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: 35506

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05157	S07-004	B1MRJ7	J7D170107-1	JT14G1AA	9JT14G10	7109298
		B1MRJ7	J7D170107-1	JT14G1AC	9JT14G10	7109290
		B1MRJ7	J7D170107-1	JT14G1AD	9JT14G10	7109291
		B1MRJ7	J7D170107-1	JT14G1AE	9JT14G10	7109294
		B1MRJ7	J7D170107-1	JT14G1AF	9JT14G10	7109283
		B1MRC3	J7D170107-2	JT14M1AA	9JT14M10	7109298
		B1MRC3	J7D170107-2	JT14M1AC	9JT14M10	7109290
		B1MRC3	J7D170107-2	JT14M1AD	9JT14M10	7109291
		B1MRC3	J7D170107-2	JT14M1AE	9JT14M10	7109283
		B1MRC3	J7D170107-2	JT14M1AF	9JT14M10	7109292
		B1MRB9	J7D170107-3	JT14X1AA	9JT14X10	7109298
		B1MRB9	J7D170107-3	JT14X1AC	9JT14X10	7109290
		B1MRB9	J7D170107-3	JT14X1AD	9JT14X10	7109291
		B1MRB9	J7D170107-3	JT14X1AE	9JT14X10	7109283
		B1MRB9	J7D170107-3	JT14X1AF	9JT14X10	7109292

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05157	W07-004	B1MNV7	J7D170109-1	JT15M1AA	9JT15M10	7109290
		B1MNV7	J7D170109-1	JT15M1AC	9JT15M10	7109291
		B1MNV7	J7D170109-1	JT15M1AD	9JT15M10	7109288
		B1MNV7	J7D170109-1	JT15M2AE	9JT15M20	7109295
	S07-003	B1MF59	J7D170111-1	JT16L1AA	9JT16L10	7109283
	S07-004	B1MR89	J7D170115-1	JT1711AA	9JT17110	7109283
		B1MR89	J7D170115-1	JT1711AC	9JT17110	7109292
		B1MR94	J7D170115-2	JT1721AA	9JT17210	7109283
		B1MR94	J7D170115-2	JT1721AC	9JT17210	7109292
	W07-002	B1M8V8	J7D170117-1	JT18A1AA	9JT18A10	7109298
		B1M8V8	J7D170117-1	JT18A2AC	9JT18A20	7151395
		B1M8Y0	J7D170117-2	JT18E1AA	9JT18E10	7109298
		B1M8Y0	J7D170117-2	JT18E1AC	9JT18E10	7109283
		B1M8Y0	J7D170117-2	JT18E2AD	9JT18E20	7151395
	A07-003	B1MCT7	J7D170120-1	JT18X1AA	9JT18X10	7109298
		B1MCT7	J7D170120-1	JT18X1AC	9JT18X10	7109283
		B1MCT7	J7D170120-1	JT18X2AD	9JT18X20	7151395
	S07-004	B1MR49	J7D170145-1	JT2K91AA	9JT2K910	7109283
		B1MR49	J7D170145-1	JT2K91AC	9JT2K910	7109292
	S07-003	B1MF18	J7D170161-1	JT2LQ1AA	9JT2LQ10	7109283
		B1MF17	J7D170161-2	JT2LT1AA	9JT2LT10	7109283
	W07-003	B1MKJ3	J7D170167-1	JT2MC1AA	9JT2MC10	7109291
		B1MKJ3	J7D170167-1	JT2MC2AC	9JT2MC20	7109294
		B1MKJ3	J7D170167-1	JT2MC2AD	9JT2MC20	7151395
		B1MKJ3	J7D170167-1	JT2MC2AE	9JT2MC20	7109295
		B1MKJ4	J7D170167-2	JT2MW1AA	9JT2MW10	7109291

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05157	W07-003	B1MKJ4	J7D170167-2	JT2MW1AC	9JT2MW10	7109294
		B1MKJ4	J7D170167-2	JT2MW2AD	9JT2MW20	7151395
		B1MKJ4	J7D170167-2	JT2MW2AE	9JT2MW20	7109295
	S07-004	B1MPR3	J7D170288-1	JT3M41AA	9JT3M410	7109296
		B1MPR3	J7D170288-1	JT3M42AC	9JT3M420	7151395
		B1MPT5	J7D170288-2	JT3NL1AA	9JT3NL10	7109290
		B1MPT5	J7D170288-2	JT3NL1AC	9JT3NL10	7109291
		B1MPT5	J7D170288-2	JT3NL2AD	9JT3NL20	7151395
		B1MPT5	J7D170288-2	JT3NL2AE	9JT3NL20	7109295
	I07-036	B1MN09	J7D170295-1	JT3P71AA	9JT3P710	7109292
		B1MN11	J7D180222-1	JT5WN1AA	9JT5WN10	7109292
	G07-004	B1MMH9	J7D190105-1	JT7NH1AA	9JT7NH10	7109291

Comments:

SEVERN TRENT STL

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Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

June 5, 2007

Attention: Steve Trent

SAF Number	:	S07-004, W07-004, S07-003, W07-002, A07-003, W07-003, I07-036
Date SDG Closed	:	April 18, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05157
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between April 13, 2007 and April 18, 2007 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1MRJ7	JT14G	4/13/07	WATER
B1MRC3	JT14M	4/13/07	WATER
B1MRB9	JT14X	4/13/07	WATER
B1MNV7	JT15M	4/13/07	WATER
B1MF59	JT16L	4/13/07	WATER
B1MR89	JT171	4/13/07	WATER
B1MR94	JT172	4/13/07	WATER
B1M8V8	JT18A	4/13/07	WATER
B1M8Y0	JT18E	4/13/07	WATER
B1MCT7	JT18X	4/13/07	WATER
B1MR49	JT2K9	4/16/07	WATER
B1MF18	JT2LQ	4/16/07	WATER
B1MF17	JT2LT	4/16/07	WATER

B1MKJ3	JT2MC	4/16/07	WATER
B1MKJ4	JT2MW	4/16/07	WATER
B1MPR3	JT3M4	4/16/07	WATER
B1MPT5	JT3NL	4/16/07	WATER
B1MN09	JT3P7	4/16/07	WATER
B1MN11	JT5WN	4/17/07	WATER
B1MMH9	JT7NH	4/18/07	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Technetium-99 by method RICH-RC-5078
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 volume was analyzed for sample B1MRJ7 based on an elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MRC3) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Reduced volumes were analyzed for sample B1MKJ3 and B1MPT5 based on an elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MRB9) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1MN09) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
Sample B1MKJ3 did not meet the CRDL. The sample was recounted for 200 minutes and met the CRDL. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MRJ7) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
Sample B1M8Y0 had a high screening result therefore the aliquot was reduced to prevent contamination in the laboratory. The CRDL was not achieved, but the result exceeds the MDA achieved. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MF18) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The TSIE was out of limits and the samples could not be calculated. The entire batch was recounted after shaking the samples and wiping them with fabric softener sheets. The recount results were acceptable. The LCS, batch blank, samples, sample duplicate (B1M8V8), and sample matrix spike (B1M8Y0) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:
The LCS, batch blank, samples, sample duplicate (B1MNV7), and sample matrix spike (B1MNV7) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1MRJ7) results are within contractual requirements.

Pacific Northwest National Laboratories
June 5, 2007

Carbon-14 by method RICH-RC-5022:
The LCS, batch blank, samples and sample duplicate (B1MPR3) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The lifetimes for the QC samples exceeded 350 microseconds due to environmental conditions in the laboratory where the instrument operates. Discussions were held regarding the importance of consistency in the environmental conditions in the laboratory, including but not limited to, temperature. The samples were recounted with acceptable results. The LCS, batch blank, samples, sample duplicate (B1MKJ3), and sample matrix spike (B1MKJ4) 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 Segen

Sherryl A. Adam
for Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35506 File Name: h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.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:
9JT14G10	B1MRJ7		MW6-SBB-A1	S07-004	W05157					04/13/2007 12:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	1.33E+04	pCi/L	4.5E+02	6.2E+02		3.65E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 03:06	I
7109290	ALPHA	12587-46-1	5.59E-01	pCi/L	7.8E-01	7.9E-01	U	1.34E+00	100.0	9310_ALPHABETA	1.849E-01	L	05/31/2007 08:05	I
7109291	BETA	12587-47-2	2.68E+01	pCi/L	2.7E+00	5.7E+00		2.86E+00	100.0	9310_ALPHABETA	1.999E-01	L	05/30/2007 18:25	I
7109294	BE-7	13966-02-4	1.84E+01	pCi/L	1.9E+01	1.9E+01	U	3.83E+01		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	CO-60	10198-40-0	1.80E-01	pCi/L	1.7E+00	1.7E+00	U	3.36E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	CS-134	13967-70-9	2.09E-01	pCi/L	1.3E+00	1.3E+00	U	2.55E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	CS-137	10045-97-3	9.38E-01	pCi/L	1.7E+00	1.7E+00	U	3.31E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	EU-152	14683-23-9	3.30E-01	pCi/L	3.6E+00	3.6E+00	U	6.56E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	EU-154	15585-10-1	-9.85E-01	pCi/L	3.9E+00	3.9E+00	U	7.31E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	EU-155	14391-16-3	-1.11E+00	pCi/L	3.1E+00	3.1E+00	U	5.46E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	K-40	13966-00-2	-4.39E+01	pCi/L	3.2E+01	3.2E+01	U	6.57E+01		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	RU-106	13967-48-1	-4.33E+00	pCi/L	1.3E+01	1.3E+01	U	2.39E+01		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109294	SB-125	14234-35-6	-2.07E+00	pCi/L	3.5E+00	3.5E+00	U	5.98E+00		GAMMALL_GS	2.0039E+00	L	05/31/2007 05:38	I
7109283	I-129L	15046-84-1	4.32E+00	pCi/L	6.3E-01	6.3E-01		3.39E-01	98.1	I129LL_SEP_LEPS	3.8993E+00	L	06/01/2007 15:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT14M10	B1MRC3		MW6-SBB-A1	S07-004	W05157					04/13/2007 09:12

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	1.46E+05	pCi/L	1.4E+03	4.7E+03		3.66E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 05:51	I
7109290	ALPHA	12587-46-1	8.74E-01	pCi/L	9.5E-01	9.7E-01	U	1.71E+00	100.0	9310_ALPHABETA	1.997E-01	L	05/31/2007 08:05	I
7109291	BETA	12587-47-2	1.46E+01	pCi/L	2.1E+00	3.0E+00		2.66E+00	100.0	9310_ALPHABETA	2.004E-01	L	05/30/2007 18:25	I
7109283	I-129L	15046-84-1	2.05E+00	pCi/L	5.0E-01	5.0E-01		2.75E-01	98.4	I129LL_SEP_LEPS	3.9336E+00	L	06/01/2007 15:17	I
7109292	SR-90	10098-97-2	4.90E-01	pCi/L	3.0E-01	3.1E-01	U	5.90E-01	70.7	SRISO_SEP_PRE	1.007E+00	L	05/31/2007 05:51	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:
9JT14X10	B1MRB9		MW6-SBB-A1	S07-004	W05157					04/13/2007 10:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	5.44E+03	pCi/L	3.1E+02	3.7E+02		3.67E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 07:14	I
7109290	ALPHA	12587-46-1	1.15E+00	pCi/L	1.0E+00	1.0E+00	U	1.34E+00	100.0	9310_ALPHABETA	2.003E-01	L	05/31/2007 09:10	I
7109291	BETA	12587-47-2	1.26E+01	pCi/L	2.1E+00	2.6E+00		2.96E+00	100.0	9310_ALPHABETA	1.998E-01	L	05/30/2007 18:25	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.

