Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

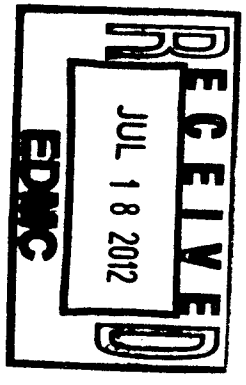
STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 33200

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04996	S06-008	B1KH46	J6H240324-1	JC5F81AA	9JC5F810	6240177
		B1KH46	J6H240324-1	JC5F81AC	9JC5F810	6240178
		B1KH46	J6H240324-1	JC5F81AD	9JC5F810	6240179
		B1KH46	J6H240324-1	JC5F81AE	9JC5F810	6240175
		B1KH46	J6H240324-1	JC5F81AF	9JC5F810	6240176



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EDMC

Comments:

1215445

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

September 8, 2006

Attention: Dot Stewart

SAF Number	:	S06-008
Date SDG Closed	:	August 24, 2006
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W04996
Data Deliverable	:	15-Day / Summary

CASE NARRATIVE

I. Introduction

On August 24, 2006, one water sample was received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Pacific Northwest National Laboratories (PGW) specific ID:

PGW ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1KH46	JC5F8	WATER	8/24/06

II. Sample Receipt

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

III. Analytical Results/Methodology

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

Pacific Northwest National Laboratories
September 8, 2006

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010
Uranium 234, 235 and 238 by method RICH-RC-5039
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017

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

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010
The LCS, batch blank, samples and sample duplicate (B1KH46) results are within contractual requirements.

Uranium 234, 235 and 238 by method RICH-RC-5039
The LCS, batch blank, samples and sample duplicate (B1KH46) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1KH46) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1KH46) results are within contractual requirements.

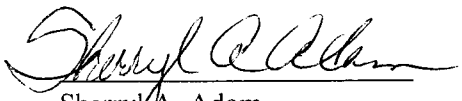
Gamma Spectroscopy

Gamma Spec by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1KH46) 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
September 8, 2006

Reviewed and approved:



Sherry 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.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 33200 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.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:
9JC5F810	B1KH46		MW6-SBB-A1	S06-008	W04996					08/24/2006 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6240177	ALPHA	12587-46-1	3.62E+00	pCi/L	1.9E+00	2.0E+00		2.24E+00	100.0	9310_ALPHABETA	1.666E-01	L	09/02/2006 11:50	I
6240178	BETA	12587-47-2	1.59E+01	pCi/L	2.3E+00	3.1E+00		2.92E+00	100.0	9310_ALPHABETA	2.009E-01	L	08/31/2006 11:55	I
6240179	BE-7	13966-02-4	8.78E+00	pCi/L	1.5E+01	1.5E+01	U	2.94E+01		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	CO-60	10198-40-0	-4.00E-01	pCi/L	2.0E+00	2.0E+00	U	3.73E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	CS-134	13967-70-9	-1.62E-01	pCi/L	2.0E+00	2.0E+00	U	3.76E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	CS-137	10045-97-3	4.10E-02	pCi/L	1.6E+00	1.6E+00	U	3.04E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	EU-152	14683-23-9	3.76E+00	pCi/L	4.7E+00	4.7E+00	U	9.20E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	EU-154	15585-10-1	-3.99E+00	pCi/L	6.5E+00	6.5E+00	U	1.11E+01		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	EU-155	14391-16-3	-1.11E+00	pCi/L	3.5E+00	3.5E+00	U	5.90E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	K-40	13966-00-2	-5.76E+01	pCi/L	3.2E+01	3.2E+01	U	7.02E+01		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	RU-106	13967-48-1	9.95E+00	pCi/L	1.6E+01	1.6E+01	U	3.25E+01		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240179	SB-125	14234-35-6	-1.42E+00	pCi/L	3.8E+00	3.8E+00	U	6.76E+00		GAMMA_GS	2.5014E+00	L	08/30/2006 11:31	I
6240175	PU-238	13981-16-3	0.00E+00	pCi/L	1.1E-01	1.1E-01	U	1.18E-01	75.0	PUISO_PLATE_AE	2.012E-01	L	09/05/2006 19:24	I
6240175	PU-239	PU-239/240	-8.71E-03	pCi/L	1.7E-02	1.7E-02	U	2.08E-01	75.0	PUISO_PLATE_AE	2.012E-01	L	09/05/2006 19:24	I
6240176	U-234	13966-29-5	4.64E+00	pCi/L	8.3E-01	1.2E+00		1.01E-01	81.6	UISO_PLATE_AEA	1.999E-01	L	08/31/2006 04:52	I
6240176	U-235	15117-96-1	1.12E-01	pCi/L	1.3E-01	1.3E-01	U	1.01E-01	81.6	UISO_PLATE_AEA	1.999E-01	L	08/31/2006 04:52	I
6240176	U-238	U-238	4.44E+00	pCi/L	8.2E-01	1.2E+00		2.11E-01	81.6	UISO_PLATE_AEA	1.999E-01	L	08/31/2006 04:52	I

