N-586-1	Ice Chest No. 5AW5-109 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
B1M716		W	2-9-07	1222	1x20-mL P	Activity Scan	None
B1M716		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1M716		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M716		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JPANE	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN		R F Carrigan	2-9-07 1420	Eric Darby	Eric Darby		2-9-07 1420
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

STL

Sample Check-in List

Date/Time Received: 2/9/07 1420

Client: PNL SDG #: W05117 NA ( ) SAF #: I07-027 NA ( )

Work Order Number: J7B120163 Chain of Custody #: I07-027-16

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA ( ) Yes (✓) No ( )
2. Custody Seals dated and signed? NA ( ) Yes (✓) No ( )
3. Chain of Custody record present? Yes (✓) No ( )
4. Cooler temperature: _____ NA (✓) 5. Vermiculite/packing materials is NA (✓) Wet ( ) Dry ( )
6. Number of samples in shipping container 1
7. Sample holding times exceeded? NA (✓) Yes ( ) No ( )
8. Samples have:
   ____ tape
   ____ 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? *
    *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: Ed Darby Date: 2/9/07 1420

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

( ) No action necessary, process as is.

Project Manager _____ Date _____

LS-003 9/03, Rev 5

3/22/2007 7:47:55 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

Pipet #: _____

AnalyDueDate: 03/26/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7046336 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7046323 FPS5, 7046332 ARS6, 7046335 AWTA, 7046336 AZS7, 7046338 BCS8, 7046340 DHSS,

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 JPAJH-1-AC J7B120157-3-SAMP 02/09/2007 07:51		95.30g,in AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6	1.5	34.2mg	100		Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
2 JPAJH-1-AJ-X J7B120157-3-DUP 02/09/2007 07:51		94.40g,in AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6		34.3mg	100		Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
[redacted] J7B120157-3-SAMP 02/09/2007 07:51		95.30g AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6	1.5	34.2	100	10B	Scr:	1001 Alpha: -8.18E-04 uCi/Sa	3/22/07 R Beta: 1.68E-03 uCi/Sa
[redacted] J7B120157-3-DUP 02/09/2007 07:51		94.40g AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6	1.5	34.3	100	10C	Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
5 JPG1J-1-AA-B J7B150000-336-BLK 02/09/2007 07:51		200.20g,in AmtRec:	#Containers: 1		1.7mg	100		Scr:	Alpha:	Beta:
6 JPG1J-1-AC-C J7B150000-336-LCS 02/09/2007 07:51		203.50g,in AmtRec:	ASD4125 01/18/07,pd 02/09/06,r #Containers: 1		1.8mg	100		Scr:	Alpha:	Beta:

0

STL RICHLAND

03/22/2007 7:48:03 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: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046336 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:

Comments: JPAJH-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 02/22/07"

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

JPAJH1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JPG1J1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JPG1J1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JPAJH1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPG1J1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPG1J1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

3/20/2007 4:54:47 PM

Sample Preparation/Analysis

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

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 03/26/2007

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

Batch: 7046338 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None All Tests: 7046323 FPS5, 7046332 ARS6, 7046335 AWTA, 7046336 AZS7, 7046338 BCS8, 7046340 DHSS,

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 JPAJH-1-AD J7B120157-3-SAMP		122.60g,in			90.5mg	100	27A	2012	3/20/07 DD	
02/09/2007 07:51		AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6				Scr:	Alpha: -8.18E-04 uCi/Sa		Beta: 1.68E-03 uCi/Sa
2 JPAJH-1-AK-X J7B120157-3-DUP		123.90g,in			88.9mg	100	27B			
02/09/2007 07:51		AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6				Scr:	Alpha: -8.18E-04 uCi/Sa		Beta: 1.68E-03 uCi/Sa
3 JPG1L-1-AA-B J7B150000-338-BLK		201.70g,in			0.4mg	100	27C			
02/09/2007 07:51		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
4 JPG1L-1-AC-C J7B150000-338-LCS		201.40g,in	BESB3005 01/23/07,pd 08/08/06,r		0.2mg	100	27D			
02/09/2007 07:51		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

Comments: JPAJH-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 02/22/07"

DH 3/20/07

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

JPAJH1AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JPG1L1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JPG1L1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

