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: 35514

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05159	S07-004	B1MRD1	J7D180228-1	JT5W91AA	9JT5W910	7113506
		B1MRD1	J7D180228-1	JT5W91AC	9JT5W910	7113496
		B1MRD1	J7D180228-1	JT5W91AD	9JT5W910	7113497
		B1MRD1	J7D180228-1	JT5W91AE	9JT5W910	7113502
		B1MRD1	J7D180228-1	JT5W91AF	9JT5W910	7113501
		B1MRF7	J7D180228-2	JT5XL1AA	9JT5XL10	7113506
		B1MRF7	J7D180228-2	JT5XL1AC	9JT5XL10	7113496
		B1MRF7	J7D180228-2	JT5XL1AD	9JT5XL10	7113497
		B1MRF7	J7D180228-2	JT5XL1AE	9JT5XL10	7113502
		B1MRF7	J7D180228-2	JT5XL1AF	9JT5XL10	7113501
		B1MPX9	J7D180228-3	JT5XR1AA	9JT5XR10	7113504
		B1MPX9	J7D180228-3	JT5XR2AC	9JT5XR20	7151391
		B1MRC7	J7D180228-4	JT5X21AA	9JT5X210	7113506
		B1MRC7	J7D180228-4	JT5X21AC	9JT5X210	7113496
		B1MRC7	J7D180228-4	JT5X21AD	9JT5X210	7113497

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05159	S07-004	B1MRC7	J7D180228-4	JT5X21AE	9JT5X210	7113502
		B1MRC7	J7D180228-4	JT5X21AF	9JT5X210	7113501
	G07-003	B1MD27	J7D190111-1	JT7P11AA	9JT7P110	7113500
		B1MD67	J7D190111-2	JT7QC1AA	9JT7QC10	7113506
		B1MD67	J7D190111-2	JT7QC1AC	9JT7QC10	7113499
		B1MD67	J7D190111-2	JT7QC1AD	9JT7QC10	7113501
		B1MD71	J7D190111-3	JT7QM1AA	9JT7QM10	7113506
		B1MD71	J7D190111-3	JT7QM1AC	9JT7QM10	7113499
		B1MD71	J7D190111-3	JT7QM1AD	9JT7QM10	7113501
	I07-031	B1MDB7	J7D190114-1	JT7Q41AA	9JT7Q410	7113501
		B1MDH4	J7D190114-2	JT7Q61AA	9JT7Q610	7113497
		B1MDH4	J7D190114-2	JT7Q61AC	9JT7Q610	7113500
		B1MDH4	J7D190114-2	JT7Q61AD	9JT7Q610	7113501
	I07-026	B1M6D4	J7D190122-1	JT7TR1AA	9JT7TR10	7113502
		B1M6D4	J7D190122-1	JT7TR2AC	9JT7TR20	7151391
	S07-003	B1MF93	J7D190134-1	JT70F1AA	9JT70F10	7113502
		B1MF98	J7D190134-2	JT70X1AA	9JT70X10	7113502
	W07-004	B1MNM5	J7D200154-1	JVA8Q1AA	9JVA8Q10	7113496
		B1MNM5	J7D200154-1	JVA8Q1AC	9JVA8Q10	7113497
	S07-003	B1MFC2	J7D200283-1	JVC3T1AA	9JVC3T10	7113496
		B1MFC2	J7D200283-1	JVC3T1AC	9JVC3T10	7113497
		B1MFC2	J7D200283-1	JVC3T1AD	9JVC3T10	7113498
		B1MDW0	J7D200283-2	JVC4D1AA	9JVC4D10	7113505
		B1MFF5	J7D200283-3	JVC4J1AA	9JVC4J10	7113496
		B1MFF5	J7D200283-3	JVC4J1AC	9JVC4J10	7113497
		B1MFF5	J7D200283-3	JVC4J1AD	9JVC4J10	7113501

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05159	S07-003	B1MFF5	J7D200283-3	JVC4J1AE	9JVC4J10	7113498
		B1MFD7	J7D200283-4	JVC421AA	9JVC4210	7113496
		B1MFD7	J7D200283-4	JVC421AC	9JVC4210	7113497
		B1MFD7	J7D200283-4	JVC421AD	9JVC4210	7113498
		B1MFF1	J7D200283-5	JVC471AA	9JVC4710	7113496
		B1MFF1	J7D200283-5	JVC471AC	9JVC4710	7113497
		B1MFF1	J7D200283-5	JVC471AD	9JVC4710	7113498
	S07-004	B1MRH1	J7D200294-1	JVC6M1AA	9JVC6M10	7113506
		B1MRH1	J7D200294-1	JVC6M1AC	9JVC6M10	7113496
		B1MRH1	J7D200294-1	JVC6M1AD	9JVC6M10	7113497
		B1MRH1	J7D200294-1	JVC6M1AE	9JVC6M10	7113499
		B1MRH1	J7D200294-1	JVC6M1AF	9JVC6M10	7113502
		B1MRH0	J7D200299-1	JVC7H1AA	9JVC7H10	7113506
		B1MRH0	J7D200299-1	JVC7H1AC	9JVC7H10	7113496
		B1MRH0	J7D200299-1	JVC7H1AD	9JVC7H10	7113497
		B1MRH0	J7D200299-1	JVC7H1AE	9JVC7H10	7113499
		B1MRH0	J7D200299-1	JVC7H1AF	9JVC7H10	7113502

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

June 6 , 2007

Attention: Steve Trent

SAF Number	:	S07-004, G07-003, I07-031, I07-026, S07-003, W07-004,
Date SDG Closed	:	April 19, 2007
Number of Samples	:	Nineteen (19)
Sample Type	:	Water
SDG Number	:	W05159
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between April 11, 2007 and April 19, 2007 nineteen water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1MRD1	JT5W9	4/17/07	WATER
B1MRF7	JT5XL	4/17/07	WATER
B1MPX9	JT5XR	4/17/07	WATER
B1MRC7	JT5X2	4/17/07	WATER
B1MD27	JT7P1	4/18/07	WATER
B1MD67	JT7QC	4/18/07	WATER
B1MD71	JT7QM	4/18/07	WATER
B1MDB7	JT7Q4	4/18/07	WATER
B1MDH4	JT7Q6	4/18/07	WATER
B1M6D4	JT7TR	4/18/07	WATER
B1MF93	JT70F	4/18/07	WATER
B1MF98	JT70X	4/18/07	WATER
B1MNM5	JVA8Q	4/11/07	WATER

B1MFC2	JVC3T	4/19/07	WATER
B1MDW0	JVC4D	4/19/07	WATER
B1MFF5	JVC4J	4/19/07	WATER
B1MFD7	JVC42	4/19/07	WATER
B1MFF1	JVC47	4/19/07	WATER
B1MRH0	JVC7H	4/19/07	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Gamma Spec by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Carbon-14 by method RICH-RC-5022
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:
Reduced volumes were analyzed based on elevated screen results for samples B1MRF7, B1MNM5, B1MFC2 AND B1MNM5 DUP. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MNM5) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Reduced volume was analyzed based on elevated screen results for sample B1MNM5. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MFD7) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1MRC7) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1MRH0) results are within contractual requirements.

Gamma Spec by method RICH-RC-5017:
The Cs137 in the LCS had a low recovery. Upon inspection it was found that the LCS was too full for the geometry used. The technician transferred it to a beaker, cooked it down further and resubmitted it for a recount. The recount brought the results within limits. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MDH4) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1MF93) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The TSIE was out and samples were unable to be calculated. The samples were shaken, wiped with a fabric softener sheet and recounted. The recounted results were acceptable. Except as noted, the LCS, batch blank, samples, sample duplicate (B1M6D4), and sample matrix spike (B1MPX9) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1MRH1) results are within contractual requirements.

Pacific Northwest National Laboratories
June 6, 2007

Enriched Tritium by method RICH-RC-5024
The LCS, batch blank, samples and sample duplicate (B1MDW0) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:
The LCS, batch blank, samples and sample duplicate (B1MPX9) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1MFC2), and sample matrix spike (B1MFF5) results are within contractual requirements.

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

Reviewed and approved:

Sandra Segu

Sherryl A. Adam
Project Manager

for

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: 35514 File Name: h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.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:
9JT5W910	B1MRD1		MW6-SBB-A1	S07-004	W05159					04/17/2007 09:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	1.66E+04	pCi/L	4.3E+02	7.8E+02		3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 03:58	I
7113496	ALPHA	12587-46-1	8.72E-01	pCi/L	8.4E-01	8.7E-01	U	1.22E+00	100.0	9310_ALPHABETA	2.005E-01	L	05/31/2007 10:18	I
7113497	BETA	12587-47-2	8.09E+00	pCi/L	1.8E+00	2.1E+00		2.80E+00	100.0	9310_ALPHABETA	1.984E-01	L	05/31/2007 18:08	I
7113502	I-129L	15046-84-1	1.13E+00	pCi/L	3.5E-01	3.5E-01	U	5.59E-01	96.5	I129LL_SEP_LEPS	3.9165E+00	L	05/31/2007 14:33	I
7113501	SR-90	10098-97-2	1.89E-01	pCi/L	2.3E-01	2.5E-01	U	5.18E-01	67.0	SRISO_SEP_PRE	1.0061E+00	L	05/31/2007 07:46	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:
9JT5X210	B1MRC7		MW6-SBB-A1	S07-004	W05159					04/17/2007 08:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	2.55E+05	pCi/L	1.6E+03	9.6E+03		3.01E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 06:41	I
7113496	ALPHA	12587-46-1	9.75E-01	pCi/L	8.7E-01	9.0E-01	U	1.06E+00	100.0	9310_ALPHABETA	2.001E-01	L	05/31/2007 10:18	I
7113497	BETA	12587-47-2	1.37E+01	pCi/L	2.1E+00	2.7E+00		2.73E+00	100.0	9310_ALPHABETA	1.995E-01	L	05/31/2007 18:08	I
7113502	I-129L	15046-84-1	1.39E+00	pCi/L	3.8E-01	3.8E-01	U	5.98E-01	100.3	I129LL_SEP_LEPS	3.9163E+00	L	05/31/2007 14:37	I
7113501	SR-90	10098-97-2	8.34E-02	pCi/L	1.9E-01	2.0E-01	U	4.31E-01	69.2	SRISO_SEP_PRE	9.913E-01	L	05/31/2007 07:47	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:
9JT5XL10	B1MRF7		MW6-SBB-A1	S07-004	W05159					04/17/2007 11:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	3.97E+03	pCi/L	2.4E+02	3.0E+02		3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 05:19	I
7113496	ALPHA	12587-46-1	1.76E+00	pCi/L	1.5E+00	1.6E+00	U	2.54E+00	100.0	9310_ALPHABETA	1.662E-01	L	05/31/2007 10:18	I
7113497	BETA	12587-47-2	9.77E+01	pCi/L	4.8E+00	1.3E+01		2.86E+00	100.0	9310_ALPHABETA	1.986E-01	L	05/31/2007 18:08	I
7113502	I-129L	15046-84-1	2.55E+00	pCi/L	5.5E-01	5.5E-01		2.91E-01	99.5	I129LL_SEP_LEPS	3.887E+00	L	05/31/2007 14:36	I
7113501	SR-90	10098-97-2	2.19E-01	pCi/L	2.0E-01	2.0E-01	U	4.07E-01	66.9	SRISO_SEP_PRE	1.0071E+00	L	05/31/2007 07:47	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:
9JT5XR10	B1MPX9		MW6-SBB-A1	S07-004	W05159					04/17/2007 12:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113504	C-14	14762-75-5	7.46E+03	pCi/L	4.4E+01	8.5E+02		8.39E+00	100.0	C14_LSC	2.00E-01	L	05/01/2007 21:16	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.

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT5XR20	B1MPX9		MW6-SBB-A1	S07-004	W05159					04/17/2007 12:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151391	TC-99	14133-76-7	1.85E+00	pCi/L	4.2E+00	6.0E+00	U	9.95E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	06/01/2007 19:33	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:
9JT70F10	B1MF93		MW6-SBB-A1	S07-003	W05159					04/18/2007 11:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113502	I-129L	15046-84-1	1.45E+00	pCi/L	3.8E-01	3.8E-01	U	6.02E-01	98.1	I129LL_SEP_LEPS	3.9391E+00	L	05/31/2007 16:31	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:
9JT70X10	B1MF98		MW6-SBB-A1	S07-003	W05159					04/18/2007 13:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113502	I-129L	15046-84-1	9.13E-02	pCi/L	1.0E-01	1.0E-01	U	2.18E-01	105.1	I129LL_SEP_LEPS	3.9517E+00	L	05/31/2007 18:16	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:
9JT7P110	B1MD27		MW6-SBB-A1	G07-003	W05159					04/18/2007 11:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113500	BE-7	13966-02-4	-1.01E+01	pCi/L	1.6E+01	1.6E+01	U	2.73E+01		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	CO-60	10198-40-0	7.10E-01	pCi/L	1.4E+00	1.4E+00	U	2.90E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	CS-134	13967-70-9	2.77E-01	pCi/L	1.4E+00	1.4E+00	U	2.75E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	CS-137	10045-97-3	5.00E-01	pCi/L	1.3E+00	1.3E+00	U	2.59E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	EU-152	14683-23-9	1.62E+00	pCi/L	3.5E+00	3.5E+00	U	6.62E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	EU-154	15585-10-1	-2.88E+00	pCi/L	4.0E+00	4.0E+00	U	6.73E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	EU-155	14391-16-3	-8.17E-01	pCi/L	3.2E+00	3.2E+00	U	5.54E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	K-40	13966-00-2	3.72E+00	pCi/L	1.9E+01	1.9E+01	U	4.23E+01		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	RU-106	13967-48-1	4.26E+00	pCi/L	1.5E+01	1.5E+01	U	2.75E+01		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	I
7113500	SB-125	14234-35-6	-3.59E-01	pCi/L	3.7E+00	3.7E+00	U	6.59E+00		GAMMA_GS	2.4982E+00	L	05/31/2007 17:03	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:
9JT7Q410	B1MDB7		MW6-SBB-A1	I07-031	W05159					04/18/2007 11:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113501	SR-90	10098-97-2	2.15E+02	pCi/L	3.4E+00	3.3E+01		5.22E-01	65.1	SRISO_SEP_PRE	1.008E+00	L	05/31/2007 07:47	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.