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

Thursday, September 07, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id: JDAJ21AB **Sdg/Rept Nbr:** W04996 33200 **Collection Date:** 08/24/2006 10:00

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AG	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
6240175	PU-238	1.58E-02	pCi/L	8.4E-02	U	2.49E-01	84.4		PUISO_PLATE	1.999E-01	09/05/2006				D
BLK	13981-16-3			8.3E-02						L	19:24				
6240175	PU-239	-3.94E-02	pCi/L	3.6E-02	U	2.90E-01	84.4		PUISO_PLATE	1.999E-01	09/05/2006				D
BLK	PU-239/240			3.5E-02						L	19:24				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ31AB	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AI	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
6240176	U-234	-1.39E-02	pCi/L	2.0E-02	U	1.97E-01	88.3		UISO_PLATE_	1.998E-01	08/31/2006				D
BLK	13966-29-5			2.0E-02						L	04:53				
6240176	U-235	0.00E+00	pCi/L	8.5E-02	U	9.43E-02	88.3		UISO_PLATE_	1.998E-01	08/31/2006				D
BLK	15117-96-1			8.5E-02						L	04:53				
6240176	U-238	0.00E+00	pCi/L	8.5E-02	U	9.43E-02	88.3		UISO_PLATE_	1.998E-01	08/31/2006				D
BLK	U-238			8.5E-02						L	04:53				

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.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ41AB	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AK	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
6240177	ALPHA	3.14E-01	pCi/L	4.8E-01	U	9.31E-01	100.0		9310_ALPHAB	1.996E-01	09/02/2006				D
BLK	12587-46-1			4.7E-01						L	11:50				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ51AB	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AM	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
6240178	BETA	3.90E-01	pCi/L	1.0E+00	U	2.27E+00	100.0		9310_ALPHAB	2.005E-01	08/31/2006				D
BLK	12587-47-2			1.0E+00						L	11:55				

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.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id: JDAJ71AB **Sdg/Rept Nbr:** W04996 33200 **Collection Date:** 08/24/2006 10:00
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 08/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6240179	BE-7	-6.40E+00	pCi/L	1.4E+01	U	2.37E+01			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	13966-02-4			1.4E+01						L	11:31				
6240179	CO-60	-6.25E-01	pCi/L	2.0E+00	U	3.66E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	10198-40-0			2.0E+00						L	11:31				
6240179	CS-134	3.81E-02	pCi/L	2.0E+00	U	3.69E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	13967-70-9			2.0E+00						L	11:31				
6240179	CS-137	3.70E-01	pCi/L	2.0E+00	U	3.80E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	10045-97-3			2.0E+00						L	11:31				
6240179	EU-152	-3.02E+00	pCi/L	4.5E+00	U	7.29E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	14683-23-9			4.5E+00						L	11:31				
6240179	EU-154	-1.50E+00	pCi/L	6.1E+00	U	1.12E+01			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	15585-10-1			6.1E+00						L	11:31				
6240179	EU-155	2.53E+00	pCi/L	3.5E+00	U	6.48E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	14391-16-3			3.5E+00						L	11:31				
6240179	K-40	-3.24E+01	pCi/L	3.9E+01	U	8.59E+01			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	13966-00-2			3.9E+01						L	11:31				
6240179	RU-106	-3.57E+00	pCi/L	1.6E+01	U	2.81E+01			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	13967-48-1			1.6E+01						L	11:31				
6240179	SB-125	1.76E+00	pCi/L	4.3E+00	U	8.18E+00			GAMMA_GS	2.5003E+00	08/30/2006				D
BLK	14234-35-6			4.3E+00						L	11:31				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ21CS	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AH	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
6240175	PU-239	4.81E+00	pCi/L	1.1E+00		1.93E-01	107.6	4.61E+00	PUISO_PLATE	1.996E-01	09/05/2006			70	D
BS	PU-239/240			8.1E-01				104.3		L	19:24			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.