7109283	I-129L	15046-84-1	3.04E+00	pCi/L	4.9E-01	4.9E-01		2.79E-01	91.6	I129LL_SEP_LEPS	3.9112E+00	L	06/01/2007	15:17	I
7109292	SR-90	10098-97-2	1.33E-02	pCi/L	2.7E-01	2.7E-01	U	5.91E-01	71.4	SRISO_SEP_PRE	1.0051E+00	L	05/31/2007	05:51	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:
9JT15M10	B1MNV7		MW6-SBB-A1	W07-004	W05157					04/13/2007 12:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109290	ALPHA	12587-46-1	2.93E+00	pCi/L	1.6E+00	1.8E+00		2.08E+00	100.0	9310_ALPHABETA	1.992E-01	L	05/31/2007 09:10	I
7109291	BETA	12587-47-2	9.04E+00	pCi/L	1.8E+00	2.5E+00		2.59E+00	100.0	9310_ALPHABETA	1.997E-01	L	05/30/2007 18:25	I
7109288	TC-99	14133-76-7	9.53E+00	pCi/L	4.5E+00	6.5E+00	U	1.02E+01	100.0	TC99_SEP_LSC	1.255E-01	L	05/25/2007 03:10	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT15M20	B1MNV7		MW6-SBB-A1	W07-004	W05157					04/13/2007 12:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109295	Uranium	7440-61-1	3.03E+00	ug/L	3.1E-01	3.1E-01		7.79E-02		UTOT_KPA	2.69E-02	ML	06/01/2007 10:36	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:
9JT16L10	B1MF59		MW6-SBB-A1	S07-003	W05157					04/13/2007 11:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	2.64E+00	pCi/L	5.3E-01	5.3E-01		2.99E-01	95.7	I129LL_SEP_LEPS	3.9144E+00	L	06/01/2007 16:59	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:
9JT17110	B1MR89		MW6-SBB-A1	S07-004	W05157					04/13/2007 08:14

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	1.18E+00	pCi/L	3.4E-01	3.4E-01	U	5.68E-01	98.6	I129LL_SEP_LEPS	3.9307E+00	L	06/01/2007 17:01	I
7109292	SR-90	10098-97-2	6.13E-01	pCi/L	3.8E-01	3.9E-01	U	7.52E-01	51.6	SRISO_SEP_PRE	1.0028E+00	L	05/31/2007 05:51	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:
9JT17210	B1MR94		MW6-SBB-A1	S07-004	W05157					04/13/2007 09:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	7.92E+00	pCi/L	1.0E+00	1.0E+00		3.81E-01	98.1	I129LL_SEP_LEPS	3.9571E+00	L	06/01/2007 17:02	I
7109292	SR-90	10098-97-2	1.26E+00	pCi/L	4.1E-01	4.5E-01		7.13E-01	59.7	SRISO_SEP_PRE	1.0057E+00	L	05/31/2007 05:51	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:
9JT18A10	B1M8V8		MW6-SBB-A1	W07-002	W05157					04/13/2007 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 Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35506 File Name: h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	3.68E+03	pCi/L	2.7E+02	3.0E+02		3.65E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 08:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT18A20	B1M8V8		MW6-SBB-A1	W07-002	W05157					04/13/2007 08:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	2.28E+04	pCi/L	8.1E+01	1.4E+03		1.00E+01	100.0	TC99_ETVDSK_LS	1.253E-01	L	06/01/2007 19:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT18E10	B1M8Y0		MW6-SBB-A1	W07-002	W05157					04/13/2007 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	4.59E+03	pCi/L	2.9E+02	3.4E+02		3.69E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 10:00	I
7109283	I-129L	15046-84-1	9.58E+00	pCi/L	4.7E+00	4.7E+00	U	6.62E+00	101.4	I129LL_SEP_LEPS	2.516E-01	L	06/01/2007 18:44	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:
9JT18E20	B1M8Y0		MW6-SBB-A1	W07-002	W05157					04/13/2007 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	9.67E+04	pCi/L	1.7E+02	5.9E+03		1.01E+01	100.0	TC99_ETVDSK_LS	1.244E-01	L	06/01/2007 21:40	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:
9JT18X10	B1MCT7		MW6-SBB-A1	A07-003	W05157					04/13/2007 10:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109298	H-3	10028-17-8	1.33E+02	pCi/L	1.6E+02	1.7E+02	U	3.67E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/19/2007 11:22	I
7109283	I-129L	15046-84-1	5.33E-02	pCi/L	1.4E-01	1.4E-01	U	2.58E-01	101.1	I129LL_SEP_LEPS	3.9619E+00	L	06/01/2007 18:46	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:
9JT18X20	B1MCT7		MW6-SBB-A1	A07-003	W05157					04/13/2007 10:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	9.50E+00	pCi/L	4.4E+00	6.5E+00	U	9.92E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	06/01/2007 23:45	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:
9JT2K910	B1MR49		MW6-SBB-A1	S07-004	W05157					04/16/2007 10:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	8.22E-01	pCi/L	2.8E-01	2.8E-01	U	4.82E-01	99.7	I129LL_SEP_LEPS	3.9011E+00	L	06/01/2007 18:47	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.

7109292	SR-90	10098-97-2	4.52E-01	pCi/L	2.6E-01	2.8E-01	U	5.35E-01	71.4	SRISO_SEP_PRE	1.0052E+00	L	05/31/2007	07:18	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:
9JT2LQ10	B1MF18		MW6-SBB-A1	S07-003	W05157					04/16/2007 07:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	1.76E-01	pCi/L	1.4E-01	1.4E-01	U	2.96E-01	98.6	I129LL_SEP_LEPS	3.8915E+00	L	06/01/2007 20:31	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:
9JT2LT10	B1MF17		MW6-SBB-A1	S07-003	W05157					04/16/2007 08:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109283	I-129L	15046-84-1	3.73E+00	pCi/L	6.4E-01	6.4E-01		3.13E-01	100.8	I129LL_SEP_LEPS	3.771E+00	L	06/01/2007 20:34	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:
9JT2MC10	B1MKJ3		MW6-SBB-A1	W07-003	W05157					04/16/2007 08:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109291	BETA	12587-47-2	4.76E+02	pCi/L	1.2E+01	7.5E+01		3.91E+00	100.0	9310_ALPHABETA	1.437E-01	L	05/30/2007 18:25	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:
9JT2MC20	B1MKJ3		MW6-SBB-A1	W07-003	W05157					04/16/2007 08:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109294	BE-7	13966-02-4	4.59E+00	pCi/L	2.2E+01	2.2E+01	U	3.98E+01		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	CO-60	10198-40-0	1.43E+00	pCi/L	2.1E+00	2.1E+00	U	4.17E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	CS-134	13967-70-9	2.22E-01	pCi/L	1.7E+00	1.7E+00	U	3.12E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	CS-137	10045-97-3	2.27E+00	pCi/L	1.9E+00	1.9E+00	U	3.63E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	EU-152	14683-23-9	-2.34E+00	pCi/L	4.5E+00	4.5E+00	U	7.64E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	EU-154	15585-10-1	3.55E+00	pCi/L	5.7E+00	5.7E+00	U	1.11E+01		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	EU-155	14391-16-3	-1.70E+00	pCi/L	3.1E+00	3.1E+00	U	5.15E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	K-40	13966-00-2	-2.65E+01	pCi/L	4.0E+01	4.0E+01	U	8.20E+01		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	RU-106	13967-48-1	-1.50E+00	pCi/L	1.6E+01	1.6E+01	U	2.87E+01		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7109294	SB-125	14234-35-6	-3.96E+00	pCi/L	4.5E+00	4.5E+00	U	7.32E+00		GAMMALL_GS	2.0021E+00	L	06/01/2007 12:28	I
7151395	TC-99	14133-76-7	1.90E+03	pCi/L	2.4E+01	1.2E+02		9.93E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	06/02/2007 00:47	I
7109295	Uranium	7440-61-1	2.75E+00	ug/L	2.8E-01	2.8E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	06/01/2007 10:38	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

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:
9JT2MW10	B1MKJ4		MW6-SBB-A1	W07-003	W05157					04/16/2007 07:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109291	BETA	12587-47-2	3.00E-02	pCi/L	1.2E+00	1.2E+00	U	2.63E+00	100.0	9310_ALPHABETA	1.993E-01	L	05/30/2007 18:25	I
7109294	BE-7	13966-02-4	-1.56E+01	pCi/L	2.7E+01	2.7E+01	U	4.56E+01		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	CO-60	10198-40-0	-4.74E-01	pCi/L	2.5E+00	2.5E+00	U	4.75E+00		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	CS-134	13967-70-9	3.29E-01	pCi/L	3.0E+00	3.0E+00	U	5.56E+00		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	CS-137	10045-97-3	-4.04E-01	pCi/L	2.5E+00	2.5E+00	U	4.46E+00		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	EU-152	14683-23-9	1.02E+00	pCi/L	6.4E+00	6.4E+00	U	1.16E+01		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	EU-154	15585-10-1	6.93E+00	pCi/L	8.2E+00	8.2E+00	U	1.74E+01		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	EU-155	14391-16-3	1.75E+00	pCi/L	4.2E+00	4.2E+00	U	7.71E+00		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	K-40	13966-00-2	-5.57E+01	pCi/L	5.3E+01	5.3E+01	U	1.14E+02		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	RU-106	13967-48-1	4.28E+00	pCi/L	1.9E+01	1.9E+01	U	3.66E+01		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	I
7109294	SB-125	14234-35-6	4.59E+00	pCi/L	6.6E+00	6.6E+00	U	1.27E+01		GAMMALL_GS	2.0026E+00	L	05/31/2007 05:36	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:
9JT2MW20	B1MKJ4		MW6-SBB-A1	W07-003	W05157					04/16/2007 07:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	-9.52E-01	pCi/L	4.1E+00	5.9E+00	U	9.93E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	06/02/2007 01:50	I
7109295	Uranium	7440-61-1	1.13E-02	ug/L	2.5E-03	2.5E-03	U	8.45E-02		UTOT_KPA	2.48E-02	ML	06/01/2007 10:44	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:
9JT3M410	B1MPR3		MW6-SBB-A1	S07-004	W05157					04/16/2007 11:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109296	C-14	14762-75-5	1.20E+04	pCi/L	5.5E+01	1.4E+03		8.31E+00	100.0	C14_LSC	2.00E-01	L	05/02/2007 00:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT3M420	B1MPR3		MW6-SBB-A1	S07-004	W05157					04/16/2007 11:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	3.46E+01	pCi/L	5.2E+00	7.9E+00		9.91E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	06/02/2007 02:52	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:
9JT3NL10	B1MPT5		MW6-SBB-A1	S07-004	W05157					04/16/2007 10:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109290	ALPHA	12587-46-1	1.50E+00	pCi/L	1.1E+00	1.1E+00		1.06E+00	100.0	9310_ALPHABETA	2.001E-01	L	05/31/2007 09:10	I