9JT7Q610 B1MDH4 MW6-SBB-A1 I07-031 W05159 04/18/2007 13:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113497	BETA	12587-47-2	6.69E+02	pCi/L	1.2E+01	8.8E+01		2.69E+00	100.0	9310_ALPHABETA	2.027E-01	L	05/31/2007 18:08	I
7113500	BE-7	13966-02-4	-8.32E+00	pCi/L	2.3E+01	2.3E+01	U	4.05E+01		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	CO-60	10198-40-0	7.88E-01	pCi/L	2.1E+00	2.1E+00	U	4.37E+00		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	CS-134	13967-70-9	5.39E-01	pCi/L	2.4E+00	2.4E+00	U	4.53E+00		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	CS-137	10045-97-3	8.95E-02	pCi/L	2.0E+00	2.0E+00	U	3.68E+00		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	EU-152	14683-23-9	-3.10E+00	pCi/L	4.8E+00	4.8E+00	U	7.95E+00		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	EU-154	15585-10-1	1.47E+00	pCi/L	5.0E+00	5.0E+00	U	1.07E+01		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	EU-155	14391-16-3	1.01E-01	pCi/L	3.9E+00	3.9E+00	U	6.89E+00		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	K-40	13966-00-2	-1.55E+01	pCi/L	4.0E+01	4.0E+01	U	8.85E+01		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	RU-106	13967-48-1	-1.78E+00	pCi/L	2.0E+01	2.0E+01	U	3.63E+01		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113500	SB-125	14234-35-6	2.37E+00	pCi/L	5.5E+00	5.5E+00	U	1.04E+01		GAMMA_GS	2.5029E+00	L	05/31/2007 16:51	I
7113501	SR-90	10098-97-2	3.63E+02	pCi/L	4.3E+00	5.4E+01		5.28E-01	70.2	SRISO_SEP_PRE	9.986E-01	L	05/31/2007 07:47	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:
9JT7QC10	B1MD67		MW6-SBB-A1	G07-003	W05159					04/18/2007 09:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	5.97E+01	pCi/L	1.3E+02	1.4E+02	U	3.01E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 08:03	I
7113499	BE-7	13966-02-4	1.68E+01	pCi/L	3.1E+01	3.1E+01	U	5.87E+01		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	CO-60	10198-40-0	1.34E+00	pCi/L	2.5E+00	2.5E+00	U	5.37E+00		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	CS-134	13967-70-9	-5.68E-01	pCi/L	2.5E+00	2.5E+00	U	4.58E+00		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	CS-137	10045-97-3	-1.37E+00	pCi/L	2.3E+00	2.3E+00	U	3.92E+00		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	EU-152	14683-23-9	-1.64E+00	pCi/L	6.5E+00	6.5E+00	U	1.13E+01		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	EU-154	15585-10-1	2.26E+00	pCi/L	6.8E+00	6.8E+00	U	1.40E+01		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	EU-155	14391-16-3	5.47E-01	pCi/L	3.9E+00	3.9E+00	U	7.12E+00		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	K-40	13966-00-2	-2.55E+01	pCi/L	5.5E+01	5.5E+01	U	1.21E+02		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	RU-106	13967-48-1	-1.40E+00	pCi/L	2.4E+01	2.4E+01	U	4.34E+01		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113499	SB-125	14234-35-6	-2.81E-01	pCi/L	6.2E+00	6.2E+00	U	1.11E+01		GAMMALL_GS	1.9975E+00	L	05/30/2007 18:33	I
7113501	SR-90	10098-97-2	1.78E+00	pCi/L	3.8E-01	4.6E-01		5.28E-01	61.1	SRISO_SEP_PRE	9.995E-01	L	05/31/2007 07:47	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:
9JT7QM10	B1MD71		MW6-SBB-A1	G07-003	W05159					04/18/2007 11:58

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35514 File Name: h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	4.36E+02	pCi/L	1.4E+02	1.6E+02		3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 09:25	I
7113499	BE-7	13966-02-4	5.10E+00	pCi/L	2.7E+01	2.7E+01	U	5.14E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	CO-60	10198-40-0	-1.79E+00	pCi/L	2.8E+00	2.8E+00	U	4.68E+00		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	CS-134	13967-70-9	8.47E-01	pCi/L	2.6E+00	2.6E+00	U	5.13E+00		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	CS-137	10045-97-3	9.38E-01	pCi/L	2.3E+00	2.3E+00	U	4.49E+00		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	EU-152	14683-23-9	-2.55E+00	pCi/L	6.6E+00	6.6E+00	U	1.15E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	EU-154	15585-10-1	-5.99E+00	pCi/L	8.4E+00	8.4E+00	U	1.39E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	EU-155	14391-16-3	5.31E+00	pCi/L	6.5E+00	6.5E+00	U	1.20E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	K-40	13966-00-2	-7.08E+01	pCi/L	5.3E+01	5.3E+01	U	1.13E+02		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	RU-106	13967-48-1	1.01E+01	pCi/L	2.2E+01	2.2E+01	U	4.34E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113499	SB-125	14234-35-6	1.06E+00	pCi/L	6.0E+00	6.0E+00	U	1.10E+01		GAMMALL_GS	1.9954E+00	L	05/31/2007 05:36	I
7113501	SR-90	10098-97-2	1.70E+03	pCi/L	1.0E+01	2.6E+02		5.88E-01	67.2	SRISO_SEP_PRE	1.006E+00	L	05/31/2007 09:30	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:
9JT7TR10	B1M6D4		MW6-SBB-A1	I07-026	W05159					04/18/2007 09:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113502	I-129L	15046-84-1	2.52E+00	pCi/L	5.2E-01	5.2E-01		3.12E-01	96.5	I129LL_SEP_LEPS	3.972E+00	L	05/31/2007 16:28	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT7TR20	B1M6D4		MW6-SBB-A1	I07-026	W05159					04/18/2007 09:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151391	TC-99	14133-76-7	2.96E+02	pCi/L	1.0E+01	2.3E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.254E-01	L	06/01/2007 21:39	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:
9JVA8Q10	B1MNM5		MW6-SBB-A1	W07-004	W05159					04/11/2007 08:58

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113496	ALPHA	12587-46-1	1.85E+00	pCi/L	1.3E+00	1.4E+00	U	1.91E+00	100.0	9310_ALPHABETA	1.296E-01	L	05/31/2007 12:58	I
7113497	BETA	12587-47-2	9.24E+00	pCi/L	1.9E+00	2.3E+00		2.93E+00	100.0	9310_ALPHABETA	1.913E-01	L	05/31/2007 18:08	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:
9JVC3T10	B1MFC2		MW6-SBB-A1	S07-003	W05159					04/19/2007 10:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113496	ALPHA	12587-46-1	3.52E+01	pCi/L	5.5E+00	9.8E+00		2.18E+00	100.0	9310_ALPHABETA	1.857E-01	L	05/31/2007 10:18	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.

7113497	BETA	12587-47-2	2.84E+01	pCi/L	2.8E+00	4.6E+00		2.80E+00	100.0	9310_ALPHABETA	1.99E-01	L	05/31/2007	18:08	I
7113498	Uranium	7440-61-1	7.23E+01	ug/L	8.6E+00	8.6E+00		7.91E-02		UTOT_KPA	2.65E-02	ML	06/01/2007	09:04	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:
9JVC4210	B1MFD7		MW6-SBB-A1	S07-003	W05159					04/19/2007 09:47

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113496	ALPHA	12587-46-1	1.97E+01	pCi/L	3.5E+00	5.6E+00		1.10E+00	100.0	9310_ALPHABETA	1.971E-01	L	05/31/2007 11:26	I
7113497	BETA	12587-47-2	1.78E+01	pCi/L	2.2E+00	4.4E+00		2.67E+00	100.0	9310_ALPHABETA	1.995E-01	L	05/31/2007 18:08	I
7113498	Uranium	7440-61-1	5.01E+01	ug/L	6.0E+00	6.0E+00		8.32E-02		UTOT_KPA	2.52E-02	ML	06/01/2007 09:11	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:
9JVC4710	B1MFF1		MW6-SBB-A1	S07-003	W05159					04/19/2007 11:49

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113496	ALPHA	12587-46-1	1.90E+01	pCi/L	4.0E+00	5.9E+00		2.26E+00	100.0	9310_ALPHABETA	2.04E-01	L	05/31/2007 11:26	I
7113497	BETA	12587-47-2	1.82E+01	pCi/L	2.4E+00	3.7E+00		2.97E+00	100.0	9310_ALPHABETA	2.017E-01	L	05/31/2007 18:08	I
7113498	Uranium	7440-61-1	4.22E+01	ug/L	5.0E+00	5.0E+00		8.19E-02		UTOT_KPA	2.56E-02	ML	06/01/2007 09:13	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:
9JVC4D10	B1MDW0		MW6-SBB-A1	S07-003	W05159					04/19/2007 13:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113505	H-3	10028-17-8	7.12E+01	pCi/L	8.1E+00	1.6E+01		5.97E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	05/12/2007 02:29	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:
9JVC4J10	B1MFF5		MW6-SBB-A1	S07-003	W05159					04/19/2007 12:37

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113496	ALPHA	12587-46-1	3.07E+01	pCi/L	5.1E+00	8.8E+00		1.99E+00	100.0	9310_ALPHABETA	2.013E-01	L	05/31/2007 11:26	I
7113497	BETA	12587-47-2	2.34E+01	pCi/L	2.5E+00	3.9E+00		2.71E+00	100.0	9310_ALPHABETA	1.995E-01	L	05/31/2007 18:08	I
7113501	SR-90	10098-97-2	2.29E-01	pCi/L	2.2E-01	2.2E-01	U	4.41E-01	78.0	SRISO_SEP_PRE	1.0057E+00	L	05/31/2007 07:47	I
7113498	Uranium	7440-61-1	6.36E+01	ug/L	7.6E+00	7.6E+00		7.76E-02		UTOT_KPA	2.70E-02	ML	06/01/2007 09:08	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:
9JVC6M10	B1MRH1		MW6-SBB-A1	S07-004	W05159					04/19/2007 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7113506	H-3	10028-17-8	-2.86E+01	pCi/L	1.2E+02	1.3E+02	U	3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 10:47	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.

7113496	ALPHA	12587-46-1	5.10E-02	pCi/L	2.1E-01	2.1E-01	U	6.11E-01	100.0	9310_ALPHABETA	2.013E-01	L	05/31/2007	11:26	I
7113497	BETA	12587-47-2	7.26E-01	pCi/L	1.2E+00	1.2E+00	U	2.62E+00	100.0	9310_ALPHABETA	2.019E-01	L	05/31/2007	18:08	I
7113499	BE-7	13966-02-4	1.48E+01	pCi/L	2.8E+01	2.8E+01	U	5.47E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	CO-60	10198-40-0	-1.23E+00	pCi/L	2.7E+00	2.7E+00	U	4.76E+00		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	CS-134	13967-70-9	1.33E+00	pCi/L	2.4E+00	2.4E+00	U	4.92E+00		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	CS-137	10045-97-3	1.55E+00	pCi/L	2.4E+00	2.4E+00	U	4.76E+00		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	EU-152	14683-23-9	9.17E-01	pCi/L	5.9E+00	5.9E+00	U	1.07E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	EU-154	15585-10-1	4.13E+00	pCi/L	5.9E+00	5.9E+00	U	1.36E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	EU-155	14391-16-3	-4.82E-02	pCi/L	4.8E+00	4.8E+00	U	8.29E+00		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	K-40	13966-00-2	2.87E+01	pCi/L	5.1E+01	5.1E+01	U	3.99E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	RU-106	13967-48-1	1.26E+01	pCi/L	2.0E+01	2.0E+01	U	3.98E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113499	SB-125	14234-35-6	-3.68E-01	pCi/L	6.0E+00	6.0E+00	U	1.08E+01		GAMMALL_GS	1.9962E+00	L	05/31/2007	05:34	I
7113502	I-129L	15046-84-1	4.57E-02	pCi/L	1.5E-01	1.5E-01	U	2.69E-01	98.1	I129LL_SEP_LEPS	3.938E+00	L	05/31/2007	18:18	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:
9JVC7H10	B1MRH0		MW6-SBB-A1	S07-004	W05159					04/19/2007 12:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
7113506	H-3	10028-17-8	3.89E+03	pCi/L	2.3E+02	3.0E+02		3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007	13:31	I
7113496	ALPHA	12587-46-1	2.14E+00	pCi/L	1.2E+00	1.3E+00		1.55E+00	100.0	9310_ALPHABETA	1.996E-01	L	05/31/2007	11:26	I
7113497	BETA	12587-47-2	5.36E+00	pCi/L	1.6E+00	1.9E+00		2.69E+00	100.0	9310_ALPHABETA	2.009E-01	L	05/31/2007	18:10	I
7113499	BE-7	13966-02-4	-1.34E+01	pCi/L	2.7E+01	2.7E+01	U	4.55E+01		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	CO-60	10198-40-0	-2.45E+00	pCi/L	3.2E+00	3.2E+00	U	5.17E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	CS-134	13967-70-9	1.00E+00	pCi/L	2.8E+00	2.8E+00	U	5.48E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	CS-137	10045-97-3	-8.06E-01	pCi/L	2.4E+00	2.4E+00	U	4.13E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	EU-152	14683-23-9	9.85E-01	pCi/L	5.3E+00	5.3E+00	U	9.96E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	EU-154	15585-10-1	-5.29E+00	pCi/L	7.5E+00	7.5E+00	U	1.25E+01		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	EU-155	14391-16-3	-2.19E+00	pCi/L	3.8E+00	3.8E+00	U	6.26E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	K-40	13966-00-2	-1.11E+01	pCi/L	5.0E+01	5.0E+01	U	1.09E+02		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	RU-106	13967-48-1	-3.70E+00	pCi/L	2.4E+01	2.4E+01	U	4.32E+01		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113499	SB-125	14234-35-6	-3.76E+00	pCi/L	5.7E+00	5.7E+00	U	9.44E+00		GAMMALL_GS	1.9815E+00	L	05/31/2007	05:37	I
7113502	I-129L	15046-84-1	4.13E+00	pCi/L	6.5E-01	6.5E-01		3.62E-01	98.4	I129LL_SEP_LEPS	3.8775E+00	L	05/31/2007	18:19	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.