STL Richland QC Control Sample Report

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id: JDAJ31CS **Sdg/Rept Nbr:** W04996 33200 **Collection Date:** 08/24/2006 10:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AJ	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
6240176	U-234	9.06E+00	pCi/L	1.8E+00		1.57E-01	87.1	8.77E+00	UISO_PLATE_	2.004E-01	08/31/2006			70	D
BS	13966-29-5			1.1E+00				103.2		L	04:52			130	
6240176	U-238	8.05E+00	pCi/L	1.7E+00		2.04E-01	87.1	9.19E+00	UISO_PLATE_	2.004E-01	08/31/2006			70	D
BS	U-238			1.1E+00				87.6		L	04:52			130	

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B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ41CS	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AL	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
6240177	ALPHA	2.14E+01	pCi/L	5.3E+00		1.01E+00	100.0	2.30E+01	9310_ALPHAB	1.999E-01	09/02/2006			70	D
BS	12587-46-1			3.1E+00				93.1		L	11:50			130	

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.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JDAJ51CS	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AN	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
6240178	BETA	2.32E+01	pCi/L	3.9E+00		2.51E+00	100.0	2.28E+01	9310_ALPHAB	1.997E-01	08/31/2006			70	D
BS	12587-47-2			2.4E+00				101.9		L	11:55			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.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id: JDAJ71CS **Sdg/Rept Nbr:** W04996 33200 **Collection Date:** 08/24/2006 10:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AP	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
6240179	CO-60	2.87E+01	pCi/L	6.3E+00		2.55E+00		3.09E+01	GAMMA_GS	2.5028E+00	08/30/2006			70	D
BS	10198-40-0			6.3E+00				93.0		L	11:32			130	
6240179	CS-137	2.16E+01	pCi/L	4.9E+00		3.43E+00		2.01E+01	GAMMA_GS	2.5028E+00	08/30/2006			70	D
BS	10045-97-3			4.9E+00				107.4		L	11:32			130	
6240179	EU-152	6.11E+01	pCi/L	1.3E+01		8.03E+00		6.19E+01	GAMMA_GS	2.5028E+00	08/30/2006			70	D
BS	14683-23-9			1.3E+01				98.6		L	11:32			130	

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B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JC5F81GR	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	B1KH46	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-008	MW6-SBB-A19981								AB	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
6240175	PU-238	-1.57E-02	pCi/L	2.2E-02	U	2.22E-01	80.7		PUISO_PLATE	2.033E-01	09/05/2006	0.0	1.		D
DUP	13981-16-3	0.00E+00		2.2E-02						L	19:24	20.0	3		
6240175	PU-239	-7.86E-03	pCi/L	1.6E-02	U	1.88E-01	80.7		PUISO_PLATE	2.033E-01	09/05/2006	0.0	0.1		D
DUP	PU-239/240	-8.71E-03		1.6E-02						L	19:24	20.0	3		