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

7109291	BETA	12587-47-2	1.05E+02	pCi/L	5.2E+00	1.9E+01		3.26E+00	100.0	9310_ALPHABETA	1.783E-01	L	05/30/2007 18:25	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:
9JT3NL20	B1MPT5		MW6-SBB-A1	S07-004	W05157					04/16/2007 10:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7151395	TC-99	14133-76-7	-8.55E-01	pCi/L	4.1E+00	5.9E+00	U	9.96E+00	100.0	TC99_ETVDSK_LS	1.248E-01	L	06/02/2007 03:55	I
7109295	Uranium	7440-61-1	4.99E+00	ug/L	6.0E-01	6.0E-01		8.03E-02		UTOT_KPA	2.61E-02	ML	06/01/2007 10:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT3P710	B1MN09		MW6-SBB-A1	I07-036	W05157					04/16/2007 10:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109292	SR-90	10098-97-2	5.55E+01	pCi/L	1.7E+00	8.1E+00		7.70E-01	52.4	SRISO_SEP_PRE	9.995E-01	L	05/31/2007 07:18	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:
9JT5WN10	B1MN11		MW6-SBB-A1	I07-036	W05157					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
7109292	SR-90	10098-97-2	5.57E-01	pCi/L	3.9E-01	4.0E-01	U	7.60E-01	54.2	SRISO_SEP_PRE	9.965E-01	L	05/31/2007 07:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JT7NH10	B1MMH9		MW6-SBB-A1	G07-004	W05157					04/18/2007 12:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7109291	BETA	12587-47-2	1.08E+03	pCi/L	1.5E+01	2.1E+02		2.54E+00	100.0	9310_ALPHABETA	1.996E-01	L	05/30/2007 20:10	I

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

Tuesday, June 05, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8H91AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 07:50
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/16/2007

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
7109283	I-129L	2.26E-02	pCi/L	1.6E-01	U	2.78E-01	99.2		I129LL_SEP_L	3.9457E+00	06/01/2007				D
BLK	15046-84-1			1.6E-01						L	22:21				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8J12AB	**Sdg/Rept Nbr:**	W05157	35506	**Collection Date:** 04/13/2007 08:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/13/2007

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
7151395	TC-99	-1.96E+00	pCi/L	5.7E+00	U	9.70E+00	100.0		TC99_ETVDSK	1.267E-01	06/02/2007				D
BLK	14133-76-7			4.0E+00						L	04:57				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8K11AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 10:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/16/2007

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
7109292	SR-90	3.80E-01	pCi/L	2.6E-01	U	5.02E-01	83.2		SRISO_SEP_P	1.0037E+00	05/31/2007				D
BLK	10098-97-2			2.5E-01						L	07:37				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8K31AB **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/13/2007

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
7109294	BE-7	1.40E+01	pCi/L	3.1E+01	U	5.99E+01			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	13966-02-4			3.1E+01						L	07:33				
7109294	CO-60	-5.89E-01	pCi/L	2.1E+00	U	3.97E+00			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	10198-40-0			2.1E+00						L	07:33				
7109294	CS-134	7.41E-01	pCi/L	2.3E+00	U	4.59E+00			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	13967-70-9			2.3E+00						L	07:33				
7109294	CS-137	-9.72E-01	pCi/L	2.3E+00	U	3.95E+00			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	10045-97-3			2.3E+00						L	07:33				
7109294	EU-152	-1.16E+00	pCi/L	5.7E+00	U	9.89E+00			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	14683-23-9			5.7E+00						L	07:33				
7109294	EU-154	-1.51E+00	pCi/L	6.0E+00	U	1.15E+01			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	15585-10-1			6.0E+00						L	07:33				
7109294	EU-155	-3.31E+00	pCi/L	4.4E+00	U	7.10E+00			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	14391-16-3			4.4E+00						L	07:33				
7109294	K-40	-1.96E+01	pCi/L	4.2E+01	U	9.60E+01			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	13966-00-2			4.2E+01						L	07:33				
7109294	RU-106	2.91E+00	pCi/L	2.1E+01	U	3.87E+01			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	13967-48-1			2.1E+01						L	07:33				
7109294	SB-125	1.70E+00	pCi/L	5.4E+00	U	1.03E+01			GAMMALL_GS	1.999E+00	05/31/2007				D
BLK	14234-35-6			5.4E+00						L	07:33				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8K62AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 08:57
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/16/2007

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
7109295	Uranium	2.04E-02	ug/L	2.6E-03	U	8.19E-02			UTOT_KPA	2.56E-02	06/01/2007				D
BLK	7440-61-1			2.6E-03						ML	10:28				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8K81AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 11:34
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/16/2007

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
7109296	C-14	-9.18E-01	pCi/L	6.8E+00	U	8.30E+00	100.0		C14_LSC	2.00E-01	05/01/2007				D
BLK	14762-75-5			3.4E+00						L	23:24				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8KL1AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 12:00
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/13/2007

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
7109288	TC-99	8.89E-01	pCi/L	6.0E+00	U	1.02E+01	100.0		TC99_SEP_LS	1.255E-01	05/25/2007				D
BLK	14133-76-7			4.2E+00						L	03:10				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8KR1AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 09:12
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**BLK**	**Received Date:**	04/13/2007

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
7109290	ALPHA	3.38E-01	pCi/L	5.2E-01	U	1.06E+00	100.0		9310_ALPHAB	1.982E-01	05/31/2007				D
BLK	12587-46-1			5.1E-01						L	09:10				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8KW1AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 10:01
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/13/2007

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
7109291	BETA	1.37E+00	pCi/L	1.3E+00	U	2.70E+00	100.0		9310_ALPHAB	2.005E-01	05/30/2007				D
BLK	12587-47-2			1.3E+00						L	20:10				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8LA1AB	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 12:39
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CI	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
7109298	H-3	-1.64E+02	pCi/L	1.5E+02	U	3.66E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007				D
BLK	10028-17-8			1.4E+02						L	00:21				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8LA1DX	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 12:39
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CK	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
7109298	H-3	-4.85E+01	pCi/L	1.6E+02	U	3.78E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007				D
BLK	10028-17-8			1.5E+02						L	14:08				

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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8H91CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 07:50

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/16/2007

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
7109283	I-129L	7.89E+00	pCi/L	1.1E+00		3.90E-01	101.1	9.73E+00	I129LL_SEP_L	3.9856E+00	06/01/2007			70	D
BS	15046-84-1			1.1E+00				81.1		L	22:22			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8J12CS	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 08:56
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	04/13/2007

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
7151395	TC-99	5.32E+02	pCi/L	3.8E+01		9.97E+00	100.0	5.38E+02	TC99_ETVDSK	1.251E-01	06/02/2007			70	D
BS	14133-76-7			1.3E+01				98.9		L	06:00			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT8K11CS	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 10:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	04/16/2007

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
7109292	SR-90	1.46E+01	pCi/L	2.2E+00		4.60E-01	90.4	1.37E+01	SRISO_SEP_P	1.0047E+00	05/31/2007			70	D
BS	10098-97-2			7.0E-01				106.7		L	07:37			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8K31CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

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
7109294	CO-60	3.48E+01	pCi/L	9.3E+00		5.40E+00		3.74E+01	GAMMALL_GS	1.9986E+00	05/31/2007			70	D
BS	10198-40-0			9.3E+00				92.9		L	07:38			130	
7109294	CS-137	2.65E+01	pCi/L	6.5E+00		5.20E+00		2.44E+01	GAMMALL_GS	1.9986E+00	05/31/2007			70	D
BS	10045-97-3			6.5E+00				108.6		L	07:38			130	
7109294	EU-152	7.32E+01	pCi/L	1.9E+01	U	2.55E+01		7.62E+01	GAMMALL_GS	1.9986E+00	05/31/2007			70	D
BS	14683-23-9			1.9E+01				96.2		L	07:38			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8K62CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 08:57

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/16/2007

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
7109295	Uranium	3.69E+01	ug/L	4.4E+00		8.32E-02		3.59E+01	UTOT_KPA	2.52E-02	06/01/2007			70	D
BS	7440-61-1			4.4E+00				102.7		ML	10:33			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8K62DS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 08:57

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/16/2007

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
7109295	Uranium	3.63E+00	ug/L	3.7E-01		8.25E-02		3.60E+00	UTOT_KPA	2.54E-02	06/01/2007			70	D
BS	7440-61-1			3.7E-01				100.9		ML	10:35			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8K81CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 11:34

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/16/2007

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
7109296	C-14	4.51E+01	pCi/L	1.2E+01		8.30E+00	100.0	4.53E+01	C14_LSC	2.00E-01	05/02/2007			70	D
BS	14762-75-5			4.8E+00				99.8		L	00:07			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8KL1CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

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
7109288	TC-99	4.54E+02	pCi/L	3.2E+01		1.01E+01	100.0	5.38E+02	TC99_SEP_LS	1.26E-01	05/25/2007			70	D
BS	14133-76-7			1.2E+01				84.5		L	03:10			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8KR1CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 09:12

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

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
7109290	ALPHA	1.91E+01	pCi/L	5.3E+00		9.80E-01	100.0	2.27E+01	9310_ALPHAB	2.008E-01	05/31/2007			70	D
BS	12587-46-1			2.8E+00				84.1		L	10:18			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8KW1CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 10:01

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

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
7109291	BETA	2.51E+01	pCi/L	4.2E+00		2.61E+00	100.0	2.25E+01	9310_ALPHAB	2.011E-01	05/30/2007			70	D
BS	12587-47-2			2.5E+00				111.6		L	20:10			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8LA1CS **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CJ	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
7109298	H-3	2.64E+03	pCi/L	2.7E+02		3.67E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/19/2007			70	D
BS	10028-17-8			2.4E+02				97.0		L	01:43			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT8LA1EM **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CL	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
7109298	H-3	2.26E+03	pCi/L	2.6E+02		3.77E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/19/2007			70	D
BS	10028-17-8			2.3E+02				82.9		L	15:31			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT14G1GR **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

Client Id: B1MRJ7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7109294	BE-7	1.37E+01	pCi/L	2.0E+01	U	3.97E+01			GAMMALL_GS	1.925E+00	05/31/2007	29.8	0.3		D
DUP	13966-02-4	1.84E+01		2.0E+01						L	05:38	20.0	3		
7109294	CO-60	4.76E-01	pCi/L	1.9E+00	U	3.85E+00			GAMMALL_GS	1.925E+00	05/31/2007	90.0	0.2		D
DUP	10198-40-0	1.80E-01		1.9E+00						L	05:38	20.0	3		
7109294	CS-134	2.52E-01	pCi/L	1.8E+00	U	3.50E+00			GAMMALL_GS	1.925E+00	05/31/2007	18.7	0.		D
DUP	13967-70-9	2.09E-01		1.8E+00						L	05:38	20.0	3		
7109294	CS-137	8.69E-01	pCi/L	1.7E+00	U	3.25E+00			GAMMALL_GS	1.925E+00	05/31/2007	7.6	0.1		D
DUP	10045-97-3	9.38E-01		1.7E+00						L	05:38	20.0	3		
7109294	EU-152	5.25E-01	pCi/L	3.9E+00	U	7.24E+00			GAMMALL_GS	1.925E+00	05/31/2007	45.8	0.1		D
DUP	14683-23-9	3.30E-01		3.9E+00						L	05:38	20.0	3		
7109294	EU-154	7.12E-01	pCi/L	5.0E+00	U	9.84E+00			GAMMALL_GS	1.925E+00	05/31/2007	0.0	0.5		D
DUP	15585-10-1	-9.85E-01		5.0E+00						L	05:38	20.0	3		
7109294	EU-155	-3.14E+00	pCi/L	3.2E+00	U	5.28E+00			GAMMALL_GS	1.925E+00	05/31/2007	0.0	0.9		D
DUP	14391-16-3	-1.11E+00		3.2E+00						L	05:38	20.0	3		
7109294	K-40	7.23E+00	pCi/L	3.7E+01	U	8.22E+01			GAMMALL_GS	1.925E+00	05/31/2007	0.0	1.9		D
DUP	13966-00-2	-4.39E+01		3.7E+01						L	05:38	20.0	3		
7109294	RU-106	-3.64E+00	pCi/L	1.7E+01	U	2.94E+01			GAMMALL_GS	1.925E+00	05/31/2007	0.0	0.1		D
DUP	13967-48-1	-4.33E+00		1.7E+01						L	05:38	20.0	3		
7109294	SB-125	3.90E-01	pCi/L	3.6E+00	U	6.66E+00			GAMMALL_GS	1.925E+00	05/31/2007	0.0	1.		D
DUP	14234-35-6	-2.07E+00		3.6E+00						L	05:38	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT14G1HR **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:39