3/20/2007 4:54:53 PM

Sample Preparation/Analysis

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

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046338 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:

```
JPAJH1AD-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG1L1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG1L1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

STL RICHLAND

2/20/2007 1:30:47 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #:

AnalyDueDate: 03/26/2007 W05117

Sep1 DT/Tm Tech:

Batch: 7046335 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 JPAJH-1-AE J7B120157-3-SAMP 02/09/2007 07:51		1982.10g,in AmtRec: 20ML,2X500ML,2XLP,4LP #Containers: 6			100 mL	100	64 Scr:	1235 Alpha: -8.18E-04 uCi/Sa	2/22/07 R Beta: 1.68E-03 uCi/Sa	
2 JPAJH-1-AH-X J7B120157-3-DUP 02/09/2007 07:51		1966.20g,in AmtRec: 20ML,2X500ML,2XLP,4LP #Containers: 6					65 Scr:	1234 Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa	
3 JPG1H-1-AA-B J7B150000-335-BLK 02/09/2007 07:51		2003.60g,in AmtRec: #Containers: 1					66 Scr:	1237 Alpha:	Beta:	
4 JPG1H-1-AC-C J7B150000-335-LCS 02/09/2007 07:51		2000.00g,in AmtRec: #Containers: 1	QCAG1338 01/23/07,pd 03/07/05,r				67 Scr:	1237 Alpha:	Beta:	

Comments: PH < 2.0 @ 2-20-07

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

JPAJH1AE-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:

JPG1H1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

2/20/2007 1:30:52 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046335 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:

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:
JPG1H1AC-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						

JPAJH1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JPG1H1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JPG1H1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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2/28/2007 2:45:57 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733

Pipet #:

AnalyDueDate: 03/23/2007 W05117

Sep1 DT/Tm Tech:

Batch: 7046334 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7046334 BNTB, 7046339 ASU3,

Prep Tech: ,BockJ, BostedD

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 JN4X9-1-AA J7B080138-1-SAMP 02/07/2007 13:07		3913.60g,in AmtRec: 20ML,3XLP,2X4LP	ITA6078 02/23/07 #Containers: 6		37.5	100	L2	1628 Scr: Alpha: -1.08E-04 uCi/Sa	3/6/07 OHP Beta: -2.25E-06 uCi/Sa	
2 JN43K-1-AA J7B080164-1-SAMP 02/07/2007 08:20		3911.70g,in AmtRec: 20ML,2X4LP	ITA6079 02/23/07 #Containers: 3		35.4		L4	1629 Scr: Alpha: -1.06E-03 uCi/Sa	Beta: 7.02E-04 uCi/Sa	
3 JN5J1-1-AC J7B080172-1-SAMP 02/07/2007 09:42		3952.60g,in AmtRec: 20ML,LP,2X4LP	ITA6080 02/23/07 #Containers: 4		36.1		L5	1630 Scr: Alpha: 1.55E-03 uCi/Sa	Beta: -4.83E-04 uCi/Sa	
4 JN5J8-1-AC J7B080172-2-SAMP 02/07/2007 10:53		3957.70g,in AmtRec: 20ML,LP,2X4LP	ITA6081 02/23/07 #Containers: 4		36.5		L2	1818 Scr: Alpha: -6.69E-04 uCi/Sa	Beta: 1.54E-04 uCi/Sa	
5 JN7C7-1-AA J7B090162-1-SAMP 02/08/2007 09:24		3924.70g,in AmtRec: 20ML,2X4LP	ITA6082 02/23/07 #Containers: 3		35.9		L4	1819 Scr: Alpha: 5.48E-04 uCi/Sa	Beta: 7.09E-04 uCi/Sa	
6 JN7C7-1-AC-X J7B090162-1-DUP 02/08/2007 09:24		3954.40g,in AmtRec: 20ML,2X4LP	ITA6083 02/23/07 #Containers: 3		35.2		L5	1820 Scr: Alpha: 5.48E-04 uCi/Sa	Beta: 7.09E-04 uCi/Sa	
7 JN7FQ-1-AC J7B090170-2-SAMP 02/08/2007 12:14		3828.40g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6084 02/23/07 #Containers: 5		35.1		L2	2003 Scr: Alpha: 1.91E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa	

2/28/2007 2:45:59 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #:

AnalyDueDate: 03/23/2007

Sep1 DT/Tm Tech:

Batch: 7046334 WATER pCi/L PM, Quote: SA , 57671