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STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JC5F81HR	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	B1KH46	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-008	MW6-SBB-A19981								AC	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
6240176	U-234	5.39E+00	pCi/L	1.4E+00		1.14E-01	65.5		UISO_PLATE_	1.996E-01	08/31/2006	14.9	0.8		D
DUP	13966-29-5	4.64E+00		9.5E-01						L	04:52	20.0	3		
6240176	U-235	2.78E-01	pCi/L	2.3E-01		2.38E-01	65.5		UISO_PLATE_	1.996E-01	08/31/2006	84.9	1.		D
DUP	15117-96-1	1.12E-01		2.2E-01						L	04:52	20.0	3		
6240176	U-238	4.32E+00	pCi/L	1.2E+00		2.38E-01	65.5		UISO_PLATE_	1.996E-01	08/31/2006	2.7	0.1		D
DUP	U-238	4.44E+00		8.5E-01						L	04:52	20.0	3		

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STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JC5F81JR	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	B1KH46	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-008	MW6-SBB-A19981								AD	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
6240177	ALPHA	5.14E+00	pCi/L	2.4E+00		1.70E+00	100.0		9310_ALPHAB	1.667E-01	09/02/2006	34.7	0.9		D
DUP	12587-46-1	3.62E+00		2.2E+00						L	11:50	20.0	3		

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STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id:	JC5F81KR	**Sdg/Rept Nbr:**	W04996	33200	**Collection Date:** 08/24/2006 10:00
Client Id:	B1KH46	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-008	MW6-SBB-A19981								AE	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
6240178	BETA	1.21E+01	pCi/L	2.6E+00		2.79E+00	100.0		9310_ALPHAB	1.997E-01	08/31/2006	26.9	2.		D
DUP	12587-47-2	1.59E+01		2.1E+00						L	11:55	20.0	3		

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STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04996.Edd, h:\Reportdb\edd\FeadIV\Rad\33200.Edd

Lab Sample Id: JC5F81LR **Sdg/Rept Nbr:** W04996 33200 **Collection Date:** 08/24/2006 10:00

Client Id: B1KH46 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 08/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-008	MW6-SBB-A19981								AF	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
6240179	BE-7	-4.19E+00	pCi/L	1.3E+01	U	2.26E+01			GAMMA_GS	2.5014E+00	08/30/2006	565.5	1.4		D
DUP	13966-02-4	8.78E+00		1.3E+01						L	13:15	20.0	3		
6240179	CO-60	-1.29E+00	pCi/L	1.6E+00	U	2.64E+00			GAMMA_GS	2.5014E+00	08/30/2006	0.0	0.8		D
DUP	10198-40-0	-4.00E-01		1.6E+00						L	13:15	20.0	3		
6240179	CS-134	-1.79E+00	pCi/L	1.8E+00	U	2.84E+00			GAMMA_GS	2.5014E+00	08/30/2006	0.0	1.3		D
DUP	13967-70-9	-1.62E-01		1.8E+00						L	13:15	20.0	3		
6240179	CS-137	9.91E-01	pCi/L	2.0E+00	U	3.82E+00			GAMMA_GS	2.5014E+00	08/30/2006	184.1	0.7		D
DUP	10045-97-3	4.10E-02		2.0E+00						L	13:15	20.0	3		
6240179	EU-152	-2.39E+00	pCi/L	4.5E+00	U	7.44E+00			GAMMA_GS	2.5014E+00	08/30/2006	893.2	1.9		D
DUP	14683-23-9	3.76E+00		4.5E+00						L	13:15	20.0	3		
6240179	EU-154	4.26E-01	pCi/L	6.0E+00	U	1.17E+01			GAMMA_GS	2.5014E+00	08/30/2006	0.0	1.		D
DUP	15585-10-1	-3.99E+00		6.0E+00						L	13:15	20.0	3		
6240179	EU-155	-5.24E-01	pCi/L	3.3E+00	U	5.62E+00			GAMMA_GS	2.5014E+00	08/30/2006	0.0	0.3		D
DUP	14391-16-3	-1.11E+00		3.3E+00						L	13:15	20.0	3		
6240179	K-40	-1.26E+01	pCi/L	4.4E+01	U	9.54E+01			GAMMA_GS	2.5014E+00	08/30/2006	0.0	1.4		D
DUP	13966-00-2	-5.76E+01		4.4E+01						L	13:15	20.0	3		
6240179	RU-106	1.16E+01	pCi/L	1.5E+01	U	3.05E+01			GAMMA_GS	2.5014E+00	08/30/2006	15.5	0.2		D
DUP	13967-48-1	9.95E+00		1.5E+01						L	13:15	20.0	3		
6240179	SB-125	-1.02E+00	pCi/L	4.3E+00	U	7.60E+00			GAMMA_GS	2.5014E+00	08/30/2006	0.0	0.1		D
DUP	14234-35-6	-1.42E+00		4.3E+00						L	13:15	20.0	3		

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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.