Client Id: B1MRJ7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7109298	H-3	1.31E+04	pCi/L	6.2E+02		3.69E+02	100.0		906.0_H3_LSC	5.00E-03	05/19/2007	2.0	0.6		D
DUP	10028-17-8	1.33E+04		4.5E+02						L	04:29	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT14M1GR	**Sdg/Rept Nbr:**	W05157	35506	**Collection Date:** 04/13/2007 09:12
Client Id:	B1MRC3	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7109290	ALPHA	8.19E-01	pCi/L	9.2E-01	U	1.58E+00	100.0		9310_ALPHAB	1.989E-01	05/31/2007	6.5	0.1		D
DUP	12587-46-1	8.74E-01		9.0E-01						L	09:10	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT14X1GR	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/13/2007 10:01
Client Id:	B1MRB9	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7109291	BETA	1.54E+01	pCi/L	3.7E+00		2.86E+00	100.0		9310_ALPHAB	1.99E-01	05/30/2007	20.5	1.1		D
DUP	12587-47-2	1.26E+01		2.2E+00						L	18:25	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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT15M1GR **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:00
Client Id: B1MNV7 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	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
7109288	TC-99	7.38E+00	pCi/L	6.3E+00	U	1.02E+01	100.0		TC99_SEP_LS	1.254E-01	05/25/2007	25.5	0.5		D
DUP	14133-76-7	9.53E+00		4.4E+00						L	03:10	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT18A2DR	**Sdg/Rept Nbr:**	W05157	35506	**Collection Date:** 04/13/2007 08:56
Client Id:	B1M8V8	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7151395	TC-99	2.27E+04	pCi/L	1.4E+03		9.96E+00	100.0		TC99_ETVDSK	1.251E-01	06/01/2007	.5	0.1		D
DUP	14133-76-7	2.28E+04		8.0E+01						L	20:37	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 Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT2LQ1CR **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 07:50
Client Id: B1MF18 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	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
7109283	I-129L	-5.02E-02	pCi/L	1.5E-01	U	2.54E-01	101.1		I129LL_SEP_L	3.8771E+00	06/01/2007	359.7	2.1		D
DUP	15046-84-1	1.76E-01		1.5E-01						L	20:34	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT2MC2FR	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 08:57
Client Id:	B1MKJ3	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7109295	Uranium	2.73E+00	ug/L	2.8E-01		8.28E-02			UTOT_KPA	2.53E-02	06/01/2007	.8	0.1		D
DUP	7440-61-1	2.75E+00		2.8E-01						ML	10:42	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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT3M41DR	**Sdg/Rept Nbr:**	W05157	35506	**Collection Date:** 04/16/2007 11:34
Client Id:	B1MPR3	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-004	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
7109296	C-14	1.19E+04	pCi/L	1.4E+03		8.30E+00	100.0		C14_LSC	2.00E-01	05/02/2007	.8	0.1		D
DUP	14762-75-5	1.20E+04		5.5E+01						L	01:32	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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id:	JT3P71CR	**Sdg/Rept Nbr:**	W05157 35506	**Collection Date:**	04/16/2007 10:04
Client Id:	B1MN09	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-036	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
7109292	SR-90	6.17E+01	pCi/L	9.0E+00		8.01E-01	51.3		SRISO_SEP_P	1.0036E+00	05/31/2007	10.6	1.		D
DUP	10098-97-2	5.55E+01		1.8E+00						L	07:18	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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT15M1FW **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 12:00

Client Id: B1MNV7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-004	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
7109288	TC-99	3.27E+03	pCi/L	2.0E+02		1.03E+01	100.0	3.62E+03	TC99_SEP_LS	1.249E-01	05/25/2007			60	D
MS	14133-76-7			3.2E+01				90.2		L	03:10			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT18E2EW **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/13/2007 09:55
Client Id: B1M8Y0 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-002	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
7151395	TC-99	3.96E+03	pCi/L	8.5E+03	U	9.84E+00	100.0	3.61E+03	TC99_ETVDSK	1.261E-01	06/01/2007			60	D
MS	14133-76-7			1.7E+02				109.7		L	22:43			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\W05157.Edd, h:\Reportdb\edd\FeadIV\Rad\35506.Edd

Lab Sample Id: JT2MW2FW **Sdg/Rept Nbr:** W05157 35506 **Collection Date:** 04/16/2007 07:50
Client Id: B1MKJ4 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7109295	Uranium	3.58E+01	ug/L	4.3E+00		8.25E-02		3.59E+01	UTOT_KPA	2.54E-02	06/01/2007			60	D
MS	7440-61-1			4.3E+00				99.8		ML	10:48			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 3:20:57 PM

Lot No., Due Date: J7D170107,J7D170109,J7D170288; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109290; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05157; 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 => JT14G1AC 184.90<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 => JT15M1AA ALPHA 2.9E+00 L:2.1E+00 JT3NL1AA ALPHA 1.5E+00 L:1.1E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. 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 Antonson **Date** 12/1/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109290
W05157

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

5/31/2007 4:29:05 PM

Lot No., Due Date: J7D170107,J7D170109,J7D170167,J7D170288,J7D190105; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109291; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05157; 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 => JT2MC1AA 143.70<200.00 JT3NL1AC 178.30<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JT14X1AG BETA 21.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JT14G1AD BETA 2.7E+01 L:2.9E+00 JT14M1AD BETA 1.5E+01 L:2.7E+00 JT14X1AD BETA 1.3E+01 L:3.0E+00 JT15M1AC BETA 9.0E+00 L:2.6E+00 JT2MC1AA BETA 4.8E+02 L:3.9E+00 JT3NL1AC BETA 1.1E+02 L:3.3E+00 JT7NH1AA BETA 1.1E+03 L:2.5E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA	✓		

OK; No Callin Level Found => BETA

8.24 Result + 3s >=0, Not Too Negative. OK	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** 5/31/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109291
W05157

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

5/31/2007 3:20:26 PM

Lot No., Due Date: J7D170107,J7D170115,J7D170145,J7D170295,J7D180222; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109292; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05157; 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 John Morton **Date** 5-31-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109292
W05157

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 8:31:57 AM

Lot No., Due Date: J7D170107,J7D170167; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109294; RGAMMA Gamma by GER

SDG, Matrix: W05157; 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:

NCM 10-10024

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

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109294

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: [illegible] Date: 6/4/7

Clouseau
Nonconformance Memo

STL

NCM #: **10-10024**
NCM Initiated By: Lisa Antonson
Date Opened: 06/04/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7D170107 (1), J7D170167 (1,2), J7D190000 (294),
QC Batches: 7109294,

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, sample JT2MC didn't meet CRDL. The sample was recounted for 200 minutes and now meets CRDL.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	The sample was 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

6/4/2007 8:21:10 AM

Lot No., Due Date: J7D170107,J7D170111,J7D170115,J7D170117,J7D170120,J7D170145,J7D170161; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109283; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05157; 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:

NCM 10-10023

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

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109283

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: Erika Jordo Date: 6/4/17

Clouseau
Nonconformance Memo

STL

NCM #: **10-10023**
NCM Initiated By: Lisa Antonson
Date Opened: 06/04/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by LEPS
Lot #'s (Sample #'s): J7D170107 (1,2,3), J7D170111 (1), J7D170115 (1,2), J7D170117 (2), J7D170120 (1), J7D170145 (1), J7D170161 (1,2), J7D190000 (283),
QC Batches: 7109283,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/04/2007	In this I-129 batch, sample JT18E had a high screening result. We reduced the aliquot for this sample to reduce the risk of contamination in the lab. The CRDL was not achieved for this sample, but the result exceeds the MDA achieved. Data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J7D170117,J7D170120,J7D170167,J7D170288; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7151395; RTC99 Tc-99 by LSC

SDG, Matrix: W05157; 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 => JT18E2AE TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments: NCM 10-10029			
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: 7151395

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: Erika Jada Date: 6/4/17

Clouseau
Nonconformance Memo

STL

NCM #:	10-10029		
NCM Initiated By:	Lisa Antonson	Classification:	**Anomaly**
Date Opened:	06/04/2007	Status:	**GLREVIEW**
Date Closed:		Production Area:	Environmental - Prep
		Tests:	Tc-99 by LSC
		Lot #'s (Sample #'s):	J7D170117 (1,2), J7D170120 (1), J7D170167 (1,2), J7D170288 (1,2), J7D190000 (285),
		QC Batches:	7109285,
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 of limits and samples could not be calculated. The entire batch was recounted after shaking the samples and wiping them with fabric softener sheets. Results were acceptable.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	Samples were recounted after shaking and wiping with fabric softener sheets.

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

5/30/2007 1:19:18 PM

Lot No., Due Date: J7D170109; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109288; RTC99 Tc-99 by LSC

SDG, Matrix: W05157; 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 => JT15M1AF TCSG<>TCSE Q:V9 OK LMA 5/30/07		✓	
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:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JT15M1AG TC-99 29.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No 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 Ken Anderson **Date** 5/30/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109288
W05157

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

Comments on any "No" response:

Second Level Review: Sheryl R Ackman Date: 5-30-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/25/2007 4:41:43 PM

Lot No., Due Date: J7D170107,J7D170117,J7D170120; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109298; RTRITIUM H-3 by LSC

SDG, Matrix: W05157; 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 => JT14G1AA 5.00<10.00 JT14M1AA 5.00<10.00 JT14X1AA 5.00<10.00 JT18A1AA 5.00<10.00 JT18E1AA 5.00<10.00 JT18X1AA 5.00<10.00 Q:VB ok AL 5/29/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JT8LA1AF SVP15/5<>SVP10/10 JT8LA1AG SVP15/5<>SVP10/10 JT8LA1AA SVP15/5<>SVP10/10 JT8LA1AC SVP15/5<>SVP10/10 JT14G1AA SVP15/5<>SVP10/10 JT14G1AH SVP15/5<>SVP10/10 JT14M1AA SVP15/5<>SVP10/10 JT14X1AA SVP15/5<>SVP10/10 JT18A1AA SVP15/5<>SVP10/10 JT18E1AA SVP15/5<>SVP10/10 JT18X1AA SVP15/5<>SVP10/10 JT8LA1AH SVP15/5<>SVP10/10 JT8LA1AD SVP15/5<>SVP10/10 JT8LA1AE 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. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		

8.2 Comments:

	Yes	No	N/A
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:

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

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

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 710929
W05157

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

Comments on any "No" response:

Second Level Review: Sheryl R Adam Date: 5-29-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/2/2007 2:05:13 PM

Lot No., Due Date: J7D170288; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109296; RC14 C-14 by LSC

SDG, Matrix: W05157; 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: 7109296
W05157

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 9:26:12 AM

Lot No., Due Date: J7D170109,J7D170167,J7D170288; 06/04/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7109295; RUNAT UNat by KPA

SDG, Matrix: W05157; WATER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:

NCM 10-10028

First Level Review Inger Oustonsson **Date** 6/4/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7109295

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 nar

Second Level Review: Erika Jordan Date: 6/4/7

Clouseau
Nonconformance Memo

STL

NCM #: **10-10028**
NCM Initiated By: Lisa Antonson
Date Opened: 06/04/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: UNat by KPA
Lot #'s (Sample #'s): J7D170109 (1), J7D170167 (1,2), J7D170288 (2), J7D190000 (295),
QC Batches: 7109295,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/04/2007	In this Unat batch, the lifetimes for the QC samples exceeded 350 usec due to envirnonmental conditions in the lab where the instrument operates. Batch was recounted with acceptable results

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/04/2007	Discussions were held regarding the importance of consistency in the environmental conditions in the lab where the instrument operates, including, but not limited to, temperature. Samples were recounted with acceptable results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

PNNL J7D170107
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-222**

Page 1 of 1

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Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-6	**Ice Chest No.** ERC-06-043 **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
B1MRJ7		W	4-13-07	1239	1x20-mL P	Activity Scan	None
B1MRJ7		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1MRJ7		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRJ7		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRJ7		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT146	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		APR 13 2007 1458	Eric Darby	Eric Darby		APR 13 2007 1458
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 J7D170107 W05157 Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-004-160

Page 1 of 1

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Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-6	**Ice Chest No.** ERC-06-043 **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
B1MRC3		W	4-13-07	0912	1x20-mL P	Activity Scan	None
B1MRC3		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRC3		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRC3		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MRC3		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT 14M	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington	D. R. Brewington	APR 13 2007 1458	Eric Darby	Eric Darby	Eric Darby	APR 13 2007 1458
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 J7D170107
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-154**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-6	**Ice Chest No.** ERC-06-043 **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
B1MRB9		W	4-13-07	1001	1x20-mL P	Activity Scan	None
B1MRB9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRB9		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MRB9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MRB9		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT14X	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		APR 13 2007 1458	Eric Darby	E Darby		APR 13 2007 1458
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 4/13/07 1458

Client: PGW SDG # W05157 NA [ ] SAF # S07-004 NA [ ]

Work Order Number: J7D170107 Chain of Custody # S07-004-154-110,222

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: 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: [signature] Date: 4/13/07 1458

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 J7D170109
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-004-166**

Page 1 of 1

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Collector Fluor Hanford K. B. HULSE	**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-506-7	**Ice Chest No.** 08 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MNV7		W	41307	1200	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MNV7		W	↓	↓	1x20-mL P	Activity Scan	None
B1MNV7		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1MNV7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JT15M	

Relinquished By Fluor Hanford K. B. HULSE Print / Sign KB Hulse	Date/Time APR 13 2007 1458	Received By Print / Sign Eric Darby Eric Darby	Date/Time APR 13 2007 1458
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 4/13/07

Client: PGW SDG #: W05757 NA ( ) SAF #: W07-004 NA ( )

Work Order Number: J7D170109 Chain of Custody # W07-004-166

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 (✓) 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: [signature] Date: 4/13/07 1458

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 J7D170111
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-91**

Collector Fluor Hanford K. B. HULSE	**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-506-7	**Ice Chest No.** 05 **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
B1MF59		W	4/13/07	1121	1x20-mL P	Activity Scan	None
B1MF59		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT16L	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			APR 13 2007 1458		Eric Darby		APR 13 2007 1458
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: 4/13/07 1458

Client: PGW SDG #: W05157 NA [ ] SAF # S07-003 NA [ ]

Work Order Number: J7D170111 Chain of Custody # S07-003-91

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: [signature] Date: 4/13/07 1458

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 J7D170115
W05757
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-114**

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-7	**Ice Chest No.** 08 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MR89		W	4-13-07	0814	1x20-mL P	Activity Scan	None
B1MR89		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MR89		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT171	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			APR 13 2007 1458	Eric Darby			APR 13 2007 1458
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 JTD170115
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-122**

Page 1 of 1

Collector ~~Fluor Hanford~~ K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HNF-N-506-7	**Ice Chest No.** 08 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MR94		W	41307	0901	1x20-mL P	Activity Scan	None
B1MR94		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MR94		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT172	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ K. B. HULSE			APR 13 2007 1458	Eric Darby		E. Darby	APR 13 2007 1458
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: 11/13/07 1958

Client: PGW SDG #: W05157 NA [ ] SAF #: S07-004 NA [ ]

Work Order Number: J7D170115 Chain of Custody # _____

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: E. Dooley Date: 11/13/07

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 J7D170117
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-310**

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	HNF-M-506-8	**Ice Chest No.** 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M8V8		W	4/13/7	0856	1x20-mL P	Activity Scan	None
B1M8V8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8V8		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JT18A	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			APR 13 2007 1310		S. Smith	S. Smith	APR 13 2007 1310
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 J7D170117
W05157
Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-002-346**

Page 1 of 1

Collector Fluor Hanford F.M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2007	HMF-M-506-8	**Ice Chest No.** 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M8Y0		W	4/13/7	0955	1x20-mL P	Activity Scan	None
B1M8Y0		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M8Y0		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M8Y0		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT18E	

Relinquished By Fluor Hanford F.M. HALL Print Sign	Date/Time APR 13 2007 1310	Received By Print Sign	Date/Time APR 13 2007 1310
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: 04-13-07 1310

Client: PGW SDG #: W05157 NA [ ] SAF #: W07-002 NA [ ]

Work Order Number: J7D170117 Chain of Custody # W07-002-310, 346

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: L. Smith Date: 04-13-07 1310

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 JTD170120 W05157 Due 05-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # A07-003-7

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. A07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(3)-PA, MARCH 2007	HNF-M-506-8	**Ice Chest No.** 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**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
B1MCT7		W	4/13/7	1046	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MCT7		W	↓	↓	1x20-mL P	Activity Scan	None
B1MCT7		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1MCT7		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JT18X	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		APR 13 2007	1310		S. Smith	S. Smith	APR 13 2007 1310
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: 04.13.07 1310

Client: PGW SDG #: W05157 NA [ ] SAF #: A07-003 NA [ ]

Work Order Number: J7D170120 Chain of Custody # A07-003-7

Shipping Container ID: _____ Air Bill # _____

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

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

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

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

6. Number of samples in shipping container: 1

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

8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   1 appropriate samples labels

9. Samples are:
   1 in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)

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

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

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

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

Sample Custodian: S. Smith Date: 04.13.07 13:10

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTD170145
W05157
Due 05-31-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-90**

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** GW0-06-12
Project Title SURV, APRIL 2007	Logbook: HNF-N-506-8	**Ice Chest No.** ~~SML-139~~ **Temp.** 4/16/07
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
B1MR49		W	4/16/07	1006	1x20-mL P	Activity Scan	None
B1MR49		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1MR49		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT2K9	

D. Wade 4/16/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 16 2007 1150				APR 16 2007 1150
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 04-16-07 1150

Client: PGW SDG #: W05157 NA ( ) SAF #: 807-004 NA ( )

Work Order Number: J7D170145 Chain of Custody # 807-004-90

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

Sample Custodian: S. Smith Date: 04-16-07 1150

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 JTD170161
W05157
Due 05.31.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-124**

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**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
B1MF18		W	4/16/07	0750	1x20-mL P	Activity Scan	None
B1MF18		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT2L9	
						L. Wall 4/16/07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 16 2007 1150	L. Smith	S. Smith		APR 16 2007 1150
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 J7D170161
W05757
Due 05-31-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-003-123**

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	Logbook: HNF-N-506-8	**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
B1MF17		W	4/16/07	0857	1x20-mL P	Activity Scan	None
B1MF17		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JT2LT	

J. Wall 4/16/07

Relinquished By Fluor Hanford R. T. SICKLE Print Sign APR 16 2007 Date/Time 1150	Received By S. Smith Print S. Smith Sign APR 16 2007 Date/Time 1150	Matrix *	
Relinquished By Date/Time	Received By Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air	DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other
Relinquished By Date/Time	Received By Date/Time		
Relinquished By Date/Time	Received By Date/Time		

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 04-16-07 1150

Client: PtW SDG #: W05157 NA [ ] SAF # S07-003 NA [ ]

Work Order Number: JTD170161 Chain of Custody # S07-003-123, 124

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: S. Smith Date: 04-16-07 1150

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 J7D170167
W05157
due 05-31-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-003-180**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, 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 RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MKJ3		W	4/16/07	0857	1x20-mL P	Activity Scan	None
B1MKJ3		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKJ3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKJ3		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MKJ3		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						JT2mL	

D. Wall 4/16/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			APR 16 2007 1150		S. Smith	S. Smith	APR 16 2007 1150
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

PNNL J7D170167
W05157
Due 05-31-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-003-181**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, 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 RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MKJ4		W	4/16/07	0750	1x20-mL P	Activity Scan	None
B1MKJ4		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKJ4		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKJ4		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MKJ4		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						JT2MW	

R. Wall 4/16/07

Relinquished By Fluor Hanford R. T. SICKLE — Print — Sign — Date/Time APR 16 2007 1150	Received By S. Smith — Print — Sign S. Smith — Date/Time APR 16 2007 1150	Matrix *
Relinquished By — Date/Time	Received By — Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liqui, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By — Date/Time	Received By — Date/Time	
Relinquished By — Date/Time	Received By — Date/Time	

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

STL

Sample Check-in List

Date/Time Received: 04-16-07 1150

Client: PGW SDG #: W05157 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: J7D170167 Chain of Custody #: W07-003-180,181

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: L. Smith Date: 04-16-07 1150

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 JTD170288
W05157
Due 05-31-07

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-5**

Page 1 of 1

Collector M.R. WEIL	**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.** BT6 10 **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
B1MPR3		W	4-16-07	1434	1x20-mL P	Activity Scan	None
B1MPR3		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1MPR3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JT3M4	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD	M.R. WEIL		APR 16 2007 1500				APR 16 2007 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J7D170288 W05157 Due 05-31-07

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-14**

Collector M.R. WEIL	**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-IN-506-7	**Ice Chest No.** B16-10 **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
B1MPT5		W	4-16-07	1004	1x20-mL P	Activity Scan	None
B1MPT5		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MPT5		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MPT5		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JT3MT	
						JT3NL	04-19-07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD M.R. WEIL			APR 16 2007 1500				APR 16 2007 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	=	Soil	DS	=	Drum Solid
SE	=	Sediment	DL	=	Drum Liquid
SO	=	Solid	T	=	Tissue
SL	=	Sludge	WI	=	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: 4-16-07 1500

Client: PBW SDG #: W05157 NA [ ] SAF #: S07-004 NA [ ]

Work Order Number: J7D170286 Chain of Custody # S07-004-5, 14

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: L. Smith Date: 04-16-07 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev 5

PNNL J7D170295
W05157
Due 05.31.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-036-8**