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 JN7GD-1-AC J7B090170-4-SAMP 02/08/2007 10:33		3950.60g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6085 02/23/07 #Containers: 5		32.8	100	L4	2003 Scr: Alpha: 1.23E-03 uCi/Sa	3/6/07 OAD Beta: 9.47E-04 uCi/Sa	
9 JN7GJ-1-AC J7B090170-5-SAMP 02/08/2007 09:23		3851.50g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6086 02/23/07 #Containers: 5		34.9		L5	2004 Scr: Alpha: -5.35E-04 uCi/Sa	Beta: 4.98E-04 uCi/Sa	
10 JPAA8-1-AC J7B120141-1-SAMP 02/09/2007 12:08		3928.80g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6087 02/23/07 #Containers: 5		34.5		L2	2205 Scr: Alpha: 6.67E-04 uCi/Sa	Beta: 9.49E-04 uCi/Sa	
11 JPACG-1-AC J7B120141-2-SAMP 02/09/2007 08:59		3870.70g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6088 02/23/07 #Containers: 5		34.1		L4	2206 Scr: Alpha: 3.37E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa	
12 JPANE-1-AC J7B120163-1-SAMP 02/09/2007 12:22		3932.10g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6089 02/23/07 #Containers: 5		34.9		L5	2207 Scr: Alpha: 5.60E-03 uCi/Sa 3.1E-01L	Beta: 8.37E-04 uCi/Sa	
13 JPG1D-1-AA-B J7B150000-334-BLK 02/08/2007 09:24		3902.30g,in AmtRec:	ITA6090 02/23/07 #Containers: 1		34.2		L4	0714 Scr: Alpha:	3/7/07 Beta:	
14 JPG1D-1-AC-C J7B150000-334-LCS 02/08/2007 09:24		3890.80g,in AmtRec:	ISD0732 12/20/06 #Containers: 1		37.4		L5	0715 Scr: Alpha:	Beta:	

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2 ISV - Insufficient Volume for Analysis WO Cnt: 14
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.

STL RICHLAND

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2/20/2007 9:15:51 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 03/26/2007 4/05/17

Sep1 DT/Tm Tech:

Batch: 7046323 WATER pCi/L **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7046323 FPS5, 7046332 ARS6, 7046334 BNTB,

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN7FH-1-AC J7B090170-1-SAMP 02/08/2007 11:04		AmtRec: 20ML,500ML,LP	125.20g,in	125.20g #Containers: 3		60		Scr:	Alpha: -3.40E-04 uCi/Sa	Beta: 5.40E-04 uCi/Sa
2 JN7FQ-1-AD J7B090170-2-SAMP 02/08/2007 12:14		AmtRec: 20ML,500ML,LP,2X4LP	125.20g,in	125.20g #Containers: 5				Scr:	Alpha: 1.91E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa
3 JN7F0-1-AC J7B090170-3-SAMP 02/08/2007 12:36		AmtRec: 20ML,500ML,LP	125.50g,in	125.50g #Containers: 3				Scr:	Alpha: -2.08E-05 uCi/Sa	Beta: 2.37E-04 uCi/Sa
4 JN7GD-1-AD J7B090170-4-SAMP 02/08/2007 10:33		AmtRec: 20ML,500ML,LP,2X4LP	126.20g,in	126.20g #Containers: 5				Scr:	Alpha: 1.23E-03 uCi/Sa	Beta: 9.47E-04 uCi/Sa
5 JN7GJ-1-AD J7B090170-5-SAMP 02/08/2007 09:23		AmtRec: 20ML,500ML,LP,2X4LP	125.20g,in	125.20g #Containers: 5				Scr:	Alpha: -5.35E-04 uCi/Sa	Beta: 4.98E-04 uCi/Sa
6 JN92G-1-AC J7B120113-1-SAMP 02/08/2007 09:24		AmtRec: 20ML,500ML,LP	126.40g,in	126.40g #Containers: 3				Scr:	Alpha: 1.14E-04 uCi/Sa	Beta: 9.72E-05 uCi/Sa
7 JN92H-1-AC J7B120113-2-SAMP 02/08/2007 07:30		AmtRec: 20ML,500ML,LP	125.50g,in	125.50g #Containers: 3				Scr:	Alpha: -1.22E-04 uCi/Sa	Beta: 1.67E-04 uCi/Sa

STL RICHLAND

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2/20/2007 9:15:57 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046323 WATER pCi/L PM, Quote: SA , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

STL RICHLAND

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JN92J-1-AC J7B120113-3-SAMP			125.60g,in	125.60g		60				
02/08/2007 12:56		AmtRec: 20ML,500ML,LP		#Containers: 3			Scr:	Alpha: 5.91E-05 uCi/Sa	Beta: -9.77E-06 uCi/Sa	
9 JN92K-1-AC J7B120113-4-SAMP			125.80g,in	125.80g						
02/08/2007 11:29		AmtRec: 20ML,500ML,LP		#Containers: 3			Scr:	Alpha: -2.06E-04 uCi/Sa	Beta: 2.91E-04 uCi/Sa	
10 JPAA8-1-AD J7B120141-1-SAMP			125.70g,in	125.70g						
02/09/2007 12:08		AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5			Scr:	Alpha: 6.67E-04 uCi/Sa	Beta: 9.49E-04 uCi/Sa	