Wednesday, June 06, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG511AB **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 12:55

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/19/2007

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
7113499	BE-7	-1.40E+01	pCi/L	2.4E+01	U	3.98E+01			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	13966-02-4			2.4E+01						L	05:37				
7113499	CO-60	-8.96E-01	pCi/L	1.3E+00	U	2.22E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	10198-40-0			1.3E+00						L	05:37				
7113499	CS-134	6.09E-01	pCi/L	1.8E+00	U	3.50E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	13967-70-9			1.8E+00						L	05:37				
7113499	CS-137	-9.40E-01	pCi/L	1.6E+00	U	2.62E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	10045-97-3			1.6E+00						L	05:37				
7113499	EU-152	-5.16E+00	pCi/L	5.2E+00	U	8.39E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	14683-23-9			5.2E+00						L	05:37				
7113499	EU-154	-1.45E+00	pCi/L	5.1E+00	U	9.27E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	15585-10-1			5.1E+00						L	05:37				
7113499	EU-155	1.30E+00	pCi/L	4.4E+00	U	7.83E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	14391-16-3			4.4E+00						L	05:37				
7113499	K-40	6.58E+00	pCi/L	2.5E+01	U	5.46E+01			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	13966-00-2			2.5E+01						L	05:37				
7113499	RU-106	1.21E+01	pCi/L	1.7E+01	U	3.37E+01			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	13967-48-1			1.7E+01						L	05:37				
7113499	SB-125	-1.84E+00	pCi/L	4.3E+00	U	7.43E+00			GAMMALL_GS	1.998E+00	05/31/2007				D
BLK	14234-35-6			4.3E+00						L	05:37				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG541AB **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/18/2007 13:01

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/18/2007

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
7113500	BE-7	1.66E+00	pCi/L	2.5E+01	U	4.59E+01			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	13966-02-4			2.5E+01						L	18:43				
7113500	CO-60	-3.72E-01	pCi/L	2.1E+00	U	3.97E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	10198-40-0			2.1E+00						L	18:43				
7113500	CS-134	5.00E-01	pCi/L	2.2E+00	U	4.31E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	13967-70-9			2.2E+00						L	18:43				
7113500	CS-137	1.98E+00	pCi/L	2.1E+00	U	4.20E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	10045-97-3			2.1E+00						L	18:43				
7113500	EU-152	-2.63E-01	pCi/L	5.3E+00	U	9.49E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	14683-23-9			5.3E+00						L	18:43				
7113500	EU-154	-7.99E-01	pCi/L	6.1E+00	U	1.12E+01			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	15585-10-1			6.1E+00						L	18:43				
7113500	EU-155	1.99E+00	pCi/L	3.7E+00	U	6.81E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	14391-16-3			3.7E+00						L	18:43				
7113500	K-40	-2.23E+01	pCi/L	4.8E+01	U	1.02E+02			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	13966-00-2			4.8E+01						L	18:43				
7113500	RU-106	-1.73E+01	pCi/L	2.0E+01	U	3.10E+01			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	13967-48-1			2.0E+01						L	18:43				
7113500	SB-125	3.18E+00	pCi/L	5.3E+00	U	9.95E+00			GAMMA_GS	2.4989E+00	05/31/2007				D
BLK	14234-35-6			5.3E+00						L	18:43				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVG561AB	**Sdg/Rept Nbr:**	W05159 35514	**Collection Date:**	04/17/2007 08:27
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/17/2007

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
7113501	SR-90	2.45E-02	pCi/L	3.9E-01	U	8.54E-01	53.3		SRISO_SEP_P	9.978E-01	05/31/2007				D
BLK	10098-97-2			3.9E-01						L	08:40				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVG5F1AB	**Sdg/Rept Nbr:**	W05159 35514	**Collection Date:**	04/11/2007 08:58
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								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
7113496	ALPHA	1.02E-01	pCi/L	1.8E-01	U	3.76E-01	100.0		9310_ALPHAB	2.01E-01	05/31/2007				D
BLK	12587-46-1			1.8E-01						L	12:58				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5K1AB **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 09:47

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/19/2007

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
7113497	BETA	1.49E+00	pCi/L	1.3E+00	U	2.54E+00	100.0		9310_ALPHAB	2.016E-01	05/31/2007				D
BLK	12587-47-2			1.3E+00						L	18:10				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5V1AB **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 10:55

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/19/2007

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
7113498	Uranium	0.00E+00	ug/L	0.0E+00	U	8.25E-02			UTOT_KPA	2.54E-02	06/01/2007				D
BLK	7440-61-1			0.0E+00						ML	08:56				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVG6D1AB	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/18/2007 11:06
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 04/18/2007

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
7113502	I-129L	-6.15E-02	pCi/L	1.1E-01	U	1.96E-01	96.8		I129LL_SEP_L	3.9902E+00	05/31/2007				D
BLK	15046-84-1			1.1E-01						L	19:59				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6N2AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05159 35514
Matrix: WATER WATER
QC Type: BLK

Collection Date: 04/18/2007 09:26
Sample On Date:
Received Date: 04/18/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BY	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
7151391	TC-99	2.66E+00	pCi/L	6.1E+00	U	1.00E+01	100.0		TC99_ETVDSK	1.253E-01	06/01/2007				D
BLK	14133-76-7			4.2E+00						L	23:44				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6P1AB **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/17/2007 12:44

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/17/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CA	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
7113504	C-14	-4.01E+00	pCi/L	6.6E+00	U	8.39E+00	100.0		C14_LSC	2.00E-01	05/01/2007				D
BLK	14762-75-5			3.3E+00						L	19:51				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVG6T1AB	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/19/2007 13:26
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CC	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
7113505	H-3	1.42E+00	pCi/L	7.9E+00	U	5.94E+00	100.0		TRITIUM_ELE	1.5001E-01	05/11/2007				D
BLK	10028-17-8			5.7E+00						L	23:54				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVG6W1AB	**Sdg/Rept Nbr:**	W05159 35514	**Collection Date:**	04/19/2007 08:00
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CE	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
7113506	H-3	-3.49E+01	pCi/L	1.3E+02	U	3.00E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007				D
BLK	10028-17-8			1.2E+02						L	01:14				

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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6W1DX **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 08:00

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CG	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
7113506	H-3	-4.90E+01	pCi/L	1.3E+02	U	3.03E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007				D
BLK	10028-17-8			1.2E+02						L	16:15				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG511CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 12:55

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

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
7113499	CO-60	3.41E+01	pCi/L	8.4E+00		4.43E+00		3.74E+01	GAMMALL_GS	2.0002E+00	05/31/2007			70	D
BS	10198-40-0			8.4E+00				91.1		L	05:37			130	
7113499	CS-137	2.76E+01	pCi/L	6.5E+00		4.73E+00		2.48E+01	GAMMALL_GS	2.0002E+00	05/31/2007			70	D
BS	10045-97-3			6.5E+00				111.3		L	05:37			130	
7113499	EU-152	6.80E+01	pCi/L	1.9E+01		1.23E+01		7.64E+01	GAMMALL_GS	2.0002E+00	05/31/2007			70	D
BS	14683-23-9			1.9E+01				89.0		L	05:37			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG542CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/18/2007 13:01

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/18/2007

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
7113500	CO-60	2.69E+01	pCi/L	7.0E+00		4.59E+00		3.02E+01	GAMMA_GS	2.5011E+00	06/04/2007			70	D
BS	10198-40-0			7.0E+00				88.9		L	12:30			130	
7113500	CS-137	1.78E+01	pCi/L	5.2E+00		4.45E+00		1.97E+01	GAMMA_GS	2.5011E+00	06/04/2007			70	D
BS	10045-97-3			5.2E+00				89.9		L	12:30			130	
7113500	EU-152	6.21E+01	pCi/L	1.4E+01	U	2.04E+01		6.10E+01	GAMMA_GS	2.5011E+00	06/04/2007			70	D
BS	14683-23-9			1.4E+01				101.8		L	12:30			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG561CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/17/2007 08:27

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/17/2007

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
7113501	SR-90	1.44E+01	pCi/L	2.3E+00		7.52E-01	56.8	1.38E+01	SRISO_SEP_P	9.967E-01	05/31/2007			70	D
BS	10098-97-2			9.3E-01				104.3		L	08:40			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5F1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/11/2007 08:58
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								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
7113496	ALPHA	1.96E+01	pCi/L	4.9E+00		6.87E-01	100.0	2.30E+01	9310_ALPHAB	2.00E-01	05/31/2007			70	D
BS	12587-46-1			2.0E+00				85.1		L	12:58			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5K1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 09:47

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

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
7113497	BETA	2.21E+01	pCi/L	3.6E+00		2.64E+00	100.0	2.28E+01	9310_ALPHAB	1.989E-01	05/31/2007			70	D
BS	12587-47-2			2.4E+00				97.3		L	18:10			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5V1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 10:55

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

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
7113498	Uranium	3.56E+01	ug/L	4.2E+00		8.22E-02		3.54E+01	UTOT_KPA	2.55E-02	06/01/2007			70	D
BS	7440-61-1			4.2E+00				100.6		ML	09:00			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG5V1DS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 10:55

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

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
7113498	Uranium	3.48E+00	ug/L	3.6E-01		8.25E-02		3.60E+00	UTOT_KPA	2.54E-02	06/01/2007			70	D
BS	7440-61-1			3.6E-01				96.7		ML	09:02			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6D1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/18/2007 11:06
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/18/2007

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
7113502	I-129L	9.02E+00	pCi/L	1.2E+00		4.25E-01	97.7	9.85E+00	I129LL_SEP_L	3.8757E+00	05/31/2007			70	D
BS	15046-84-1			1.2E+00				91.5		L	20:02			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6N2CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/18/2007 09:26

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/18/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BZ	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
7151391	TC-99	5.04E+02	pCi/L	3.6E+01		9.86E+00	100.0	5.28E+02	TC99_ETVDSK	1.272E-01	06/02/2007			70	D
BS	14133-76-7			1.3E+01				95.3		L	00:46			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6P1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/17/2007 12:44

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/17/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CB	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
7113504	C-14	4.27E+01	pCi/L	1.2E+01		8.38E+00	100.0	4.50E+01	C14_LSC	2.00E-01	05/01/2007			70	D
BS	14762-75-5			4.8E+00				94.9		L	20:33			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6T1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 13:26

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CD	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
7113505	H-3	4.42E+02	pCi/L	7.8E+01		5.96E+00	100.0	4.60E+02	TRITIUM_ELE	1.50E-01	05/12/2007			70	D
BS	10028-17-8			2.0E+01				96.1		L	05:12			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6W1CS **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 08:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CF	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
7113506	H-3	2.43E+03	pCi/L	2.4E+02		3.01E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/19/2007			70	D
BS	10028-17-8			2.0E+02				89.3		L	02:36			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\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVG6W1EM **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 08:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CH	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
7113506	H-3	2.51E+03	pCi/L	2.4E+02		3.03E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/19/2007			70	D
BS	10028-17-8			2.0E+02				92.2		L	17:36			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 Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JT5X21GR	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/17/2007 08:27
Client Id:	B1MRC7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/17/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7113501	SR-90	1.75E-02	pCi/L	2.6E-01	U	5.82E-01	56.1		SRISO_SEP_P	9.885E-01	05/31/2007	130.5	0.4		D
DUP	10098-97-2	8.34E-02		2.6E-01						L	07:47	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JT5XR1ER **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/17/2007 12:44

Client Id: B1MPX9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/17/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7113504	C-14	7.54E+03	pCi/L	8.6E+02		8.39E+00	100.0		C14_LSC	2.00E-01	05/01/2007	1.0	0.1		D
DUP	14762-75-5	7.46E+03		4.4E+01						L	21:59	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JT70F1CR	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/18/2007 11:06
Client Id:	B1MF93	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/18/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7113502	I-129L	1.64E+00	pCi/L	3.6E-01		2.47E-01	96.2		I129LL_SEP_L	3.948E+00	05/31/2007	12.4	0.7		D
DUP	15046-84-1	1.45E+00		3.6E-01						L	16:31	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JT7Q61ER **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/18/2007 13:01