Page 1 of 1

Collector FLUOR HANFORD M.R. WEIL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-036	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI, APRIL 2007	HNF-IN-506-7	**Ice Chest No.** B16-10 **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
B1MN09		W	4-16-07	1004	1x20-mL P	Activity Scan	None
B1MN09		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JT3P7	

Relinquished By FLUOR HANFORD M.R. WEIL Print Sign	Date/Time 1500 APR 16 2007	Received By L. Smith Print Sign	Date/Time 1500 APR 16 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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 04-16-07 1500

Client: PGW SDG #: W05157 NA [ ] SAF #: I07-036-8 NA [ ]

Work Order Number: J7D170295 Chain of Custody # I07-036-8

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5 Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   1 appropriate samples labels
9. Samples are:
   1 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: L. Smith Date: 04-16-07 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTD180222 W05157 Due 06-01-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-036-56** (4)

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-036	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2)-LOI, 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 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
B1MN11		W	4/17/07	1244	1x20-mL P	Activity Scan	None
B1MN11		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

JT5WN

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	Eric Dankey			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: POW SDG #: W05157 NA [ ] SAF #: I07-036 NA [ ]

Work Order Number: J7D180222 Chain of Custody # I07-036-56

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? * Yes [✓] No [ ]
    *For documentation only No corrective action needed
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. 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 JTD190105
W05157
Due 06.01.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **G07-004-10** (2)

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, APRIL 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
B1MMH9		W	4/18/07	1231	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MMH9		W	↓	↓	1x20-mL P	Activity Scan	None
						JT 7NH	
			R. Wood		4/18/07		

Relinquished By Fluor Hanford R. T. SICKLE Print Sign Date/Time 1522 APR 18 2007	Received By Eric Darley Print Sign Date/Time 1522 APR 18 2007	Matrix *	
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air	DS = Drum Solid, DL = Drum Liquid, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time		
Relinquished By Date/Time	Received By Date/Time		

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/18/07 1522

Client: PGW SDG #: W05157 NA [ ] SAF #: G07-004 NA [ ]

Work Order Number: J7D190105 Chain of Custody #: G07-004-10

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 [✓] Yes [✓] No [ ]
5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - [✓] appropriate samples labels
9. Samples are:
   - [✓] in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] 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: Ex 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 _____

LS-023, 9/03, Rev. 5

5/21/2007 8:37:46 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 W05157

Sep1 DT/Tm Tech:

Batch: 7109290 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7109283 BNTB, 7109290 AZS7, 7109291 BCS8, 7109292 CLTL, 7109294 AWTA, 7109298 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 JT14G-1-AC J7D170107-1-SAMP 04/13/2007 12:39		184.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6	1.5	46.5	.50	NJD Scr:	0831 Alpha: 2.80E-04 uCi/Sa	5/31/07 Beta: 1.69E-03 uCi/Sa	
2 JT14M-1-AC J7D170107-2-SAMP 04/13/2007 09:12		199.70g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		31.6		NJF Scr:	Alpha: 7.55E-04 uCi/Sa	Beta: -2.82E-04 uCi/Sa	
3 JT14M-1-AG-X J7D170107-2-DUP 04/13/2007 09:12		198.90g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		31.5		NA Scr:	0936 Alpha: 7.55E-04 uCi/Sa	5/31/07 Beta: -2.82E-04 uCi/Sa	
4 JT14X-1-AC J7D170107-3-SAMP 04/13/2007 10:01		200.30g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		38.7		NJB Scr:	Alpha: 7.34E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa	
5 JT15M-1-AA J7D170109-1-SAMP 04/13/2007 12:00		199.20g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6		40.2		NC Scr:	Alpha: 6.22E-04 uCi/Sa	Beta: -8.45E-04 uCi/Sa	
6 JT3NL-1-AA J7D170288-2-SAMP 04/16/2007 10:04		200.10g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4		35.2		NJD Scr:	Alpha: 2.30E-04 uCi/Sa	Beta: -1.62E-04 uCi/Sa	
7 JT8KR-1-AA-B J7D190000-290-BLK 04/13/2007 09:12		198.20g,in AmtRec:	#Containers: 1		0.4		NJF Scr:	Alpha:	Beta:	

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

5/21/2007 8:37:49 AM

Sample Preparation/Analysis

Balance Id:11,1120482733

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: 7109290 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JT8KR-1-AC-C J7D190000-290-LCS 04/13/2007 09:12		200.80g,in	ASD4178 03/23/07,pd 06/01/01,r	1.5	0.7	.50	NA	NA	5/31/07	

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

Comments: JT14G-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 05/21/07 "
~~JT3NL-SAMP Comments~~. PH <2.0 SB 5-21-07

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

JT14G1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JT8KR1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JT8KR1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JT14G1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8KR1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8KR1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/1/2007 3:20:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/1/2006, 6/6/2007, Batch: '7109290', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109290						
AC		**CalcC**	**BockJ**	5/21/2007 8:19:24		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/21/2007 8:19:24 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/21/2007 8:23:49 AM	RICH-RC-5014 REVISION 6
SC			BockJ	Prep1C	5/21/2007 8:37:52 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/29/2007 3:03:55 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/30/2007 5:22:31 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	5/30/2007 5:59:02 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/31/2007 11:12:50 AM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/21/2007 8:23:49		
AC			**BockJ**	5/21/2007 8:37:52		
AC			**BockJ**	5/21/2007 8:38:21		
AC			**AshworthA**	5/29/2007 3:03:55 PM		
AC			**AshworthA**	5/30/2007 5:22:31 PM		
AC			**DAWKINSO**	5/30/2007 5:59:02 PM		
AC			**StringerR**	5/31/2007 11:12:50		

AC: Accepting Entry; SC: Status Change

5/21/2007 8:41:24 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:11

Pipet #: 235

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109291 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

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 JT14G-1-AD J7D170107-1-SAMP 04/13/2007 12:39		199.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6	1.5	74.1	100	31A Scr:	1914 Alpha: 2.80E-04 uCi/Sa	5/30/07 DP Beta: 1.69E-03 uCi/Sa	
2 JT14M-1-AD J7D170107-2-SAMP 04/13/2007 09:12		200.40g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		57.2		31B Scr:	Alpha: 7.55E-04 uCi/Sa	Beta: -2.82E-04 uCi/Sa	
3 JT14X-1-AD J7D170107-3-SAMP 04/13/2007 10:01		199.80g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		66.0		31C Scr:	Alpha: 7.34E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa	
4 JT14X-1-AG-X J7D170107-3-DUP 04/13/2007 10:01		199.00g,in AmtRec: 20ML,5XLP,2X4LP	#Containers: 8		63.5		31D Scr:	Alpha: 7.34E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa	
5 JT15M-1-AC J7D170109-1-SAMP 04/13/2007 12:00		199.70g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6		74.6		32A Scr:	Alpha: 6.22E-04 uCi/Sa	Beta: -8.45E-04 uCi/Sa	
6 JT2MC-1-AA J7D170167-1-SAMP 04/16/2007 08:57		143.70g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5		99.2		32B Scr:	Alpha: 9.86E-04 uCi/Sa	Beta: -1.30E-04 uCi/Sa	
7 JT2MW-1-AA J7D170167-2-SAMP 04/16/2007 07:50		199.30g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5		0.2		32C Scr:	Alpha: -1.02E-03 uCi/Sa	Beta: 7.22E-04 uCi/Sa	

5/21/2007 8:41:25 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:11
Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109291 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 JT3NL-1-AC J7D170288-2-SAMP 04/16/2007 10:04		178.30g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4	1.5	101.4	100	32D Scr:	1914 Alpha: 2.30E-04 uCi/Sa	0/30/07 DP Beta: -1.62E-04 uCi/Sa	
9 JT7NH-1-AA J7D190105-1-SAMP 04/18/2007 12:31		199.60g,in AmtRec: 20ML,LP	#Containers: 2		58.6		32A Scr:	2100 Alpha: 7.38E-05 uCi/Sa	Beta: 3.14E-04 uCi/Sa	
10 JT8KW-1-AA-B J7D190000-291-BLK 04/13/2007 10:01		200.50g,in AmtRec:	#Containers: 1		0.2		32B Scr:	Alpha:	Beta:	
11 JT8KW-1-AC-C J7D190000-291-LCS 04/13/2007 10:01		201.10g,in AmtRec:	BESB3057 03/23/07,pd 08/08/06,r #Containers: 1		0.5		32C Scr:	Alpha:	Beta:	

Comments: JT14G-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 05/21/07 "
JT2MC-SAMP "Comments. Aliquot reduced due to weight screen activity. JB 05/21/07"
~~JT3NL-SAMP Comments.~~ pH <2.0 JB 5-21-07

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

JT14G1AD-SAMP Constituent List:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JT8KW1AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JT8KW1AC-LCS:

Sample Preparation/Analysis

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

Balance Id:11

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109291 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:

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

JT14G1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT8KW1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT8KW1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/31/2007 4:28:44 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/31/2006, 6/5/2007, Batch: '7109291', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109291						
AC		**CalcC**	**BockJ**	5/21/2007 8:04:53		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/21/2007 8:04:53 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/21/2007 8:19:04 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/29/2007 3:04:04 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/30/2007 5:22:51 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	5/30/2007 5:59:14 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	5/30/2007 9:30:38 PM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/21/2007 8:19:04		
AC			**BockJ**	5/21/2007 8:25:05		
AC			**AshworthA**	5/29/2007 3:04:04 PM		
AC			**AshworthA**	5/30/2007 5:22:51 PM		
AC			**DAWKINSO**	5/30/2007 5:59:14 PM		
AC			**DAWKINSO**	5/30/2007 9:30:38 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

5/29/2007 6:37:17 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,E32905

Pipet #: _____

Sep1 DT/Tm Tech: 05/21/2007 13:27,ManisD

Sep2 DT/Tm Tech: 05/29/2007 08:46,ManisD

Prep Tech: ManisD

Batch: 7109292 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:
1 **JT14M-1-AF** J7D170107-2-SAMP		1007.00g,in	SRTB14747 05/07/07,pd 09/11/06,r		1.5	25.7	100	6A	0747	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		6A	0636	5/31/07	
04/13/2007 09:12		AmtRec: 20ML,5XLP,2X4LP		#Containers: 8				Scr:	Alpha: 7.55E-04 uCi/Sa		Beta: -2.82E-04 uCi/Sa
2 **JT14X-1-AF** J7D170107-3-SAMP		1005.10g,in	SRTB14748 05/07/07,pd 09/11/06,r		1.5	24.8	100	6B	0747	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		6B	0636	5/31/07	
04/13/2007 10:01		AmtRec: 20ML,5XLP,2X4LP		#Containers: 8				Scr:	Alpha: 7.34E-04 uCi/Sa		Beta: 9.50E-04 uCi/Sa
3 **JT171-1-AC** J7D170115-1-SAMP		1002.80g,in	SRTB14749 05/07/07,pd 09/11/06,r		1.5	24.7	100	6C	0747	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		6C	0636	5/31/07	
04/13/2007 08:14		AmtRec: 20ML,3XLP,2X4LP		#Containers: 6				Scr:	Alpha: -6.06E-07 uCi/Sa		Beta: 9.37E-04 uCi/Sa
4 **JT172-1-AC** J7D170115-2-SAMP		1005.70g,in	SRTB14750 05/07/07,pd 09/11/06,r		1.5	25.1	100	6D	0747	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		6D	0636	5/31/07	
04/13/2007 09:01		AmtRec: 20ML,3XLP,2X4LP		#Containers: 6				Scr:	Alpha: -1.21E-04 uCi/Sa		Beta: 4.13E-04 uCi/Sa