11 JPACG-1-AD J7B120141-2-SAMP			125.00g,in	125.00g						
02/09/2007 08:59		AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5			Scr:	Alpha: 3.37E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa	
12 JPAH3-1-AC J7B120157-1-SAMP			127.60g,in	127.60g						
02/09/2007 10:57		AmtRec: 20ML,500ML,LP		#Containers: 3			Scr:	Alpha: 4.37E-05 uCi/Sa	Beta: 2.02E-04 uCi/Sa	
13 JPAH3-1-AD-X J7B120157-1-DUP			125.00g,in	125.00g						
02/09/2007 10:57		AmtRec: 20ML,500ML,LP		#Containers: 3			Scr:	Alpha: 4.37E-05 uCi/Sa	Beta: 2.02E-04 uCi/Sa	
14 JPAJE-1-AC J7B120157-2-SAMP			125.30g,in	125.30g						
02/09/2007 09:55		AmtRec: 20ML,500ML,LP		#Containers: 3			Scr:	Alpha: -9.37E-05 uCi/Sa	Beta: 3.26E-04 uCi/Sa	

2/20/2007 9:16:00 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046323 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JPAJE-1-AD-S J7B120157-2-MS 02/09/2007 09:55		AmtRec: 20ML,500ML,LP	125.70g,in	125.70g #Containers: 3	TCSG1773 01/24/07,pd 01/10/06,r	60		Scr:	Alpha: -9.37E-05 uCi/Sa	Beta: 3.26E-04 uCi/Sa
16 JPAJH-1-AF J7B120157-3-SAMP 02/09/2007 07:51		AmtRec: 20ML,2X500ML,2XLP,4LP	125.00g,in	125.00g #Containers: 6				Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
17 JPANE-1-AD J7B120163-1-SAMP 02/09/2007 12:22		AmtRec: 20ML,500ML,LP,2X4LP	126.00g,in	126.00g #Containers: 5				Scr:	Alpha: 5.60E-03 uCi/Sa 3.1E-01L	Beta: 8.37E-04 uCi/Sa
18 JPGXM-1-AA-B J7B150000-323-BLK 02/09/2007 10:57		AmtRec:	125.20g,in	125.20g #Containers: 1				Scr:	Alpha:	Beta:
19 JPGXM-1-AC-C J7B150000-323-LCS 02/09/2007 10:57		AmtRec:	126.90g,in	126.90g #Containers: 1	TCSE2076 01/24/07,pd 01/10/06,r			Scr:	Alpha:	Beta:
20 JPGXM-1-AD-BN J7B150000-323-IBLK 02/09/2007 10:57		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:
21 JPGXM-1-AE-BN J7B150000-323-IBLK 02/09/2007 10:57		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

2/20/2007 9:16:16 AM

Sample Preparation/Analysis

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

AnalyDueDate: 03/26/2007

Batch: 7046323 pCi/L
SEQ Batch, Test: None

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

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

Comments: PH <2.0 JB 2-20-07

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

JN7FH1AC-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JPAJE1AD-MS:

JPGXM1AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JPGXM1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JPGXM1AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JPGXM1AE-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JN7FH1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPAJE1AD-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPGXM1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPGXM1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPGXM1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPGXM1AE-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

2/17/2007 10:34:04 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 03/23/2007 W05117

Batch: 7046332 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-10 7am
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN5J1-1-AA J7B080172-1-SAMP 02/07/2007 09:42		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha: 1.55E-03 uCi/Sa	Beta: -4.83E-04 uCi/Sa
2 JN5J8-1-AA J7B080172-2-SAMP 02/07/2007 10:53		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha: -6.69E-04 uCi/Sa	Beta: 1.54E-04 uCi/Sa
3 JN7FH-1-AA J7B090170-1-SAMP 02/08/2007 11:04		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -3.40E-04 uCi/Sa	Beta: 5.40E-04 uCi/Sa
4 JN7FQ-1-AA J7B090170-2-SAMP 02/08/2007 12:14		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 1.91E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa
5 JN7F0-1-AA J7B090170-3-SAMP 02/08/2007 12:36		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -2.08E-05 uCi/Sa	Beta: 2.37E-04 uCi/Sa