Client Id: B1MDH4 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/18/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-031	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
7113500	BE-7	-1.38E+01	pCi/L	2.1E+01	U	3.61E+01			GAMMA_GS	2.5029E+00	05/31/2007	0.0	0.4		D
DUP	13966-02-4	-8.32E+00		2.1E+01						L	18:44	20.0	3		
7113500	CO-60	1.66E+00	pCi/L	2.0E+00	U	4.46E+00			GAMMA_GS	2.5029E+00	05/31/2007	71.0	0.6		D
DUP	10198-40-0	7.88E-01		2.0E+00						L	18:44	20.0	3		
7113500	CS-134	-1.81E-01	pCi/L	1.8E+00	U	3.50E+00			GAMMA_GS	2.5029E+00	05/31/2007	402.9	0.6		D
DUP	13967-70-9	5.39E-01		1.8E+00						L	18:44	20.0	3		
7113500	CS-137	-1.61E-01	pCi/L	1.8E+00	U	3.25E+00			GAMMA_GS	2.5029E+00	05/31/2007	0.0	0.2		D
DUP	10045-97-3	8.95E-02		1.8E+00						L	18:44	20.0	3		
7113500	EU-152	7.53E-01	pCi/L	4.4E+00	U	8.17E+00			GAMMA_GS	2.5029E+00	05/31/2007	0.0	1.2		D
DUP	14683-23-9	-3.10E+00		4.4E+00						L	18:44	20.0	3		
7113500	EU-154	-6.75E+00	pCi/L	5.5E+00	U	7.67E+00			GAMMA_GS	2.5029E+00	05/31/2007	0.0	2.1		D
DUP	15585-10-1	1.47E+00		5.5E+00						L	18:44	20.0	3		
7113500	EU-155	2.05E+00	pCi/L	4.3E+00	U	7.88E+00			GAMMA_GS	2.5029E+00	05/31/2007	181.3	0.6		D
DUP	14391-16-3	1.01E-01		4.3E+00						L	18:44	20.0	3		
7113500	K-40	-2.77E+01	pCi/L	4.3E+01	U	9.61E+01			GAMMA_GS	2.5029E+00	05/31/2007	0.0	0.4		D
DUP	13966-00-2	-1.55E+01		4.3E+01						L	18:44	20.0	3		
7113500	RU-106	8.55E+00	pCi/L	1.8E+01	U	3.49E+01			GAMMA_GS	2.5029E+00	05/31/2007	305.1	0.8		D
DUP	13967-48-1	-1.78E+00		1.8E+01						L	18:44	20.0	3		
7113500	SB-125	2.26E+00	pCi/L	4.9E+00	U	9.21E+00			GAMMA_GS	2.5029E+00	05/31/2007	4.4	0.		D
DUP	14234-35-6	2.37E+00		4.9E+00						L	18:44	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JT7TR2DR	**Sdg/Rept Nbr:**	W05159 35514	**Collection Date:**	04/18/2007 09:26
Client Id:	B1M6D4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/18/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-026	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
7151391	TC-99	3.02E+02	pCi/L	2.4E+01		1.01E+01	100.0		TC99_ETVDSK	1.247E-01	06/01/2007	2.2	0.4		D
DUP	14133-76-7	2.96E+02		1.0E+01						L	22:41	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVA8Q1DR **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/11/2007 08:58
Client Id: B1MNM5 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	MW6-SBB-A19981								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
7113496	ALPHA	2.05E+00	pCi/L	1.3E+00		1.39E+00	100.0		9310_ALPHAB	1.31E-01	05/31/2007	10.3	0.2		D
DUP	12587-46-1	1.85E+00		1.2E+00						L	12:58	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVC3T1ER	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/19/2007 10:55
Client Id:	B1MFC2	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**DUP**		**Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7113498	Uranium	7.22E+01	ug/L	8.6E+00		8.25E-02			UTOT_KPA	2.54E-02	06/01/2007	.2	0.		D
DUP	7440-61-1	7.23E+01		8.6E+00						ML	09:06	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVC421ER	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/19/2007 09:47
Client Id:	B1MFD7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**DUP**		**Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7113497	BETA	1.89E+01	pCi/L	3.5E+00		2.84E+00	100.0		9310_ALPHAB	1.997E-01	05/31/2007	6.3	0.5		D
DUP	12587-47-2	1.78E+01		2.4E+00						L	18:08	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVC4D1CR	**Sdg/Rept Nbr:**	W05159 35514	**Collection Date:**	04/19/2007 13:26
Client Id:	B1MDW0	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7113505	H-3	6.92E+01	pCi/L	1.6E+01		5.95E+00	100.0		TRITIUM_ELE	1.50E-01	05/12/2007	2.9	0.2		D
DUP	10028-17-8	7.12E+01		7.9E+00						L	03:47	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVC6M1GR	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/19/2007 08:00
Client Id:	B1MRH1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7113506	H-3	1.26E+02	pCi/L	1.4E+02	U	3.03E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007	317.5	1.5		D
DUP	10028-17-8	-2.86E+01		1.3E+02						L	12:09	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JVC7H1GR **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/19/2007 12:55
Client Id: B1MRH0 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7113499	BE-7	3.95E+00	pCi/L	2.9E+01	U	5.43E+01			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	0.8		D
DUP	13966-02-4	-1.34E+01		2.9E+01						L	05:37	20.0	3		
7113499	CO-60	1.22E+00	pCi/L	3.2E+00	U	6.52E+00			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	1.6		D
DUP	10198-40-0	-2.45E+00		3.2E+00						L	05:37	20.0	3		
7113499	CS-134	-8.11E-01	pCi/L	2.2E+00	U	3.94E+00			GAMMALL_GS	1.9727E+00	05/31/2007	1906.0	1.2		D
DUP	13967-70-9	1.00E+00		2.2E+00						L	05:37	20.0	3		
7113499	CS-137	-1.06E+00	pCi/L	2.2E+00	U	3.79E+00			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	0.2		D
DUP	10045-97-3	-8.06E-01		2.2E+00						L	05:37	20.0	3		
7113499	EU-152	-2.36E+00	pCi/L	5.7E+00	U	9.78E+00			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	0.8		D
DUP	14683-23-9	9.85E-01		5.7E+00						L	05:37	20.0	3		
7113499	EU-154	9.48E-01	pCi/L	6.6E+00	U	1.35E+01			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	1.3		D
DUP	15585-10-1	-5.29E+00		6.6E+00						L	05:37	20.0	3		
7113499	EU-155	7.02E+00	pCi/L	5.0E+00	U	9.72E+00			GAMMALL_GS	1.9727E+00	05/31/2007	381.0	2.6		D
DUP	14391-16-3	-2.19E+00		5.0E+00						L	05:37	20.0	3		
7113499	K-40	-6.00E+01	pCi/L	4.4E+01	U	9.47E+01			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	1.6		D
DUP	13966-00-2	-1.11E+01		4.4E+01						L	05:37	20.0	3		
7113499	RU-106	6.66E+00	pCi/L	1.8E+01	U	3.70E+01			GAMMALL_GS	1.9727E+00	05/31/2007	700.8	0.8		D
DUP	13967-48-1	-3.70E+00		1.8E+01						L	05:37	20.0	3		
7113499	SB-125	3.74E+00	pCi/L	5.0E+00	U	1.02E+01			GAMMALL_GS	1.9727E+00	05/31/2007	0.0	2.1		D
DUP	14234-35-6	-3.76E+00		5.0E+00						L	05:37	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.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id: JT5XR2DW **Sdg/Rept Nbr:** W05159 35514 **Collection Date:** 04/17/2007 12:44
Client Id: B1MPX9 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/17/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7151391	TC-99	3.42E+03	pCi/L	2.1E+02		1.00E+01	100.0	3.58E+03	TC99_ETVDSK	1.259E-01	06/01/2007			60	D
MS	14133-76-7			3.1E+01				95.5		L	20:36			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.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05159.Edd, h:\Reportdb\edd\FeadIV\Rad\35514.Edd

Lab Sample Id:	JVC4J1FW	**Sdg/Rept Nbr:**	W05159	35514	**Collection Date:** 04/19/2007 12:37
Client Id:	B1MFF5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 04/19/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7113498	Uranium	3.58E+01	ug/L	1.4E+01		8.15E-02		3.49E+01	UTOT_KPA	2.57E-02	06/01/2007			60	D
MS	7440-61-1			1.4E+01				102.7		ML	09:09			140	

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

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/1/2007 2:07:04 PM

Lot No., Due Date: J7D180228,J7D200154,J7D200283,J7D200294,J7D200299; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113496; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05159; 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 => JT5XL1AC 166.20<200.00 JVA8Q1AA 129.60<200.00 JVC3T1AA 185.70<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JVC3T1AA ALPHA 3.5E+01 L:2.2E+00 JVC4J1AA ALPHA 3.1E+01 L:2.0E+00 JVC421AA ALPHA 2.0E+01 L:1.1E+00 JVC471AA ALPHA 1.9E+01 L:2.3E+00 JVC7H1AC ALPHA 2.1E+00 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	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Anderson **Date** 6/1/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113496
W05159

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: 6-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/1/2007 3:09:43 PM

Lot No., Due Date: J7D180228,J7D190114,J7D200154,J7D200283,J7D200294,J7D200299; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113497; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05159; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JT5W91AD BETA 8.1E+00 L:2.8E+00 JT5XL1AD BETA 9.8E+01 L:2.9E+00 JT5X21AD BETA 1.4E+01 L:2.7E+00 JT7Q61AA BETA 6.7E+02 L:2.7E+00 JVA8Q1AC BETA 9.2E+00 L:2.9E+00 JVC3T1AC BETA 2.8E+01 L:2.8E+00 JVC4J1AC BETA 2.3E+01 L:2.7E+00 JVC421AC BETA 1.8E+01 L:2.7E+00 JVC471AC BETA 1.8E+01 L:3.0E+00 JVC7H1AD BETA 5.4E+00 L:2.7E+00		✓	

8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Anderson **Date** 6/1/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113497
W05159

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 Allen Date: 6-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/1/2007 2:51:47 PM

Lot No., Due Date: J7D180228,J7D190114,J7D190111,J7D200283; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113501; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05159; WATER

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

6.0 Comments on any No response:

First Level Review Jon Norton **Date** 6-1-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113501
W05159

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: Cheryl A Adam Date: 6-1-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/31/2007 2:43:47 PM

Lot No., Due Date: J7D190111,J7D200294,J7D200299; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113499; RGAMMA Gamma by GER

SDG, Matrix: W05159; WATER

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

6.0 Comments on any No response:

First Level Review Lisa Antonson **Date** 5/31/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113499
W05159

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: 5-31-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/4/2007 2:32:31 PM

Lot No., Due Date: J7D190111,J7D190114; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113500; RGAMMA Gamma by GER

SDG, Matrix: W05159; 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:
NCM 10-10035

First Level Review Lisa Antinson **Date** 6/4/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113500

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: [signature] Date: 4/4/17

Clouseau
Nonconformance Memo

STL

NCM #: **10-10035**
NCM Initiated By: Lisa Antonson
Date Opened: 06/04/2007
Date Closed:

Classification: **Deficiency**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7D190111 (1), J7D190114 (2), J7D230000 (500),
QC Batches: 7113500,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/04/2007	In this Gamma batch, the original count recovered the Cs 137 low in the LCS. Upon inspection it was found that the LCS was too full for the geometry used. The technician transfered it to a beaker, cooked it down further, then resubmitted it for recount. The recount brought the results within limits. Data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	The technician will mark the bottles at the proper geometry to enusre they are filled to the correct volume for counting.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/1/2007 4:19:25 PM

Lot No., Due Date: J7D180228,J7D190134,J7D190122,J7D200294,J7D200299; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113502; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05159; WATER

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

6.0 Comments on any No response:

First Level Review _____ **Date** _____

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113502

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: Erika Jade Date: 6/4/17

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/4/2007 11:03:39 AM

Lot No., Due Date: J7D180228,J7D190122; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7151391; RTC99 Tc-99 by LSC

SDG, Matrix: W05159; 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 => JT5XR2AD TCSG<>TCSE Q:V9		OK 6/4/07 ✓	
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: NCM 10-10030			
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!			✓

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

First Level Review Lisa Anderson **Date** 6/14/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 715391

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 nm

Second Level Review: Eutha Gode Date: 4/4/7

Clouseau
Nonconformance Memo

STL

NCM #: **10-10030**
NCM Initiated By: Lisa Antonson
Date Opened: 06/04/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J7D180228 (3), J7D190122 (1), J7D230000 (503),
QC Batches: 7113503,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/04/2007	In this Tc99 batch, the TSIE was out and samples were unable to be calculated. The samples were shaken, wiped with a fabric softener sheet and recounted. The recount produced acceptable results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	The samples were shaken, wiped with a fabric softener sheet and recounted.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/25/2007 4:44:22 PM

Lot No., Due Date: J7D180228,J7D190111,J7D200294,J7D200299; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113506; RTRITIUM H-3 by LSC

SDG, Matrix: W05159; 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 => JT5W91AA 5.00<10.00 JT5XL1AA 5.00<10.00 JT5X21AA 5.00<10.00 JT7QC1AA 5.00<10.00 JT7QM1AA 5.00<10.00 JVC6M1AA 5.00<10.00 JVC7H1AA 5.00<10.00 Q:VB ok AL 5/29/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JVG6W1AF SVP15/5<>SVP10/10 JVG6W1AG SVP15/5<>SVP10/10 JVG6W1AA SVP15/5<>SVP10/10 JVG6W1AC SVP15/5<>SVP10/10 JT5W91AA SVP15/5<>SVP10/10 JT5XL1AA SVP15/5<>SVP10/10 JT5X21AA SVP15/5<>SVP10/10 JT7QC1AA SVP15/5<>SVP10/10 JT7QM1AA SVP15/5<>SVP10/10 JVC6M1AA SVP15/5<>SVP10/10 JVC6M1AG SVP15/5<>SVP10/10 JVC7H1AA SVP15/5<>SVP10/10 JVG6W1AH SVP15/5<>SVP10/10 JVG6W1AD SVP15/5<>SVP10/10 JVG6W1AE SVP15/5<>SVP10/10 Q:VC Ok AL 5/29/07		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JVC6M1AG H-3 260.0 (RPD) ok AL 5/29/07		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓

	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓
8.26 Instruments have Current Calibrations.			
8.27 Correct Count Library Used. 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)			
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)			
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	✓		

First Level Review Angela Long **Date** 5/29/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113506
W05159