5/29/2007 6:37:19 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: 05/21/2007 13:27,ManisD

Batch: 7109292 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 05/29/2007 08:46,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:
5 **JT2K9-1-AC** J7D170145-1-SAMP		1005.20g,in	SRTB14751 05/07/07,pd 09/11/06,r		1.5	24.6	100	SA	0842	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		SA	~~0735~~ 0803	5/31/07	
04/16/2007 10:06		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr:	Alpha: 5.80E-04 uCi/Sa	Beta: -4.99E-04 uCi/Sa	
6 **JT3P7-1-AA** J7D170295-1-SAMP		999.50g,in	SRTB14752 05/07/07,pd 09/11/06,r		1.5	25	100	SB	0842	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		SC	~~0735~~ 0803	5/31/07	
04/16/2007 10:04		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 1.18E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa	
7 **JT3P7-1-AC-X** J7D170295-1-DUP		1003.60g,in	SRTB14753 05/07/07,pd 09/11/06,r		1.5	24.5	100	SC	0842	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		SD	~~0735~~ 0803	5/31/07	
04/16/2007 10:04		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 1.18E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa	
8 **JT5WN-1-AA** J7D180222-1-SAMP		996.50g,in	SRTB14754 05/07/07,pd 09/11/06,r		1.5	24.3	100	SD	0842	5/30/07	
						~~05/21/2007 13:27;s1, 05/29/2007~~		GA	0822	5/31/07	
04/17/2007 12:44		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 3.03E-04 uCi/Sa	Beta: 1.29E-04 uCi/Sa	

5/29/2007 6:37:20 PM

Sample Preparation/Analysis

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech: 05/21/2007 13:27,ManisD

Batch: 7109292 pCi/L

Sep2 DT/Tm Tech: 05/29/2007 08:46,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:
9 JT8K1-1-AA-B J7D190000-292-BLK		1003.70g,in	SRTB14755 05/07/07,pd 09/11/06,r		1.5	24.7	100	6A 6B	0434 0822	0/3/07 0/3/07	
						~~05/21/2007 13:27,s1, 05/29/2007~~					
04/16/2007 10:04		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
10 JT8K1-1-AC-C J7D190000-292-LCS		1004.70g,in	SRSG1343 04/19/07,pd 09/11/06,r		1.5	24.4	100	6B 6C	0434 0822	0/3/07 0/3/07	
						~~05/21/2007 13:27,s1, 05/29/2007~~					
04/16/2007 10:04		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments:

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

JT14M1AF-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

JT8K11AA-BLK:

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

JT8K11AC-LCS:

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

JT14M1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8K11AA-BLK:

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: 05/21/2007 13:27,ManisD

Batch: 7109292 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech: 05/29/2007 08:46,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:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8K11AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/31/2007 3:16:13 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/31/2006, 6/5/2007, Batch: '7109292', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109292						
AC		**CalcC**	**BockJ**	5/17/2007 11:32:34		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/17/2007 11:32:34 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/17/2007 11:53:04 AM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	5/17/2007 12:17:44 PM	RICH-RC-5006 REVISION 6
SC			ManisD	Sep1C	5/21/2007 4:09:01 PM	RICH-RC-5006 REVISION 6
SC			DAWKINSO	InCnt1	5/21/2007 4:33:20 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	Cnt1C	5/21/2007 7:43:31 PM	RICH-RD-0007 REVISION 5
SC			ManisD	Sep2C	5/29/2007 7:00:46 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	5/29/2007 7:47:02 PM	RICH-RD-0003 REVISION 4
SC			StringerR	CalcC	5/31/2007 9:07:20 AM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/17/2007 11:53:04		
AC			**ManisD**	5/17/2007 12:17:44		
AC			**ManisD**	5/21/2007 4:09:01 PM		
AC			**DAWKINSO**	5/21/2007 4:33:20 PM		
AC			**DAWKINSO**	5/21/2007 7:43:31 PM		
AC			**ManisD**	5/29/2007 7:00:46 PM		
AC			**DAWKINSO**	5/29/2007 7:47:02 PM		
AC			**StringerR**	5/31/2007 9:07:20		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 9

ICOCFractions v4.8.26

PGW WATER

5/24/2007 11:56:49 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 W0515n

Batch: 7109294 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id:11,1120482733
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 JT14G-1-AE J7D170107-1-SAMP 04/13/2007 12:39		2003.90g,in AmtRec: 20ML,2XLP,3X4LP #Containers: 6			100 mL	100	G11	0718	5/31/07 s	
							Scr:	Alpha: 2.80E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa	
2 JT14G-1-AG-X J7D170107-1-DUP 04/13/2007 12:39		1925.00g,in AmtRec: 20ML,2XLP,3X4LP #Containers: 6					G12	0718		
							Scr:	Alpha: 2.80E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa	
3 JT2MC-1-AC J7D170167-1-SAMP 04/16/2007 08:57		2002.10g,in AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5					G14	0718		
							Scr:	Alpha: 9.86E-04 uCi/Sa	Beta: -1.30E-04 uCi/Sa	
4 JT2MW-1-AC J7D170167-2-SAMP 04/16/2007 07:50		2002.60g,in AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5					G15	0716		
							Scr:	Alpha: -1.02E-03 uCi/Sa	Beta: 7.22E-04 uCi/Sa	
5 JT8K3-1-AA-B J7D190000-294-BLK 04/13/2007 12:39		1999.00g,in AmtRec: #Containers: 1					G5	0913	5/31/07 r	
							Scr:	Alpha:	Beta:	
6 JT8K3-1-AC-C J7D190000-294-LCS 04/13/2007 12:39		1998.60g,in AmtRec: #Containers: 1	QCAG1364 03/23/07,pd 03/07/05,r				G6	0917	5/31/07 r	
							Scr:	Alpha:	Beta:	

5/24/2007 11:56:54 AM

Sample Preparation/Analysis

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

Balance Id:1120482733,11,1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109294 **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: JT14~~G-SAMP~~ Comments
JT2MC-SAMP "Comments. "

PH < 2.0 JB 5-24-07

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

JT14G1AE-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:

JT8K31AA-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:

JT8K31AC-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						

JT14G1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT8K31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JT8K31AC-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 J7D170107

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7109294

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) J7ZMC1AC	CRDL Not met. CT 200 please.
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	

6/1/2007 9:18:36 AM

Sample Preparation/Analysis

Balance Id:11,1120482733

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: 7109294 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:
1 JT14G-1-AE J7D170107-1-SAMP 04/13/2007 12:39		2003.90g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6					Scr:	Alpha: 2.80E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa
2 JT14G-1-AG-X J7D170107-1-DUP 04/13/2007 12:39		1925.00g,in AmtRec: 20ML,2XLP,3X4LP	#Containers: 6					Scr:	Alpha: 2.80E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa
3 JT2MC-1-AC J7D170167-1-SAMP 04/16/2007 08:57		2002.10g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 9.86E-04 uCi/Sa	Beta: -1.30E-04 uCi/Sa
4 JT2MC-2-AC J7D170167-1-SAMP 04/16/2007 08:57		2002.10g AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5		100ml	200 min		RS 6/1/07 ~~60~~ 615 Scr:	~~1127~~ 1548 Alpha: 9.86E-04 uCi/Sa	~~6/1/07 R~~ 6/1/07 R Beta: -1.30E-04 uCi/Sa
5 JT2MW-1-AC J7D170167-2-SAMP 04/16/2007 07:50		2002.60g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: -1.02E-03 uCi/Sa	Beta: 7.22E-04 uCi/Sa
6 JT8K3-1-AA-B J7D190000-294-BLK 04/13/2007 12:39		1999.00g,in AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
7 JT8K3-1-AC-C J7D190000-294-LCS 04/13/2007 12:39		1998.60g,in AmtRec:	QCAG1364 03/23/07,pd 03/07/05,r #Containers: 1					Scr:	Alpha:	Beta:

6/1/2007 9:18:40 AM

Sample Preparation/Analysis

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

Balance Id:1120482733,11,1120482733

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109294 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: JT14G-SAMP Comments
JT2MC-SAMP "Comments. "

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

JT14G1AE-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:

JT8K31AA-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:

JT8K31AC-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						

JT14G1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8K31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8K31AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/4/2007 8:30:56 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/4/2006, 6/9/2007, Batch: '7109294', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109294						
AC		**CalcC**	**BockJ**	5/24/2007 11:48:20		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/24/2007 11:48:20 AM	rich-rc-5014 rEVISION 6
SC			BockJ	Prep1C	5/24/2007 11:56:55 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2	5/29/2007 8:52:07 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	5/30/2007 6:23:42 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	5/30/2007 6:32:42 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	5/31/2007 9:51:10 AM	RICH-RD-0007 REVISION 5
SC			StringerR	InCnt1	6/1/2007 9:45:08 AM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	6/1/2007 3:55:55 PM	RICH-RD-0007 REVISION 5
AC			**BockJ**	5/24/2007 11:56:55		
AC			**AshworthA**	5/29/2007 8:52:07		
AC			**AshworthA**	5/30/2007 6:23:42 PM		
AC			**DAWKINSO**	5/30/2007 6:32:42 PM		
AC			**StringerR**	5/31/2007 9:51:10		
AC			**StringerR**	6/1/2007 9:45:08 AM		
AC			**BlackCL**	6/1/2007 3:55:55 PM		

AC: Accepting Entry; SC: Status Change

5/30/2007 11:05:12 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 06/04/2007 W05157

Sep1 DT/Tm Tech:

Batch: 7109283 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JT14G-1-AF J7D170107-1-SAMP 04/13/2007 12:39		3899.30g,in AmtRec: 20ML,2XLP,3X4LP	ita6281 05/08/07 #Containers: 6		36.3	100	L2	1655 Scr: Alpha: 2.80E-04 uCi/Sa	6/1/07 Beta: 1.69E-03 uCi/Sa	
2 JT14M-1-AE J7D170107-2-SAMP 04/13/2007 09:12		3933.60g,in AmtRec: 20ML,5XLP,2X4LP	ita6282 05/08/07 #Containers: 8		36.4		L4	1657 Scr: Alpha: 7.55E-04 uCi/Sa	Beta: -2.82E-04 uCi/Sa	
3 JT14X-1-AE J7D170107-3-SAMP 04/13/2007 10:01		3911.20g,in AmtRec: 20ML,5XLP,2X4LP	ita6283 05/08/07 #Containers: 8		33.9		L5	1657 Scr: Alpha: 7.34E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa	
4 JT16L-1-AA J7D170111-1-SAMP 04/13/2007 11:21		3914.40g,in AmtRec: 20ML,2X4LP	ita6284 05/08/07 #Containers: 3		35.4		L2	1839 Scr: Alpha: 2.24E-05 uCi/Sa	6/1/07 one Beta: 7.75E-04 uCi/Sa	
5 JT171-1-AA J7D170115-1-SAMP 04/13/2007 08:14		3930.70g,in AmtRec: 20ML,3XLP,2X4LP	ita6285 05/08/07 #Containers: 6		36.5		L4	1841 Scr: Alpha: -6.06E-07 uCi/Sa	Beta: 9.37E-04 uCi/Sa	
6 JT172-1-AA J7D170115-2-SAMP 04/13/2007 09:01		3957.10g,in AmtRec: 20ML,3XLP,2X4LP	ita6286 05/08/07 #Containers: 6		36.3		L5	1842 Scr: Alpha: -1.21E-04 uCi/Sa	Beta: 4.13E-04 uCi/Sa	
7 JT18E-1-AC J7D170117-2-SAMP 04/13/2007 09:55		251.60g,in AmtRec: 20ML,500ML,LP,2X4LP	ita6287 05/08/07 #Containers: 5		37.5		L2	2024 Scr: Alpha: 2.26E-02 uCi/Sa 7.6E-02L	b Beta: 1.15E-03 uCi/Sa	