6 JN7GD-1-AA J7B090170-4-SAMP 02/08/2007 10:33		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 1.23E-03 uCi/Sa	Beta: 9.47E-04 uCi/Sa
7 JN7GJ-1-AA J7B090170-5-SAMP 02/08/2007 09:23		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: -5.35E-04 uCi/Sa	Beta: 4.98E-04 uCi/Sa

STL RICHLAND

2/17/2007 10:34:06 AM

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: 3-1-07 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/23/2007

Batch: 7046332 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:
8 JN92G-1-AA J7B120113-1-SAMP 02/08/2007 09:24		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: 1.14E-04 uCi/Sa	Beta: 9.72E-05 uCi/Sa
9 JN92H-1-AA J7B120113-2-SAMP 02/08/2007 07:30		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -1.22E-04 uCi/Sa	Beta: 1.67E-04 uCi/Sa
10 JN92J-1-AA J7B120113-3-SAMP 02/08/2007 12:56		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: 5.91E-05 uCi/Sa	Beta: -9.77E-06 uCi/Sa
11 JN92K-1-AA J7B120113-4-SAMP 02/08/2007 11:29		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -2.06E-04 uCi/Sa	Beta: 2.91E-04 uCi/Sa
12 JPAA8-1-AA J7B120141-1-SAMP 02/09/2007 12:08		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 6.67E-04 uCi/Sa	Beta: 9.49E-04 uCi/Sa
13 JPACG-1-AA J7B120141-2-SAMP 02/09/2007 08:59		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 3.37E-03 uCi/Sa	Beta: 3.86E-04 uCi/Sa
14 JPAH3-1-AA J7B120157-1-SAMP 02/09/2007 10:57		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: 4.37E-05 uCi/Sa	Beta: 2.02E-04 uCi/Sa

STL RICHLAND

2/17/2007 10:34:06 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 03/23/2007

Batch: 7046332 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-1-07 Tbn
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:
15 JPAJE-1-AA J7B120157-2-SAMP 02/09/2007 09:55	AmtRec: 20ML,500ML,LP	#Containers: 3				Scr:	Alpha: -9.37E-05 uCi/Sa	Beta: 3.26E-04 uCi/Sa
16 JPAJH-1-AA J7B120157-3-SAMP 02/09/2007 07:51	AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6				Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
17 JPANE-1-AA J7B120163-1-SAMP 02/09/2007 12:22	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 5.60E-03 uCi/Sa 3.1E-01L	Beta: 8.37E-04 uCi/Sa
18 JPANE-1-AE-X J7B120163-1-DUP 02/09/2007 12:22	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 5.60E-03 uCi/Sa 3.1E-01L	Beta: 8.37E-04 uCi/Sa
19 JPG0G-1-AA-B J7B150000-332-BLK 02/09/2007 12:22	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
20 JPG0G-1-AC-C J7B150000-332-LCS 02/09/2007 12:22	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
21 JPG0G-1-AD-BX J7B150000-332-MBLK 02/09/2007 12:22	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

STL RICHLAND
108

2/17/2007 10:34:11 AM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-1-07 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/23/2007

Batch: 7046332 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:
22 JPG0G-1-AE-CM J7B150000-332-MLCS 02/09/2007 12:22		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
23 JPG0G-1-AF-BN J7B150000-332-IBLK 02/09/2007 12:22		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
24 JPG0G-1-AG-BN J7B150000-332-IBLK 02/09/2007 12:22		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
25 JPG0G-1-AH-BN J7B150000-332-IBLK 02/09/2007 12:22		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
26 JPG0G-1-AJ-BN J7B150000-332-IBLK 02/09/2007 12:22		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JN5J11AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20

STL RICHLAND

2/17/2007 10:34:19 AM

Sample Preparation/Analysis

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

AnalyDueDate: 03/23/2007

Batch: 7046332 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-1-07 Kam
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:

```
JPG0G1AA-BLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JPG0G1AC-LCS:
  H-3          RDL:400          pCi/L     LCL:70      UCL:130     RPD:20
JPG0G1AD-MBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JPG0G1AE-MLCS:
  H-3          RDL:400          pCi/L     LCL:70      UCL:130     RPD:20
JPG0G1AF-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JPG0G1AG-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JPG0G1AH-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JPG0G1AJ-IBLK:
  H-3          RDL:400          pCi/L     LCL:        UCL:        RPD:
JN5J11AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AF-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AG-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AH-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JPG0G1AJ-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

STL RICHLAND

STL RICHLAND

2/20/2007 12:58:48 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: 03/26/2007 W05117

Sep1 DT/Tm Tech:

Batch: 7046340 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 JPAJH-1-AG J7B120157-3-SAMP 02/09/2007 07:51		25.10g,in AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6			Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
2 JPAJH-1-AL-S J7B120157-3-MS 02/09/2007 07:51		26.40g,in AmtRec: 20ML,2X500ML,2XLP,4LP	UNSF3607 02/05/07,pd 01/23/07,r #Containers: 6			Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
3 JPAJH-1-AM-X J7B120157-3-DUP 02/09/2007 07:51		24.90g,in AmtRec: 20ML,2X500ML,2XLP,4LP	#Containers: 6			Scr:	Alpha: -8.18E-04 uCi/Sa	Beta: 1.68E-03 uCi/Sa
4 JPG1P-1-AA-B J7B150000-340-BLK 02/09/2007 07:51		26.10g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JPG1P-1-AC-C J7B150000-340-LCS 02/09/2007 07:51		24.90g,in AmtRec:	UNSF3608 02/05/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
6 JPG1P-1-AD-C J7B150000-340-LCS 02/09/2007 07:51		25.40g,in AmtRec:	UNSC1497 01/23/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

111

2/20/2007 12:58:56 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech:

Batch: 7046340 ug/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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

Comments: PH L2.0 JB 2-20-07

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

JPAJH1AG-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JPAJH1AL-MS Constituent List:

JPG1P1AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JPG1P1AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
JPG1P1AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JPAJH1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPAJH1AL-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPG1P1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPG1P1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JPG1P1AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

3/26/2007 2:21:53 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/26/2006, 3/31/2007, Batch: '7046336', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046336						
AC		CalcC	BockJ	2/22/2007 9:23:19		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/22/2007 9:23:19 AM	rich-rc-5017 rEVISION 5
SC			BockJ	Prep1C	2/22/2007 9:47:49 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	3/20/2007 7:32:55 AM	RICH-RC-5014 REVISION 6
SC			HARBINSOND	Prep1C	3/20/2007 4:50:12 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	3/20/2007 5:05:33 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	3/21/2007 9:12:40 AM	RICH-RD-0003 REVISION 4
SC			StringerR	InCnt1	3/22/2007 8:06:10 AM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	3/22/2007 10:23:23 AM	RICH-RD-0003 REVISION 4
AC			BockJ	2/22/2007 9:47:49		
AC			AshworthA	3/20/2007 7:32:55		
AC			HARBINSOND	3/20/2007 4:50:12 PM		
AC			DAWKINSO	3/20/2007 5:05:33 PM		
AC			StringerR	3/21/2007 9:12:40		
AC			StringerR	3/22/2007 8:06:10		
AC			StringerR	3/22/2007 10:23:23		