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: Cheryl A. Adkins Date: 5-29-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/14/2007 1:41:37 PM

Lot No., Due Date: J7D200283; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113505; RH3EE H3EE by LSC

SDG, Matrix: W05159; 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 Angela Tong **Date** 5/14/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113505
W05159

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

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/2/2007 2:03:59 PM

Lot No., Due Date: J7D180228; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113504; RC14 C-14 by LSC

SDG, Matrix: W05159; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. 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. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => C-14 OK; No Callin Level Found => C-14	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

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

First Level Review Angela Long **Date** 5/2/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113504
W05159

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: 5-2-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/4/2007 11:39:37 AM

Lot No., Due Date: J7D200283; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7113498; RUNAT UNat by KPA

SDG, Matrix: W05159; WATER

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

6.0 Comments on any No response:

First Level Review Lisa Antonson **Date** 6/4/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7113498

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: Erika Jordan Date: 6/5/17

PNNL JTD180228
WO 5759
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-172

8

Collector R. Sickle	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	Logbook: HNF-N-506-8	**Ice Chest No.** Slick-1 **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
B1MRD1		W	4/17/07	0916	1x20-mL P	Activity Scan	None
B1MRD1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRD1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRD1		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MRD1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT5W9	

JD Wade 4/17/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Sickle			APR 17 2007 1518	E Dang	Eric Dang		APR 17 2007 1518
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 J70180228 W05159 Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-196

Collector R. Sickle	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	Logbook: HNF-N-506-8	**Ice Chest No.** Slick-1 **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
B1MRF7		W	4/17/07	1100	1x20-mL P	Activity Scan	None
B1MRF7		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRF7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRF7		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MRF7		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT5KL	
				R. Wall			
					4/17/07		

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Sickle			APR 17 2007 1518	Eric Dailey			APR 17 2007 1518
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 J7D180228 W05159 Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-50**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SLICK1 **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
B1MPX9		W	4/17/07	1244	1x20-mL P	Activity Scan	None
B1MPX9		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1MPX9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

JT5XR

R. Wall 4/17/07

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford R. T. SICKLE	APR 17 2007 1518	ERC Dolly	APR 17 2007 1518
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 J7D180228
W05159
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-166 (8)

Collector R. Sickle	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	Logbook: HNF-N-506-8	**Ice Chest No.** Slick-1 **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
B1MRC7		W	4/17/07	0827	1x20-mL P	Activity Scan	None
B1MRC7		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRC7		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRC7		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MRC7		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT5X2	

R. Wall
4/17/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Sickle			APR 17 2007 1518	Eric Dunty			APR 17 2007 1518
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/17/07 1518

Client: PGN SDG #: W05159 NA [ ] SAF #: S07-004 NA [ ]

Work Order Number: J7D180228 Chain of Custody # S07-004, 172, 196, 50, 166

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 [✓] Yes [ ] No [ ]
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 E. Darby Date: 4/17/07 1518

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 J7D190111
WOS159
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **G07-003-54**

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(4)

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD27		W	4/18/07	1116	1x20-mL P	Activity Scan	None
B1MD27		W	↓	↓	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
						JT 7P1	

P. Wall 4/18/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 18 2007 1522	Eric Darby			APR 18 2007 1522
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 J7D190111
W05159
Due 06-07-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G07-003-112

Page 1 of 1

(6)

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD67		W	4/18/07	0943	1x20-mL P	Activity Scan	None
B1MD67		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MD67		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MD67		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JT 7QC	
			R. Wall	4/18/07			

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 18 2007 1522		Eric Darby		APR 18 2007 1522
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 J7D190111
W05759
Due 05·01·07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G07-003-120 (6)

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SMC-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MD71		W	4/18/07	1158	1x20-mL P	Activity Scan	None
B1MD71		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MD71		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MD71		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JT7QM	

J. Wall 4/18/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 18 2007 1522		Eric Darby		APR 18 2007 1522
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/18/07 1522

Client: PGW SDG #: W05159 NA [ ] SAF #: G07-003 NA [ ]

Work Order Number: J7D190111 Chain of Custody #: G07-003-54,112,120

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: 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: Ken Darby Date: 4/18/07 1522

Client Sample ID	Analysis Requested	Condition	Comments

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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PNNL JTD190114
W05159
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-031-6**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-031	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100NR2IAM-LOI, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **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
B1MDB7		W	4/18/07	1116	1x20-mL P	Activity Scan	None
B1MDB7		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

JT794

R. Wall 4/18/07

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford R. T. SICKLE		APR 18 2007 1522	Eric Darby		APR 18 2007 1522
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 J7D190114
W05759
due 06.01.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-031-41**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-031	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100NR2IAM-LOI, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **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
B1MDH4		W	4/18/07	1301	1x20-mL P	Activity Scan	None
B1MDH4		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MDH4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MDH4		W	↓	↓	3x1000-mL G/P	GAMMA_GS: List-1 (10)	HNO3 to pH <2
						JT 796	

L. Wall 4/18/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 18 2007 1522	Eric Day		Eric Day	APR 18 2007 1522
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

Sample Check-in List

Date/Time Received: 4/18/07

Client: PGW SDG #: W05159 NA [ ] SAF #: F07-031 NA [ ]

Work Order Number: JTD190114 Chain of Custody #: I07-031-6,41

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: E. Darby Date: 4/18/07 1522

Client Sample ID	Analysis Requested	Condition	Comments/Qualifiers

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J7D190122
W05159
Due 06-07-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-026-68

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(4)

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-026	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1-LOI, FEBRUARY 2007	HHF-N-506-9	**Ice Chest No.** 118 **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
B1M6D4		W	4/18/7	0926	1x20-mL P	Activity Scan	None
B1M6D4		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1M6D4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JT7TR	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			APR 18 2007 1522	Eric Darby		E. Darby	APR 18 2007 1522
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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/18/07 1522

Client: PGW SDG # W05159 NA [ ] SAF # ~~I07-026~~ I07-026 CD NA [ ]

Work Order Number: J7D190122 Chain of Custody # I07-026-68

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: Ev Dailey Date: 4/18/07 1522

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 JTD190134
W05159
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-231

(3)

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506-9	**Ice Chest No.** 118 **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
B1MF93		W	4/18/7	1106	1x20-mL P	Activity Scan	None
B1MF93		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT 70F	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			APR 18 2007 1522	Eric Darby			APR 18 2007 1522
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 J7D190134
W05759
Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-237

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3

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HMF - M - 506-9	**Ice Chest No.** 118 **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
B1MF98		W	4/18/7	1331	1x20-mL P	Activity Scan	None
B1MF98		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT70X	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			APR 18 2007 1522	Eric Dunby		E. Dunby	APR 18 2007 1522
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/18/07 1522

Client: PGW SDG #: W051519 NA [ ] SAF #: S07-003 NA [ ]

Work Order Number: J7D190134 Chain of Custody # S07-003-231,237

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? *
    *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: Ev Dooley Date: 4/18/07 1522

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 J7D200154
WD5159
due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-004-160**

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, APRIL 2007	HNF-N-506-9	**Ice Chest No.** SML24 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.** N/A

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MNM5		W	4-11-07	0858	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MNM5		W	↓	↓	1x20-mL P	Activity Scan	None
						JVA8Q	

COC misplaced on 4-11-07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			1530 APR 11 2007	Eric Darby	E. Darby	4/20/07	1530 APR 11 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

Sample Check-in List

Date/Time Received: 4/20/07

Client: PGW SDG #: W05159 NA ( ) SAF #: W07-004 NA ( )

Work Order Number: JTD200154 Chain of Custody #: W07-004-160

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 rec. 4-11-07, 15:30, COC misplaced - Found 4-20-07 (SS)

Sample Custodian: Ev Darby Date: 4/20/07

Client Sample ID	Analysis Requested	Condition	Comments/Corrective Action

Client Informed on _____ by _____ Person contacted _____

( ) No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J7D200283
W05759
due 06-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-147**

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFC2		W	4/19/07	1055	1x20-mL P	Activity Scan	None
B1MFC2		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MFC2		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JVC3T	
					R. Wall 4/19/07		

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brew		APR 19 2007 1406	Eric Dooley	Eric Dooley		APR 19 2007 1406
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

PNNL JTD200283
W05159
Due 05.04.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-293**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDW0		W	4/19/07	1326	1x20-mL P	Activity Scan	None
B1MDW0		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
						JVC4D	
						D. Wall 4/19/07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		APR 19 2007 1400		Eric Danby	Eric Danby	APR 19 2007 1400
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J7D260283
W05159
Due 06-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-183**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** 3ML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFF5		W	4/19/07	1237	1x20-mL P	Activity Scan	None
B1MFF5		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MFF5		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MFF5		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JVC+J	

R. Wall 4/19/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON			APR 19 2007 1406		Eric Daly		APR 19 2007 1406
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 J7D200283 ~~W050~~ SS W05159 Due 06-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-171**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFD7		W	4/19/07	0947	1x20-mL P	Activity Scan	None
B1MFD7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MFD7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JVC 42

J. Wall 4/19/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D R Brewington		APR 19 2007 1406	Eric Dardy		E. Dardy	APR 19 2007 1406
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 J7D200283
W05159
Due 06-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-177**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MFF1		W	4/19/07	1149	1x20-mL P	Activity Scan	None
B1MFF1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MFF1		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JVC47

R. Wall 4/19/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington	D. R. Brewington	APR 19 2007 1406	Eric Darby	Eric Darby	Eric Darby	APR 19 2007 1406
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/19/07 1406

Client: PGW SDG #: WO 5159 NA [ ] SAF #: 807-003- NA [ ]

Work Order Number: JTD200283 Chain of Custody # 807-003-147,293,183,171,177

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: Eric Dooley Date: 4/19/07 1406

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 J7D200299
WO 51159
Due 06-04-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-202**

Collector Fluor Hanford D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF N - 506 - 7	**Ice Chest No.** B1G10 **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
B1MRH0		W	4-19-07	1255	1x20-mL P	Activity Scan	None
B1MRH0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MRH0		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRH0		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRH0		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JVC7H	
						4-19-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. P. CONNOLLY			1505 APR 19 2007		Eric Dady		1505 APR 19 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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/19/07

Client: PGW SDG #: W05159 NA [ ] SAF #: 507-004 NA [ ]

Work Order Number: JT0200299 Chain of Custody #: 507-004-202

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: 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: E. Danby Date: 4/19/07

Client Sample ID	Analysis Requested	Condition	Comments/ [illegible]

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary, process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

5/17/2007 7:39:55 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #: 235

AnalyDueDate: 06/04/2007 W05159

Sep1 DT/Tm Tech:

Batch: 7113496 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7113496 AZS7, 7113497 BCS8, 7113501 CLTL, 7113502 BNTB, 7113503 FPS5, 7113504 5SS3, 7113506 ARS6,

Prep Tech: BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JT5W9-1-AC J7D180228-1-SAMP 04/17/2007 09:16	200.50g,in	AmtRec: 20ML,5XLP,2X4LP	#Containers: 8	1.5	32.2	.50	10B	1044	8/31/07	Scr: Alpha: 1.41E-03 uCi/Sa Beta: -7.00E-04 uCi/Sa
2 JT5XL-1-AC J7D180228-2-SAMP 04/17/2007 11:00	166.20g,in	AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		41.6		1SC			Scr: Alpha: 3.36E-03 uCi/Sa Beta: -1.82E-03 uCi/Sa
3 JT5X2-1-AC J7D180228-4-SAMP 04/17/2007 08:27	200.10g,in	AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		35.5		10D			Scr: Alpha: 2.98E-03 uCi/Sa Beta: -2.25E-03 uCi/Sa
4 JVA8Q-1-AA J7D200154-1-SAMP 04/11/2007 08:58	129.60g,in	AmtRec: 20ML,LP	#Containers: 2		45.6	100	10A	1348	8/31/07	Scr: Alpha: 1.68E-04 uCi/Sa Beta: -3.24E-05 uCi/Sa
5 JVA8Q-1-AD-X J7D200154-1-DUP 04/11/2007 08:58	131.00g,in	AmtRec: 20ML,LP	#Containers: 2		43.9		10B			Scr: Alpha: 1.68E-04 uCi/Sa Beta: -3.24E-05 uCi/Sa
6 JVC3T-1-AA J7D200283-1-SAMP 04/19/2007 10:55	185.70g,in	AmtRec: 20ML,500ML,LP	#Containers: 3		44.0	.50	10F	1044	8/31/07	Scr: Alpha: -5.79E-06 uCi/Sa Beta: -4.64E-05 uCi/Sa
7 JVC4J-1-AA J7D200283-3-SAMP 04/19/2007 12:37	201.30g,in	AmtRec: 20ML,500ML,4XLP	#Containers: 6		49.1		10A	1152	8/31/07 r	Scr: Alpha: 3.33E-04 uCi/Sa Beta: -5.28E-04 uCi/Sa

5/17/2007 7:39:58 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113496 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JVC42-1-AA J7D200283-4-SAMP 04/19/2007 09:47		197.10g,in AmtRec: 20ML,500ML,LP #Containers: 3		1.5	24.6	.50	10B	1152	5/31/07 R Scr: Alpha: -1.93E-04 uCi/Sa	Beta: 1.32E-04 uCi/Sa
9 JVC47-1-AA J7D200283-5-SAMP 04/19/2007 11:49		204.00g,in AmtRec: 20ML,500ML,LP #Containers: 3			48.5		10C		Scr: Alpha: 2.21E-04 uCi/Sa	Beta: -4.61E-05 uCi/Sa
10 JVC6M-1-AC J7D200294-1-SAMP 04/19/2007 08:00		201.30g,in AmtRec: 20ML,2XLP,3X4LP #Containers: 6			0.4		10d		Scr: Alpha: 2.99E-04 uCi/Sa	Beta: -8.90E-04 uCi/Sa
11 JVC7H-1-AC J7D200299-1-SAMP 04/19/2007 12:55		199.60g,in AmtRec: 20ML,2XLP,3X4LP #Containers: 6			25.1		10F		Scr: Alpha: -9.64E-04 uCi/Sa	Beta: -4.33E-04 uCi/Sa
12 JVG5F-1-AA-B J7D230000-496-BLK 04/11/2007 08:58		201.00g,in AmtRec: #Containers: 1			0.4	100	10D	1348	5/31/07 S Scr: Alpha:	Beta:
13 JVG5F-1-AC-C J7D230000-496-LCS 04/11/2007 08:58		200.00g,in AmtRec: #Containers: 1	ASD4177 03/23/07,pd 06/01/01,r		0.6	100	10F		Scr: Alpha:	Beta:

5/17/2007 7:40:01 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113496 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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

Comments: JT5W9-SAMP "Comments. Aliquots that are reduced are due to weight screen results. JB 05/17/07"

PH <2.0 JB 5-17-07

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

JT5W91AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JVG5F1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JVG5F1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JT5W91AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JVG5F1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JVG5F1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/1/2007 2:05:50 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/1/2006, 6/6/2007, Batch: '7113496', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113496						
AC		**CalcC**	**BockJ**	5/17/2007 7:28:54		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/17/2007 7:28:54 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/17/2007 7:39:56 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/29/2007 3:04:11 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/30/2007 5:22:39 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	5/30/2007 5:58:51 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/31/2007 3:26:47 PM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/17/2007 7:39:56		
AC			**AshworthA**	5/29/2007 3:04:11 PM		
AC			**AshworthA**	5/30/2007 5:22:39 PM		
AC			**DAWKINSO**	5/30/2007 5:58:51 PM		
AC			**StringerR**	5/31/2007 3:26:47 PM		

AC: Accepting Entry; SC: Status Change

5/17/2007 8:01:09 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 06/04/2007 W05159

Sep1 DT/Tm Tech:

Batch: 7113497 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 JT5W9-1-AD J7D180228-1-SAMP 04/17/2007 09:16	198.40g,in	AmtRec: 20ML,5XLP,2X4LP #Containers: 8		1.5	53.4	100	26B	1858	5/31/07	Scr: Alpha: 1.41E-03 uCi/Sa Beta: -7.00E-04 uCi/Sa
2 JT5XL-1-AD J7D180228-2-SAMP 04/17/2007 11:00	198.60g,in	AmtRec: 20ML,5XLP,2X4LP #Containers: 8			73.4		26C			Scr: Alpha: 3.36E-03 uCi/Sa Beta: -1.82E-03 uCi/Sa
3 JT5X2-1-AD J7D180228-4-SAMP 04/17/2007 08:27	199.50g,in	AmtRec: 20ML,5XLP,2X4LP #Containers: 8			65.6		26D			Scr: Alpha: 2.98E-03 uCi/Sa Beta: -2.25E-03 uCi/Sa
4 JT7Q6-1-AA J7D190114-2-SAMP 04/18/2007 13:01	202.70g,in	AmtRec: 20ML,7XLP #Containers: 8			63.0		27A			Scr: Alpha: 8.67E-04 uCi/Sa Beta: 3.89E-04 uCi/Sa
5 JVA8Q-1-AC J7D200154-1-SAMP 04/11/2007 08:58	191.30g,in	AmtRec: 20ML,LP #Containers: 2			92.0		27B			Scr: Alpha: 1.68E-04 uCi/Sa Beta: -3.24E-05 uCi/Sa
6 JVC3T-1-AC J7D200283-1-SAMP 04/19/2007 10:55	199.00g,in	AmtRec: 20ML,500ML,LP #Containers: 3			74.2		27C			Scr: Alpha: -5.79E-06 uCi/Sa Beta: -4.64E-05 uCi/Sa
7 JVC4J-1-AC J7D200283-3-SAMP 04/19/2007 12:37	199.50g,in	AmtRec: 20ML,500ML,4XLP #Containers: 6			73.1		27D			Scr: Alpha: 3.33E-04 uCi/Sa Beta: -5.28E-04 uCi/Sa

5/17/2007 8:01:12 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113497 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JVC42-1-AC J7D200283-4-SAMP 04/19/2007 09:47		199.50g,in AmtRec: 20ML,500ML,LP	#Containers: 3	1.5	47.2	100	28A Scr:	1858 Alpha: -1.93E-04 uCi/Sa	5/31/02000 Beta: 1.32E-04 uCi/Sa	
9 JVC42-1-AE-X J7D200283-4-DUP 04/19/2007 09:47		199.70g,in AmtRec: 20ML,500ML,LP	#Containers: 3		47.8		28B Scr:	Alpha: -1.93E-04 uCi/Sa	Beta: 1.32E-04 uCi/Sa	
10 JVC47-1-AC J7D200283-5-SAMP 04/19/2007 11:49		201.70g,in AmtRec: 20ML,500ML,LP	#Containers: 3		82.7		28 C Scr:	Alpha: 2.21E-04 uCi/Sa	Beta: -4.61E-05 uCi/Sa	
11 JVC6M-1-AD J7D200294-1-SAMP 04/19/2007 08:00		201.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		0.3		28 D Scr:	Alpha: 2.99E-04 uCi/Sa	Beta: -8.90E-04 uCi/Sa	
12 JVC7H-1-AD J7D200299-1-SAMP 04/19/2007 12:55		200.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6		46.5		31A Scr:	1900 Alpha: -9.64E-04 uCi/Sa	Beta: -4.33E-04 uCi/Sa	
13 JVG5K-1-AA-B J7D230000-497-BLK 04/19/2007 09:47		201.60g,in AmtRec:	#Containers: 1		0.4		31B Scr:	Alpha:	Beta:	
14 JVG5K-1-AC-C J7D230000-497-LCS 04/19/2007 09:47		198.90g,in AmtRec:	BESB3056 03/23/07,pd 08/08/06,r #Containers: 1		0.4		31C Scr:	Alpha:	Beta:	

5/17/2007 8:01:15 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113497 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: JT5W9-SAMP "Comments. Aliquots that are reduced are due to weight screen results. JB 05/17/07"
PH < 2.0 JB 5-17-07

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

JT5W91AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JVG5K1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JVG5K1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JT5W91AD-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JVG5K1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JVG5K1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

6/1/2007 3:08:36 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/1/2006, 6/6/2007, Batch: '7113497', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113497						
AC		**CalcC**	**BockJ**	5/17/2007 7:47:00		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/17/2007 7:47:00 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/17/2007 8:01:40 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/30/2007 10:37:14 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/31/2007 4:20:06 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	5/31/2007 5:11:13 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	5/31/2007 10:32:09 PM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/17/2007 8:01:40		
AC			**AshworthA**	5/30/2007 10:37:14		
AC			**AshworthA**	5/31/2007 4:20:06 PM		
AC			**DAWKINSO**	5/31/2007 5:11:13 PM		
AC			**DAWKINSO**	5/31/2007 10:32:09		

AC: Accepting Entry; SC: Status Change

5/29/2007 6:38:55 PM

Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech: 05/22/2007 14:00,ManisD

Batch: 7113501 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 05/29/2007 09:39,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JT5W9-1-AF J7D180228-1-SAMP		1006.10g,in	srtb14765 05/07/07,pd 09/11/06,r		1.0	24.6	100	2D 2D	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 09:16		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8					Scr:	Alpha: 1.41E-03 uCi/Sa		Beta: -7.00E-04 uCi/Sa
2 JT5XL-1-AF J7D180228-2-SAMP		1007.10g,in	srtb14766 05/07/07,pd 09/11/06,r		1.0	24.4	100	3A 3A	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 11:00		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8					Scr:	Alpha: 3.36E-03 uCi/Sa		Beta: -1.82E-03 uCi/Sa
3 JT5X2-1-AF J7D180228-4-SAMP		991.30g,in	srtb14767 05/07/07,pd 09/11/06,r		1.0	24.8	100	3B 3B	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 08:27		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8					Scr:	Alpha: 2.98E-03 uCi/Sa		Beta: -2.25E-03 uCi/Sa
4 JT5X2-1-AG-X J7D180228-4-DUP		988.50g,in	srtb14768 05/07/07,pd 09/11/06,r		1.0	24.3	100	3C 3C	0747 0831	5/31/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 08:27		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8					Scr:	Alpha: 2.98E-03 uCi/Sa		Beta: -2.25E-03 uCi/Sa

5/29/2007 6:38:56 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech: 05/22/2007 14:00,ManisD

Batch: 7113501 WATER pCi/L **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Sep2 DT/Tm Tech: 05/29/2007 09:39,ManisD

Prep Tech: ,ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JT7QC-1-AD J7D190111-2-SAMP		999.50g,in	srtb14799 05/09/07,pd 09/11/06,r		1.0	24.2	100	3D 3D	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/18/2007 09:43		AmtRec: 20ML,4XLP,4LP	#Containers: 6					Scr:	Alpha: 1.33E-03 uCi/Sa	Beta: 3.46E-04 uCi/Sa	
6 JT7QM-1-AD J7D190111-3-SAMP		1006.00g,in	srtb14800 05/09/07,pd 09/11/06,r		1.0	24.8	100 85	4A 4A	0919 0747 1013	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/18/2007 11:58		AmtRec: 20ML,4XLP,4LP	#Containers: 6					Scr:	Alpha: 2.46E-03 uCi/Sa	Beta: 6.74E-03 uCi/Sa 1.1E-01L	
7 JT7Q4-1-AA J7D190114-1-SAMP		1008.00g,in	srtb14801 05/09/07,pd 09/11/06,r		1.0	24.4	100	4B 4A	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/18/2007 11:16		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -2.88E-04 uCi/Sa	Beta: 2.64E-04 uCi/Sa	
8 JT7Q6-1-AD J7D190114-2-SAMP		998.60g,in	srtb14802 05/09/07,pd 09/11/06,r		1.0	25.3	100	4C 4B	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/18/2007 13:01		AmtRec: 20ML,7XLP	#Containers: 8					Scr:	Alpha: 8.67E-04 uCi/Sa	Beta: 3.89E-04 uCi/Sa	

5/29/2007 6:38:57 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 06/04/2007

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

Sep1 DT/Tm Tech: 05/22/2007 14:00,ManisD

Sep2 DT/Tm Tech: 05/29/2007 09:39,ManisD

Prep Tech: ,ManisD

Batch: 7113501 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
9 JVC4J-1-AD J7D200283-3-SAMP		1005.70g,in	srtb14803 05/09/07,pd 09/11/06,r		1.0	24.8	100	4D 4D	0747 0831	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/19/2007 12:37		AmtRec: 20ML,500ML,4XLP	#Containers: 6					Scr:	Alpha: 3.33E-04 uCi/Sa		Beta: -5.28E-04 uCi/Sa
10 JVG56-1-AA-B J7D230000-501-BLK		997.80g,in	srtb14804 05/09/07,pd 09/11/06,r		1.0	25.1	100	7A 7A	0934 0924	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 08:27		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
11 JVG56-1-AC-C J7D230000-501-LCS		996.70g,in	srsg1345 04/19/07,pd 09/11/06,r		1.0	24.5	100	7B 7B	0934 0924	5/30/07 5/31/07	
						~~05/22/2007 14:00,s1, 05/29/2007~~					
04/17/2007 08:27		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments: JT5W9-SAMP "Comments. "
JT7Q6-SAMP "Comments. No DUP. aliquot poured due to insufficient sample amount. JB 05/23/07"

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

Sample Preparation/Analysis

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech: 05/22/2007 14:00,ManisD

Batch: 7113501 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech: 05/29/2007 09:39,ManisD