PNNL J6H240324
W04996
K.J. YOUNG

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Due 09.8.06

C.O.C. # **S06-008-81**

Page 1 of 1

Collector	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, AUGUST 2006	logbook: OTS-SAWS-H104	**Ice Chest No.** SML-442 **Temp.**
Shipped To (Lab) Severn Trent Incornorated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 15 Days **PRIORITY**	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993) **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 06 SAFs into one SDG, not to exceed SDG closure of 14 days.
Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1KH46		W	8/24/06	1000	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1KH46		W	↓	↓	1x20-mL P	Activity Scan	None
B1KH46		W			3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
B1KH46		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1KH46		W			1x1000-mL G/P	UISO_PLATE_AEA: List-1 (3)	HNO3 to pH <2
						JC5F8	
					R. Wells 8/24/06		

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG			AUG 24 2006 1425	D. Smith	S. Smith		AUG 24 2006 1425
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 8.24.06 14:25

Client: PBW SDG #: WC4996 NA [ ] SAF #: SAC-008 NA [ ]

Work Order Number: WH240324 Chain of Custody # SAC-008-81

Shipping Container ID: SML-442 Air Bill # N/A

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

Sample Custodian: L. Sirk Date: 8-24-06 14:25

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PSL300
Page 1

Severn Trent Laboratories, Inc

Lot Summary - J6H240324

Run Date: 8/24/06
Time: 16:42:16

RAD

CLIENT: 384868 Pacific Northwest National Laboratory
PROJECT MANAGER: Sherryl Adam
SITE: HANFORD
LOT COMMENTS:
QC PACKAGE: QAPP on File

SDG: 49960
SAS: S06-008
DO#:

Date Received: 8/24/06
Date Analysis Due: 9/08/06 N
Date Report Due: 9/08/06
Turnaround Time: 15

SAMP#	SAMPLE ID/ CLIENT	MATRIX	RAD#	W/O NO.	PARAMETER	LIST#	SPIKE AMOUNT	COMMENTS/ ALIQ	COUNT	PREP DESCRIPTOR
001-	BAKH46	WATER	3*	JC5F8	-1AE XX I 6D SO	5I 00000	pCi/L			Pu PrpRC5016, SepRC5010(5039)
	BIK1H46	WATER	3*	"	-1AF XX I 7Y SR	5I 00000	pCi/L			UIso PrpRC5016/5086, SepRC5067(5039)
	SPS 8/25/06	WATER	3*	"	-1AA XX I AZ S7	5I 00000	pCi/L			Gross Alpha PrpRC5014
		WATER	3*	"	-1AC XX I BC S8	5I 00000	pCi/L			Gross Beta PrpRC5014
		WATER	3*	"	-1AD XX I AW TA	5I 00000	pCi/L			Gamma PrpRC5017

Seger, Sandra

From: Seger, Sandra
Sent: Monday, August 28, 2006 6:21 AM
To: Stewart, Dorothy L
Cc: 'Felmy, Diana'; 'Waters-Husted, Karen S'
Subject: W04995 & W04996 COCs

Attachments: W04995.PDF; W04996.PDF

W04995.PDF (537 KB)

W04996.PDF (109 KB)

Project No. _____

TLE _____ Book No. _____

m Page No. ____

W04996

08-24-06 J6H240324 PGW ① H20 506-008

Closed 8/24/06
Due 9/8/06

15 day TAT

To Page No. ____

essed & Understood by me,	Date	Invented by:	Date
		Recorded by:	