AC: Accepting Entry; SC: Status Change

3/21/2007 3:41:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/21/2006, 3/26/2007, Batch: '7046338', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046338						
AC		CalcC	BockJ	2/22/2007 9:17:04		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/22/2007 9:17:04 AM	rich-rc-5017 rEVISION 5
SC			BockJ	Prep1C	2/22/2007 9:21:21 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	3/20/2007 7:32:50 AM	RICH-RC-5014 REVISION 6
SC			HARBINSOND	Prep1C	3/20/2007 4:50:32 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	3/20/2007 5:05:27 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	3/20/2007 9:57:20 PM	RICH-RD-0003 REVISION 4
AC			BockJ	2/22/2007 9:21:21		
AC			AshworthA	3/20/2007 7:32:50		
AC			HARBINSOND	3/20/2007 4:50:32 PM		
AC			DAWKINSO	3/20/2007 5:05:27 PM		
AC			DAWKINSO	3/20/2007 9:57:20 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

2/22/2007 4:33:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/22/2006, 2/27/2007, Batch: '7046335', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046335						
AC		**CalcC**	**BockJ**	2/20/2007 1:23:21 PM		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/20/2007 1:23:21 PM	RICH-RC-5016 Revision 6
SC			AshworthA	InPrep2	2/21/2007 10:45:31 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	2/22/2007 10:33:18 AM	RICH-RC-5017 REVISION 4
SC			BlackCL	InCnt1	2/22/2007 10:50:25 AM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	2/22/2007 12:44:41 PM	RICH-RD-0007 REVISION 5
AC			**AshworthA**	2/21/2007 10:45:31		
AC			**AshworthA**	2/22/2007 10:33:18		
AC			**BlackCL**	2/22/2007 10:50:25		
AC			**StringerR**	2/22/2007 12:44:41		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

3/9/2007 11:47:59 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/9/2006, 3/14/2007, Batch: '7046334', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046334						
AC		CalcC	BockJ	2/28/2007 1:48:39 PM		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/28/2007 1:48:39 PM	RICH-RC-5017 Revision 5
SC			BockJ	Prep1C	2/28/2007 2:46:04 PM	RICH-RC-5017 REVISION 5
SC			BostedD	Sep1C	3/6/2007 2:39:03 PM	RICHRC5025 REV3
SC			DAWKINSO	InCnt1	3/6/2007 2:48:16 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	3/7/2007 8:54:25 AM	RICH-RD-0007 REVISION 5
AC			BockJ	2/28/2007 2:46:04 PM		
AC			BockJ	2/28/2007 2:53:09 PM		
AC			BostedD	3/6/2007 2:39:03 PM		
AC			DAWKINSO	3/6/2007 2:48:16 PM		
AC			StringerR	3/7/2007 8:54:25 AM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.26

2/26/2007 12:00:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 2/26/2006, 3/3/2007, Batch: '7046323', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7046323							
AC			CalcC	BockJ	2/20/2007 8:48:28		
SC				wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	2/20/2007 8:48:28 AM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C	2/20/2007 9:15:53 AM	RICH-RC-5016 REVISION 6
SC				FABREM	Sep1C	2/22/2007 5:18:19 PM	RICH-RC-5065 REVISION 5
SC				DAWKINSO	InCnt1	2/22/2007 6:17:24 PM	RICH-RD-0001 REVISION 3
SC				StringerR	CalcC	2/25/2007 9:46:31 AM	RICH-RD-0001 REVISION 3
AC				BockJ	2/20/2007 9:15:53		
AC				FABREM	2/22/2007 5:18:19 PM		
AC				DAWKINSO	2/22/2007 6:17:24 PM		
AC				StringerR	2/25/2007 9:46:31		

AC: Accepting Entry; SC: Status Change

3/12/2007 9:45:01 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/12/2006, 3/17/2007, Batch: '7046332', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046332						
AC		**CalcC**	**McDowellD**	3/1/2007 10:55:39		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	3/1/2007 10:55:39 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	3/7/2007 1:54:36 PM	RICH-RC-5007 REVISION 6
SC			StringerR	InCnt1	3/7/2007 2:29:26 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	3/9/2007 10:03:51 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	3/7/2007 1:54:36 PM		
AC			**StringerR**	3/7/2007 2:29:26 PM		
AC			**StringerR**	3/9/2007 10:03:51		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