Prep Tech: ManisD

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

```
JT5W91AF-SAMP Constituent List:
  Sr-85      RDL:          pCi/L    LCL:20    UCL:105    RPD:20     Sr-90     RDL:2     pCi/L    LCL:70    UCL:130    RPD:20

JVG561AA-BLK:
  Sr-85      RDL:          pCi/L    LCL:20    UCL:105    RPD:20     Sr-90     RDL:2     pCi/L    LCL:      UCL:       RPD:

JVG561AC-LCS:
  Sr-85      RDL:          pCi/L    LCL:20    UCL:105    RPD:20     Sr-90     RDL:2     pCi/L    LCL:70    UCL:130    RPD:20

JT5W91AF-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG561AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG561AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

6/1/2007 2:40:17 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/1/2006, 6/6/2007, Batch: '7113501', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113501						
AC		CalcC	BockJ	5/18/2007 8:11:09		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/18/2007 8:11:09 AM	rich-rc-5016 rEVISION 6
SC			BockJ	Prep1C	5/18/2007 8:32:21 AM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	5/18/2007 9:18:46 AM	RICH-RC-5006 REVISION 6
SC			ManisD	Sep1C	5/22/2007 5:31:04 PM	RICH-RC-5006 REVISION 6
SC			DAWKINSO	InCnt1	5/22/2007 5:38:27 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	Cnt1C	5/23/2007 6:55:44 AM	RICH-RD-0007 REVISION 5
SC			ManisD	Sep2C	5/29/2007 7:00:20 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	5/29/2007 7:47:06 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/31/2007 10:38:19 AM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/18/2007 8:32:21		
AC			**BockJ**	5/18/2007 8:35:04		
AC			**ManisD**	5/18/2007 9:18:46		
AC			**ManisD**	5/22/2007 5:31:04 PM		
AC			**DAWKINSO**	5/22/2007 5:38:27 PM		
AC			**BlackCL**	5/23/2007 6:55:44		
AC			**ManisD**	5/29/2007 7:00:20 PM		
AC			**DAWKINSO**	5/29/2007 7:47:06 PM		
AC			**StringerR**	5/31/2007 10:38:19		

AC: Accepting Entry; SC: Status Change

PGW WATER

5/23/2007 7:58:18 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/04/2007 W05159

Batch: 7113499 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JT7QC-1-AC J7D190111-2-SAMP 04/18/2007 09:43		1997.50g,in AmtRec: 20ML,4XLP,4LP	#Containers: 6		100mL	100	G15	Scr: Alpha: 1.33E-03 uCi/Sa	2013 5/30/07	Beta: 3.46E-04 uCi/Sa
2 JT7QM-1-AC J7D190111-3-SAMP 04/18/2007 11:58		1995.40g,in AmtRec: 20ML,4XLP,4LP	#Containers: 6				64	Scr: Alpha: 2.46E-03 uCi/Sa	0716 5/31/07	Beta: 6.74E-03 uCi/Sa 1.1E-01L
3 JVC6M-1-AE J7D200294-1-SAMP 04/19/2007 08:00		1996.20g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6				65	Scr: Alpha: 2.99E-04 uCi/Sa	0714	Beta: -8.90E-04 uCi/Sa
4 JVC7H-1-AE J7D200299-1-SAMP 04/19/2007 12:55		1981.50g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6				66	Scr: Alpha: -9.64E-04 uCi/Sa	0717	Beta: -4.33E-04 uCi/Sa
5 JVC7H-1-AG-X J7D200299-1-DUP 04/19/2007 12:55		1972.70g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6				67	Scr: Alpha: -9.64E-04 uCi/Sa	0717	Beta: -4.33E-04 uCi/Sa
6 JVG51-1-AA-B J7D230000-499-BLK 04/19/2007 12:55		1998.00g,in AmtRec:	#Containers: 1				610	Scr: Alpha:	0717	Beta:
7 JVG51-1-AC-C J7D230000-499-LCS 04/19/2007 12:55		2000.20g,in AmtRec:	QCAG1361 03/23/07,pd 03/07/05,r #Containers: 1				613	Scr: Alpha:	0717	Beta:

5/23/2007 7:58:23 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113499 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

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

Comments: PH <2.0 JB 5-23-07

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

JT7QC1AC-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:

JVG511AA-BLK:

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

JVG511AC-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						

JT7QC1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG511AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG511AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/31/2007 2:43:09 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/31/2006, 6/5/2007, Batch: '7113499', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113499						
AC		**CalcC**	**BockJ**	5/23/2007 7:48:48		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/23/2007 7:48:48 AM	rich-rc-5015 rEVISION 4
SC			BockJ	Prep1C	5/23/2007 7:58:29 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	5/29/2007 8:52:15 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	5/30/2007 6:23:56 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	5/30/2007 6:32:46 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	5/31/2007 8:29:57 AM	RICH-RD-0007 REVISION 5
AC			**BockJ**	5/23/2007 7:58:29		
AC			**AshworthA**	5/29/2007 8:52:15		
AC			**AshworthA**	5/30/2007 6:23:56 PM		
AC			**DAWKINSO**	5/30/2007 6:32:46 PM		
AC			**StringerR**	5/31/2007 8:29:57		
AC			**StringerR**	5/31/2007 9:07:33		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

5/23/2007 8:14:59 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/04/2007 W05159

Sep1 DT/Tm Tech:

Batch: 7113500 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 JT7P1-1-AA J7D190111-1-SAMP 04/18/2007 11:16		2498.20g,in AmtRec: 20ML,3XLP	#Containers: 4		100mL	100	G10 Scr:	1843 Alpha: 3.12E-04 uCi/Sa	5/31/07 DD Beta: 1.62E-04 uCi/Sa	
2 JT7Q6-1-AC J7D190114-2-SAMP 04/18/2007 13:01		2502.90g,in AmtRec: 20ML,7XLP	#Containers: 8				G7 Scr:	1831 Alpha: 8.67E-04 uCi/Sa	5/31/07 DD Beta: 3.89E-04 uCi/Sa	
3 JT7Q6-1-AE-X J7D190114-2-DUP 04/18/2007 13:01		AmtRec: 20ML,7XLP	#Containers: 8		—		G4 Scr:	2024 Alpha: 8.67E-04 uCi/Sa	5/31/07 DD Beta: 3.89E-04 uCi/Sa	
4 JVG54-1-AA-B J7D230000-500-BLK 04/18/2007 13:01		2498.90g,in AmtRec:	#Containers: 1		100mL		G15 5/30/07 DD Scr:	2023 Alpha:	Beta:	
5 JVG54-1-AC-C J7D230000-500-LCS 04/18/2007 13:01		2501.10g,in AmtRec:	QCAG1362 03/23/07,pd 03/07/05,r #Containers: 1				G5 Scr:	2024 Alpha:	Beta:	

Comments: JT7Q6-SAMP "Comments. No DUP. aliquot poured due to insufficient sample amount. JB 05/23/07"
PH<2.0 JB 5-23-07

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

JT7P11AA-SAMP Constituent List:

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113500 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:
Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						
JVG541AA-BLK:											
Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						
JVG541AC-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						

JT7P11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG541AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG541AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 6/4/07

CUSTOMER PGW

ANALYSIS Gamma

MATRIX water

LOT NUMBER J7D9011 4

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 713500

	LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1)	JVG5L1AC	68% LCS for Cs137
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

6/4/2007 11:18:01 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113500 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7113499 AWTA, 7113500 AWTA, 7113501 CLTL, 7113506 ARS6,

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 **JT7P1-1-AA** J7D190111-1-SAMP 04/18/2007 11:16		2498.20g,in								
		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 3.12E-04 uCi/Sa	Beta: 1.62E-04 uCi/Sa
2 **JT7Q6-1-AC** J7D190114-2-SAMP 04/18/2007 13:01		2502.90g,in								
		AmtRec: 20ML,7XLP	#Containers: 8					Scr:	Alpha: 8.67E-04 uCi/Sa	Beta: 3.89E-04 uCi/Sa
3 **JT7Q6-1-AE-X** J7D190114-2-DUP 04/18/2007 13:01										
		AmtRec: 20ML,7XLP	#Containers: 8					Scr:	Alpha: 8.67E-04 uCi/Sa	Beta: 3.89E-04 uCi/Sa
4 **JVG54-1-AA-B** J7D230000-500-BLK 04/18/2007 13:01		2498.90g,in								
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
5 **JVG54-1-AC-C** J7D230000-500-LCS 04/18/2007 13:01		2501.10g,in	QCAG1362 03/23/07,pd 03/07/05,r							
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
6 **JVG54-2-AC-C** J7D230000-500-LCS 04/18/2007 13:01		2501.10g	QCAG 1362		100ml	100min	615	1418	6/4/07	
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

6/4/2007 11:18:07 AM

Sample Preparation/Analysis

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

AnalyDueDate: 06/04/2007

Batch: 7113500 **pCi/L**
SEQ Batch, Test: None

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

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

Comments: JT7Q6-SAMP "Comments. No DUP. aliquot poured due to insufficient sample amount. JB 05/23/07"

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

JT7P11AA-SAMP Constituent List:

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

JVG541AA-BLK:

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

JVG541AC-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						

JVG542AC-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						

JT7P11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG541AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG541AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JVG542AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

6/4/2007 11:18:07 AM

Sample Preparation/Analysis

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

AnalyDueDate: 06/04/2007

Batch: 7113500 **pCi/L**
SEQ Batch, Test: None

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

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

Approved By _____ Date: _____

6/4/2007 2:31:24 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/4/2006, 6/9/2007, Batch: '7113500', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113500						
AC		**CalcC**	**BockJ**	5/23/2007 8:03:39		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/23/2007 8:03:39 AM	rich-rc-5015 rEVISION 4
SC			BockJ	Prep1C	5/23/2007 8:15:03 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	5/30/2007 11:42:04 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	5/31/2007 4:19:59 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	5/31/2007 5:02:56 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	CalcC	5/31/2007 10:31:27 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	6/4/2007 2:16:11 PM	RICH-RD-0007 REVISION 5
AC			**BockJ**	5/23/2007 8:15:03		
AC			**AshworthA**	5/30/2007 11:42:04		
AC			**AshworthA**	5/31/2007 4:19:59 PM		
AC			**DAWKINSO**	5/31/2007 5:02:56 PM		
AC			**DAWKINSO**	5/31/2007 10:31:27		
AC			**BlackCL**	6/4/2007 2:16:11 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

5/25/2007 9:49:31 AM

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: 06/04/2007 W05159

Sep1 DT/Tm Tech:

Batch: 7113502 WATER pCi/L **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ManisD,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 JT5W9-1-AE J7D180228-1-SAMP 04/17/2007 09:16		3916.50g,in AmtRec: 20ML,5XLP,2X4LP	ita6256 05/08/07 #Containers: 8		35.7	100	L2	1613	5/31/07 r Scr: Alpha: 1.41E-03 uCi/Sa	Beta: -7.00E-04 uCi/Sa
2 JT5XL-1-AE J7D180228-2-SAMP 04/17/2007 11:00		3887.00g,in AmtRec: 20ML,5XLP,2X4LP	ita6257 05/08/07 #Containers: 8		36.8		L4	1616	5/31/07 r Scr: Alpha: 3.36E-03 uCi/Sa	Beta: -1.82E-03 uCi/Sa
3 JT5X2-1-AE J7D180228-4-SAMP 04/17/2007 08:27		3916.30g,in AmtRec: 20ML,5XLP,2X4LP	ita6258 05/08/07 #Containers: 8		37.1		L5	1617	5/31/07 r Scr: Alpha: 2.98E-03 uCi/Sa	Beta: -2.25E-03 uCi/Sa
4 JT7TR-1-AA J7D190122-1-SAMP 04/18/2007 09:26		3972.00g,in AmtRec: 20ML,500ML,2X4LP	ita6259 05/08/07 #Containers: 4		35.7		L2	1808	5/31/07 DD Scr: Alpha: -2.26E-04 uCi/Sa	Beta: 1.05E-04 uCi/Sa
5 JT70F-1-AA J7D190134-1-SAMP 04/18/2007 11:06		3939.10g,in AmtRec: 20ML,2X4LP	ita6260 05/08/07 #Containers: 3		36.3		L4	1811	5/31/07 DD Scr: Alpha: -4.24E-04 uCi/Sa	Beta: -7.44E-05 uCi/Sa
6 JT70F-1-AC-X J7D190134-1-DUP 04/18/2007 11:06		3948.00g,in AmtRec: 20ML,2X4LP	ita6261 05/08/07 #Containers: 3		35.6		L5	1811	5/31/07 DD Scr: Alpha: -4.24E-04 uCi/Sa	Beta: -7.44E-05 uCi/Sa
7 JT70X-1-AA J7D190134-2-SAMP 04/18/2007 13:31		3951.70g,in AmtRec: 20ML,2X4LP	ita6262 05/08/07 #Containers: 3		38.9		L2	1956	5/31/07 DD Scr: Alpha: -4.22E-04 uCi/Sa	Beta: 7.04E-04 uCi/Sa

STL Richland
Richland Wa.

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

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

5/25/2007 9:49:36 AM

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: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113502 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 JVC6M-1-AF J7D200294-1-SAMP 04/19/2007 08:00		3938.00g,in AmtRec: 20ML,2XLP,3X4LP	ITA6263 05/08/07 #Containers: 6		36.3	100	L4	1958	5/31/07 DN ~~5/31/07~~ DN 5/31/07 DN	
								Scr: Alpha: 2.99E-04 uCi/Sa		Beta: -8.90E-04 uCi/Sa
9 JVC7H-1-AF J7D200299-1-SAMP 04/19/2007 12:55		3877.50g,in AmtRec: 20ML,2XLP,3X4LP	ITA6264 05/08/07 #Containers: 6		36.4		L5	1959	5/31/07 DN	
								Scr: Alpha: -9.64E-04 uCi/Sa		Beta: -4.33E-04 uCi/Sa
10 JVG6D-1-AA-B J7D230000-502-BLK 04/18/2007 11:06		3990.20g,in AmtRec:	ITA6265 05/08/07 #Containers: 1		35.8		L2	2139		
								Scr: Alpha:		Beta:
11 JVG6D-1-AC-C J7D230000-502-LCS 04/18/2007 11:06		3875.70g,in AmtRec:	ISD0747 04/25/07,pd 04/11/07,r #Containers: 1		37.0		L4	2141		
								Scr: Alpha:		Beta:

Comments: ~~JT5W9-SAMP "Comments."~~ ~~pH 2.0~~ JB - 5-25-07
pH-neutral JB 5-25-07

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

JT5W91AE-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JVG6D1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JVG6D1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

JT5W91AE-SAMP Calc Info:

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113502 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:

```
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6D1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6D1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

6/1/2007 4:18:26 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/1/2006, 6/6/2007, Batch: '7113502', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113502						
AC		**CalcC**	**BockJ**	5/25/2007 8:26:50		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/25/2007 8:26:50 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/25/2007 9:49:34 AM	RICH-RC-5017 REVISION 5
SC			BostedD	InPrep2	5/29/2007 8:27:23 AM	RICHRC5025 REV3
SC			BostedD	Prep2C	5/31/2007 2:27:18 PM	RICHRC5025 REV3
SC			StringerR	InCnt1	5/31/2007 2:33:59 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	6/1/2007 8:55:40 AM	RICH-RD-0007 REVISION 5
AC			**BockJ**	5/25/2007 9:49:34		
AC			**BostedD**	5/29/2007 8:27:23		
AC			**BostedD**	5/31/2007 2:27:18 PM		
AC			**StringerR**	5/31/2007 2:33:59 PM		
AC			**StringerR**	6/1/2007 8:55:40 AM		7142454
AC			**StringerR**	6/1/2007 9:03:43 AM		

AC: Accepting Entry; SC: Status Change

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 6/4/07

CUSTOMER PGW

ANALYSIS TC99

MATRIX water

LOT NUMBER J7D180228

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7113503

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) all	TS18 - please shake, wipe, recount.
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	

5/31/2007 12:41:01 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 06/04/2007

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

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Batch: 7151391 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

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

1 JT5XR-2-AC
J7D180228-3-SAMP
04/17/2007 12:44 AmtRec: 20ML,500ML,2XLP #Containers: 4 Scr: Alpha: 2.50E-04 uCi/Sa Beta: -2.16E-04 uCi/Sa

2 JT5XR-2-AD-S
J7D180228-3-MS
04/17/2007 12:44 AmtRec: 20ML,500ML,2XLP #Containers: 4 Scr: Alpha: 2.50E-04 uCi/Sa Beta: -2.16E-04 uCi/Sa

3 JT7TR-2-AC
J7D190122-1-SAMP
04/18/2007 09:26 AmtRec: 20ML,500ML,2X4LP #Containers: 4 Scr: Alpha: -2.26E-04 uCi/Sa Beta: 1.05E-04 uCi/Sa

4 JT7TR-2-AD-X
J7D190122-1-DUP
04/18/2007 09:26 AmtRec: 20ML,500ML,2X4LP #Containers: 4 Scr: Alpha: -2.26E-04 uCi/Sa Beta: 1.05E-04 uCi/Sa

5 JVG6N-2-AA-B
J7D230000-503-BLK
04/18/2007 09:26 AmtRec: #Containers: 1 Scr: Alpha: Beta:

6 JVG6N-2-AC-C
J7D230000-503-LCS
04/18/2007 09:26 AmtRec: #Containers: 1 Scr: Alpha: Beta:

7 JVG6N-2-AD-B
J7D230000-503-BLK
04/18/2007 09:26 AmtRec: #Containers: 1 Scr: Alpha: Beta:

5/31/2007 12:41:08 PM

Sample Preparation/Analysis

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

AnalyDueDate: 06/04/2007

Batch: 7151391 **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:

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

JT5XR2AC-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JT5XR2AD-MS Constituent List:

JVG6N2AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JVG6N2AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JVG6N2AD-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JT5XR2AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT5XR2AD-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JVG6N2AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JVG6N2AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JVG6N2AD-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/4/2007 11:02:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/4/2006, 6/9/2007, Batch: '7151391', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7151391						
AC		**CalcC**	**BlackCL**	6/1/2007 12:44:06 PM		
SC			BlackCL	InCnt1	6/1/2007 12:44:06 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	6/3/2007 12:12:00 PM	RICH-RD-0001 REVISION 3
AC			**StringerR**	6/3/2007 12:12:00 PM		

AC: Accepting Entry; SC: Status Change

4/23/2007 3:04:09 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/04/2007 W05159

Batch: 7113506 WATER pCi/L **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07am
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 JT5W9-1-AA J7D180228-1-SAMP 04/17/2007 09:16		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8			Scr:	Alpha:	Beta:
2 JT5XL-1-AA J7D180228-2-SAMP 04/17/2007 11:00		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8			Scr:	Alpha:	Beta:
3 JT5X2-1-AA J7D180228-4-SAMP 04/17/2007 08:27		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8			Scr:	Alpha:	Beta:
4 JT7QC-1-AA J7D190111-2-SAMP 04/18/2007 09:43		AmtRec: 20ML,4XLP,4LP	#Containers: 6			Scr:	Alpha:	Beta:
5 JT7QM-1-AA J7D190111-3-SAMP 04/18/2007 11:58		AmtRec: 20ML,4XLP,4LP	#Containers: 6			Scr:	Alpha:	Beta:
6 JVC6M-1-AA J7D200294-1-SAMP 04/19/2007 08:00		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
7 JVC6M-1-AG-X J7D200294-1-DUP 04/19/2007 08:00		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha:	Beta:

4/23/2007 3:04:26 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07 Tm
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7113506 **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 JVC7H-1-AA J7D200299-1-SAMP 04/19/2007 12:55		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
9 JVG6W-1-AA-B J7D230000-506-BLK 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JVG6W-1-AC-C J7D230000-506-LCS 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JVG6W-1-AD-BX J7D230000-506-MBLK 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
12 JVG6W-1-AE-CM J7D230000-506-MLCS 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
13 JVG6W-1-AF-BN J7D230000-506-IBLK 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
14 JVG6W-1-AG-BN J7D230000-506-IBLK 04/19/2007 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

4/23/2007 3:04:34 PM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07 Tom
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7113506 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:
15 JVG6W-1-AH-BN J7D230000-506-IBLK 04/19/2007 08:00	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

```
JT5W91AA-SAMP Constituent List:
  H-3          RDL:400          pCi/L     LCL:70       UCL:130      RPD:20
JVG6W1AA-BLK:
  H-3          RDL:400          pCi/L     LCL:         UCL:         RPD:
JVG6W1AC-LCS:
  H-3          RDL:400          pCi/L     LCL:70       UCL:130      RPD:20
JVG6W1AD-MBLK:
  H-3          RDL:400          pCi/L     LCL:         UCL:         RPD:
JVG6W1AE-MLCS:
  H-3          RDL:400          pCi/L     LCL:70       UCL:130      RPD:20
JVG6W1AF-IBLK:
  H-3          RDL:400          pCi/L     LCL:         UCL:         RPD:
JVG6W1AG-IBLK:
  H-3          RDL:400          pCi/L     LCL:         UCL:         RPD:
JVG6W1AH-IBLK:
  H-3          RDL:400          pCi/L     LCL:         UCL:         RPD:
JT5W91AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7113506 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:

```
JVG6W1AF-IBLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AG-IBLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6W1AH-IBLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

5/25/2007 4:43:57 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/25/2006, 5/30/2007, Batch: '7113506', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113506						
AC		**CalcC**	**McDowellD**	5/14/2007 1:04:56 PM		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	5/14/2007 1:04:56 PM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	5/18/2007 3:10:27 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	5/18/2007 3:24:39 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	5/20/2007 10:38:18 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	5/18/2007 3:10:27 PM		
AC			**DAWKINSO**	5/18/2007 3:24:39 PM		
AC			**StringerR**	5/20/2007 10:38:18		

AC: Accepting Entry; SC: Status Change

4/23/2007 3:04:04 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/04/2007 WOS159

Batch: 7113505 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 17424
Pipet #:
Sep1 DT/Tm Tech: 5-1-07 AM
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JVC4D-1-AA J7D200283-2-SAMP 04/19/2007 13:26		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
2 JVC4D-1-AC-X J7D200283-2-DUP 04/19/2007 13:26		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
3 JVG6T-1-AA-B J7D230000-505-BLK 04/19/2007 13:26		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JVG6T-1-AC-C J7D230000-505-LCS 04/19/2007 13:26		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JVG6T-1-AD-BN J7D230000-505-IBLK 04/19/2007 13:26		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JVC4D1AA-SAMP Constituent List:
H-3 RDL:1.00E+01 pCi/L LCL:70 UCL:130 RPD:20

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: 5-1-07 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7113505 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:

```
JVG6T1AA-BLK:
  H-3          RDL:1.00E+01    pCi/L    LCL:        UCL:        RPD:
JVG6T1AC-LCS:
  H-3          RDL:10          pCi/L    LCL:70      UCL:130     RPD:20
JVG6T1AD-IBLK:
  H-3          RDL:1.00E+01    pCi/L    LCL:        UCL:        RPD:
JVC4D1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JVG6T1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JVG6T1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JVG6T1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

5/14/2007 1:40:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/14/2006, 5/19/2007, Batch: '7113505', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113505						
AC		**CalcC**	**McDowellD**	4/25/2007 2:30:47 PM		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InPrep	4/25/2007 2:30:47 PM	RICH-RC-5024 REVISION 2
SC			McDowellD	InSep1	5/1/2007 9:58:54 AM	RICH-RC-5024 REVISION 2
SC			McDowellD	Sep1C	5/11/2007 3:32:29 PM	RICH-RC-5024 REVISION 2
SC			DAWKINSO	InCnt1	5/11/2007 4:12:43 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	5/14/2007 6:38:59 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	5/1/2007 9:58:54 AM		
AC			**McDowellD**	5/11/2007 3:32:29 PM		
AC			**DAWKINSO**	5/11/2007 4:12:43 PM		
AC			**BlackCL**	5/14/2007 6:38:59		

AC: Accepting Entry; SC: Status Change

4/23/2007 3:03:58 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 06/04/2007 W05159

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

Batch: 7113504 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 4-30-07 Tm
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 JT5XR-1-AA J7D180228-3-SAMP 04/17/2007 12:44		AmtRec: 20ML,500ML,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
2 JT5XR-1-AE-X J7D180228-3-DUP 04/17/2007 12:44		AmtRec: 20ML,500ML,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
3 JVG6P-1-AA-B J7D230000-504-BLK 04/17/2007 12:44		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JVG6P-1-AC-C J7D230000-504-LCS 04/17/2007 12:44		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JVG6P-1-AD-BN J7D230000-504-IBLK 04/17/2007 12:44		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JT5XR1AA-SAMP Constituent List:
C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20

Sample Preparation/Analysis

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

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 4-30-07am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7113504 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:

```
JVG6P1AA-BLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:        UCL:        RPD:
JVG6P1AC-LCS:
  C-14        RDL:200         pCi/L    LCL:70      UCL:130     RPD:20
JVG6P1AD-IBLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:        UCL:        RPD:
JT5XR1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6P1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6P1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG6P1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

5/2/2007 2:12:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/2/2006, 5/7/2007, Batch: '7113504', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113504						
AC		**CalcC**	**McDowellD**	4/30/2007 7:57:32		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	4/30/2007 7:57:32 AM	RICH-RC-5022 REVISION 3
SC			McDowellD	Sep1C	5/1/2007 1:31:02 PM	RICH-RC-5022 REVISION 3
SC			BlackCL	InCnt1	5/1/2007 1:39:15 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	5/2/2007 8:24:29 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	5/1/2007 1:31:02 PM		
AC			**BlackCL**	5/1/2007 1:39:15 PM		
AC			**StringerR**	5/2/2007 8:24:29 AM		

AC: Accepting Entry; SC: Status Change

5/23/2007 7:27:49 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007 W05159

Sep1 DT/Tm Tech:

Batch: 7113498 WATER ug/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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JVC3T-1-AD** J7D200283-1-SAMP 04/19/2007 10:55		26.50g,in AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -5.79E-06 uCi/Sa	Beta: -4.64E-05 uCi/Sa
2 **JVC3T-1-AE-X** J7D200283-1-DUP 04/19/2007 10:55		25.40g,in AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -5.79E-06 uCi/Sa	Beta: -4.64E-05 uCi/Sa
3 **JVC4J-1-AE** J7D200283-3-SAMP 04/19/2007 12:37		27.00g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 3.33E-04 uCi/Sa	Beta: -5.28E-04 uCi/Sa
4 **JVC4J-1-AF-S** J7D200283-3-MS 04/19/2007 12:37		25.70g,in AmtRec: 20ML,500ML,4XLP	unsf3734 05/09/07,pd 01/23/07,r #Containers: 6			Scr:	Alpha: 3.33E-04 uCi/Sa	Beta: -5.28E-04 uCi/Sa
5 **JVC42-1-AD** J7D200283-4-SAMP 04/19/2007 09:47		25.20g,in AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: -1.93E-04 uCi/Sa	Beta: 1.32E-04 uCi/Sa
6 **JVC47-1-AD** J7D200283-5-SAMP 04/19/2007 11:49		25.60g,in AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha: 2.21E-04 uCi/Sa	Beta: -4.61E-05 uCi/Sa
7 **JVG5V-1-AA-B** J7D230000-498-BLK 04/19/2007 10:55		25.40g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

5/23/2007 7:27:54 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113498 ug/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JVG5V-1-AC-C J7D230000-498-LCS 04/19/2007 10:55		25.50g,in AmtRec:	unsf3735 05/09/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
9 JVG5V-1-AD-C J7D230000-498-LCS 04/19/2007 10:55		25.40g,in AmtRec:	unsc1688 05/17/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: PH <2.0 JB 5-23-07

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

```
JVC3T1AD-SAMP Constituent List:
  Uranium     RDL:1.44E-01    ug/L      LCL:        UCL:        RPD:
JVC4J1AF-MS:

JVG5V1AA-BLK:
  Uranium     RDL:1.44E-01    ug/L      LCL:        UCL:        RPD:
JVG5V1AC-LCS:
  Uranium     RDL:0.144343    ug/L      LCL:70      UCL:130     RPD:20
JVG5V1AD-LCS:
  Uranium     RDL:0.144343    ug/L      LCL:70      UCL:130     RPD:20
JVC3T1AD-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVC4J1AF-MS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG5V1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG5V1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JVG5V1AD-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7113498 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:

Approved By _____ Date: _____

6/5/2007 10:31:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/5/2006, 6/10/2007, Batch: '7113498', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7113498						
AC		**Rev1C**	**BockJ**	5/23/2007 7:18:43		
SC			wagarr	IsBatched	4/23/2007 3:04:23 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/23/2007 7:18:43 AM	rich-rc-5015 rEVISION 4
SC			BockJ	Prep1C	5/23/2007 7:27:52 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	5/30/2007 10:30:22 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	5/31/2007 2:27:27 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	6/1/2007 9:21:29 AM	RICH-RC-5058 REV 7
SC			AntonsonL	Rev1C	6/4/2007 11:41:30 AM	RICH-RC-0002 REVISION 7
AC			**BockJ**	5/23/2007 7:27:52		
AC			**BockJ**	5/23/2007 7:29:43		
AC			**AshworthA**	5/30/2007 10:30:22		
AC			**AshworthA**	5/31/2007 2:27:27 PM		
AC			**NelsonT**	6/1/2007 9:21:29 AM		
AC			**AntonsonL**	6/4/2007 11:41:30		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26