3/20/2007 3:29:10 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/20/2006, 3/25/2007, Batch: '7046340', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046340						
AC		Cnt1C	BockJ	2/20/2007 12:53:03		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	2/20/2007 12:53:03 PM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	2/20/2007 12:58:52 PM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	2/28/2007 8:11:54 AM	RICH-RC-5015 REVISION 4
SC			AntonsonL	InPrep2	2/28/2007 8:12:17 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	3/2/2007 7:20:52 AM	RICH-RC-5015 REVISION 4
SC			AntonsonL	Prep2C	3/2/2007 7:21:13 AM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	3/20/2007 2:40:00 PM	RICH-RC-5058 REV 7
AC			BockJ	2/20/2007 12:58:52		
AC			AshworthA	2/28/2007 8:11:54		
AC			AntonsonL	2/28/2007 8:12:17		
AC			AshworthA	3/2/2007 7:20:52 AM		
AC			AntonsonL	3/2/2007 7:21:13 AM		
AC			NelsonT	3/20/2007 2:40:00 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

2/17/2007 10:34:38 AM

Sample Preparation/Analysis

Balance Id: 12424

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/23/2007 W05117

Sep1 DT/Tm Tech: 3-6-07

Batch: 7046339 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JN4X9-1-AC J7B080138-1-SAMP 02/07/2007 13:07	AmtRec: 20ML,3XLP,2X4LP	#Containers: 6				Scr:	Alpha: -1.08E-04 uCi/Sa	Beta: -2.25E-06 uCi/Sa
2 JN4X9-1-AD-X J7B080138-1-DUP 02/07/2007 13:07	AmtRec: 20ML,3XLP,2X4LP	#Containers: 6				Scr:	Alpha: -1.08E-04 uCi/Sa	Beta: -2.25E-06 uCi/Sa
3 JPG1M-1-AA-B J7B150000-339-BLK 02/07/2007 13:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
4 JPG1M-1-AC-C J7B150000-339-LCS 02/07/2007 13:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
5 JPG1M-1-AD-BN J7B150000-339-IBLK 02/07/2007 13:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

4611

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

JN4X91AC-SAMP Constituent List:
H-3 RDL:1.00E+01 pCi/L LCL:70 UCL:130 RPD:20

2/17/2007 10:34:44 AM

Sample Preparation/Analysis

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 3-6-07 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 03/23/2007

Batch: 7046339 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:

```
JPG1M1AA-BLK:
  H-3        RDL:1.00E+01   pCi/L   LCL:       UCL:       RPD:
JPG1M1AC-LCS:
  H-3        RDL:10         pCi/L   LCL:70     UCL:130    RPD:20
JPG1M1AD-IBLK:
  H-3        RDL:1.00E+01   pCi/L   LCL:       UCL:       RPD:
JN4X91AC-SAMP Calc Info:
     Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
JPG1M1AA-BLK:
     Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
JPG1M1AC-LCS:
     Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
JPG1M1AD-IBLK:
     Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
```

Approved By _____ Date: _____

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ICOC Fraction Transfer/Status Report

ByDate: 3/22/2006, 3/27/2007, Batch: '7046339', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7046339						
AC		InCnt1	**McDowellD**	3/1/2007 9:59:07 AM		
SC			wagarr	IsBatched	2/17/2007 10:35:28 AM	ICOC_RADCALC v4.8.26
SC			McDowellD	InPrep	3/1/2007 9:59:07 AM	RICH-RC-5024 REVISION 2
SC			McDowellD	InSep1	3/6/2007 1:13:20 PM	RICH-RC-5024 REVISION 2
SC			McDowellD	Sep1C	3/21/2007 2:19:43 PM	RICH-RC-5024 REVISION 2
SC			DAWKINSO	InCnt1	3/21/2007 3:25:06 PM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	3/6/2007 1:13:20 PM		
AC			**McDowellD**	3/21/2007 2:19:43 PM		
AC			**DAWKINSO**	3/21/2007 3:25:06 PM		

119C

AC: Accepting Entry; SC: Status Change