5/30/2007 11:05:15 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: 7109283 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 **JT18X-1-AC** J7D170120-1-SAMP 04/13/2007 10:46		3961.90g,in	ITA6288 05/08/07		37.4	100	L4	2026	6/1/07	
		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -7.00E-05 uCi/Sa	Beta: 1.80E-05 uCi/Sa	
9 **JT2K9-1-AA** J7D170145-1-SAMP 04/16/2007 10:06		3901.10g,in	ITA6289 05/08/07		36.9		L5	2027		
		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6				Scr:	Alpha: 5.80E-04 uCi/Sa	Beta: -4.99E-04 uCi/Sa	
10 **JT2LQ-1-AA** J7D170161-1-SAMP 04/16/2007 07:50		3891.50g,in	ITA6290 05/08/07		36.5		L2	22 11		
		AmtRec: 20ML,2X4LP	#Containers: 3				Scr:	Alpha: -8.41E-04 uCi/Sa	Beta: -7.92E-05 uCi/Sa	
11 **JT2LQ-1-AC-X** J7D170161-1-DUP 04/16/2007 07:50		3877.10g,in	ITA6291 05/08/07		37.4		L4	2214		
		AmtRec: 20ML,2X4LP	#Containers: 3				Scr:	Alpha: -8.41E-04 uCi/Sa	Beta: -7.92E-05 uCi/Sa	
12 **JT2LT-1-AA** J7D170161-2-SAMP 04/16/2007 08:57		3771.00g,in	ITA6292 05/08/07		37.3		L5	2214		
		AmtRec: 20ML,2X4LP	#Containers: 3				Scr:	Alpha: 2.22E-03 uCi/Sa	Beta: 1.59E-05 uCi/Sa	
13 **JT8H9-1-AA-B** J7D190000-283-BLK 04/16/2007 07:50		3945.70g,in	ITA6293 05/08/07		36.7		L4	0002		
		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
14 **JT8H9-1-AC-C** J7D190000-283-LCS 04/16/2007 07:50		3985.60g,in	ISD0749 04/25/07,pd 04/11/07,r		38.3		L5	0002		
		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

5/30/2007 11:05:19 AM

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: 7109283 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: ~~JT14G-SAMP Comments~~
JT18E-SAMP "Comments. Aliquot reduced due to screening results. JB 05/30/07"
PH - neutral JB 5-30-07

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

JT14G1AF-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JT8H91AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
JT8H91AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

JT14G1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8H91AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8H91AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/4/2007 8:14:58 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/4/2006, 6/9/2007, Batch: '7109283', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109283						
AC		**CalcC**	**BockJ**	5/30/2007 10:23:47		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/30/2007 10:23:47 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/30/2007 11:05:16 AM	RICH-RC-5017 REVISION 5
SC			BostedD	InPrep2	5/30/2007 11:28:13 AM	RICHRC5025 REV3
SC			BostedD	Prep2C	6/1/2007 3:12:14 PM	RICHRC5025 REV3
SC			BlackCL	InCnt1	6/1/2007 3:16:56 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	6/2/2007 3:35:51 PM	RICH-RD-0007 REVISION 5
AC			**BockJ**	5/30/2007 11:05:16		
AC			**BostedD**	5/30/2007 11:28:13		
AC			**BostedD**	6/1/2007 3:12:14 PM		
AC			**BlackCL**	6/1/2007 3:16:56 PM		
AC			**StringerR**	6/2/2007 3:35:51 PM		

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 J7D170117

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7109285

	LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1)	all	TS12 - please shake,
2)		wipe, recount.
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

5/31/2007 12:41:08 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:

Pipet #:

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7151395 WATER pCi/L **PM, Quote: SA , 57671**
SEQ Batch, Test: None

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:
1 JT18A-2-AC J7D170117-1-SAMP 04/13/2007 08:56	AmtRec: 20ML,500ML,LP	#Containers: 3						Scr: Alpha: 8.35E-04 uCi/Sa	3.2E-01L	Beta: 2.70E-04 uCi/Sa
2 JT18A-2-AD-X J7D170117-1-DUP 04/13/2007 08:56	AmtRec: 20ML,500ML,LP	#Containers: 3						Scr: Alpha: 8.35E-04 uCi/Sa	3.2E-01L	Beta: 2.70E-04 uCi/Sa
3 JT18E-2-AD J7D170117-2-SAMP 04/13/2007 09:55	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5						Scr: Alpha: 2.26E-02 uCi/Sa	7.6E-02L	Beta: 1.15E-03 uCi/Sa
4 JT18E-2-AE-S J7D170117-2-MS 04/13/2007 09:55	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5						Scr: Alpha: 2.26E-02 uCi/Sa	7.6E-02L	Beta: 1.15E-03 uCi/Sa
5 JT18X-2-AD J7D170120-1-SAMP 04/13/2007 10:46	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5						Scr: Alpha: -7.00E-05 uCi/Sa		Beta: 1.80E-05 uCi/Sa
6 JT2MC-2-AD J7D170167-1-SAMP 04/16/2007 08:57	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5						Scr: Alpha: 9.86E-04 uCi/Sa		Beta: -1.30E-04 uCi/Sa
7 JT2MW-2-AD J7D170167-2-SAMP 04/16/2007 07:50	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5						Scr: Alpha: -1.02E-03 uCi/Sa		Beta: 7.22E-04 uCi/Sa

5/31/2007 12:41:11 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:
Pipet #:

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7151395 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

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:
8 JT3M4-2-AC J7D170288-1-SAMP 04/16/2007 11:34	AmtRec: 20ML,500ML,2XLP	#Containers: 4					Scr:	Alpha: 5.38E-04 uCi/Sa	Beta: 2.41E-04 uCi/Sa	
9 JT3NL-2-AD J7D170288-2-SAMP 04/16/2007 10:04	AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr:	Alpha: 2.30E-04 uCi/Sa	Beta: -1.62E-04 uCi/Sa	
10 JT8J1-2-AA-B J7D190000-285-BLK 04/13/2007 08:56	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
11 JT8J1-2-AC-C J7D190000-285-LCS 04/13/2007 08:56	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
12 JT8J1-2-AD-B J7D190000-285-BLK 04/13/2007 08:56	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments: JT18E-SAMP "Comments. Aliquot reduced due to screening results. JB 05/30/07"
JT2MC-SAMP "Comments. "
JT3NL-SAMP Comments.

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

5/31/2007 12:41:15 PM

Sample Preparation/Analysis

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

AnalyDueDate: 06/04/2007

Batch: 7151395 **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:

```
JT18A2AC-SAMP Constituent List:
  Tc-99        RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
JT18E2AE-MS:

JT8J12AA-BLK:
  Tc-99        RDL:15          pCi/L     LCL:        UCL:        RPD:
JT8J12AC-LCS:
  Tc-99        RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
JT8J12AD-BLK:
  Tc-99        RDL:15          pCi/L     LCL:        UCL:        RPD:
JT18A2AC-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT18E2AE-MS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT8J12AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT8J12AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JT8J12AD-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

6/4/2007 10:44:15 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/4/2006, 6/9/2007, Batch: '7151395', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7151395						
AC		**CalcC**	**BlackCL**	6/1/2007 12:44:03 PM		
SC			BlackCL	InCnt1	6/1/2007 12:44:03 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	6/3/2007 12:22:39 PM	RICH-RD-0001 REVISION 3
AC			**StringerR**	6/3/2007 12:22:39 PM		
AC			**StringerR**	6/3/2007 1:16:11 PM		

AC: Accepting Entry; SC: Status Change

5/17/2007 8:21:47 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 06/04/2007 W05157

Sep1 DT/Tm Tech:

Batch: 7109288 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7109288 AMS5, 7109290 AZS7, 7109291 BCS8, 7109295 DHSS,

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 **JT15M-1-AD** J7D170109-1-SAMP 04/13/2007 12:00		125.50g,in		60				
		AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 6.22E-04 uCi/Sa	Beta: -8.45E-04 uCi/Sa
2 **JT15M-1-AF-S** J7D170109-1-MS 04/13/2007 12:00		124.90g,in	TCSG1801 04/25/07,pd 01/10/06,r					
		AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 6.22E-04 uCi/Sa	Beta: -8.45E-04 uCi/Sa
3 **JT15M-1-AG-X** J7D170109-1-DUP 04/13/2007 12:00		125.40g,in						
		AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 6.22E-04 uCi/Sa	Beta: -8.45E-04 uCi/Sa
4 **JT8KL-1-AA-B** J7D190000-288-BLK 04/13/2007 12:00		125.50g,in						
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 **JT8KL-1-AC-C** J7D190000-288-LCS 04/13/2007 12:00		126.00g,in						
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 **JT8KL-1-AD-BN** J7D190000-288-IBLK 04/13/2007 12:00		125.90g,in	TCSE2107 04/05/07,pd 01/10/06,r					
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

5/17/2007 8:21:55 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109288 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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: pH < 2.0 JB 5-17-07

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

JT15M1AD-SAMP Constituent List:
Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20
JT15M1AF-MS Constituent List:

JT8KL1AA-BLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:
JT8KL1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JT8KL1AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JT15M1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT15M1AF-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8KL1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8KL1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JT8KL1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/30/2007 1:18:54 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/30/2006, 6/4/2007, Batch: '7109288', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109288						
AC		**CalcC**	**BockJ**	5/17/2007 8:14:01		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/17/2007 8:14:01 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/17/2007 8:21:51 AM	RICH-RC-5016 REVISION 6
SC			FABREM	InSep1	5/21/2007 4:53:52 PM	RICH-RC-5078 REVISION 3
SC			FABREM	Sep1C	5/24/2007 9:19:05 AM	RICH-RC-5078 REVISION 3
SC			BlackCL	InCnt1	5/24/2007 9:59:37 AM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	5/26/2007 12:03:55 PM	RICH-RD-0001 REVISION 3
AC			**BockJ**	5/17/2007 8:21:51		
AC			**FABREM**	5/21/2007 4:53:52 PM		
AC			**FABREM**	5/24/2007 9:19:05		
AC			**BlackCL**	5/24/2007 9:59:37		
AC			**StringerR**	5/26/2007 12:03:55		
AC			**StringerR**	5/26/2007 12:31:04		

AC: Accepting Entry; SC: Status Change

4/19/2007 10:56:11 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/04/2007 W05157

Batch: 7109298 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07 [illegible]
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 JT14G-1-AA J7D170107-1-SAMP 04/13/2007 12:39		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
2 JT14G-1-AH-X J7D170107-1-DUP 04/13/2007 12:39		AmtRec: 20ML,2XLP,3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
3 JT14M-1-AA J7D170107-2-SAMP 04/13/2007 09:12		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8			Scr:	Alpha:	Beta:
4 JT14X-1-AA J7D170107-3-SAMP 04/13/2007 10:01		AmtRec: 20ML,5XLP,2X4LP	#Containers: 8			Scr:	Alpha:	Beta:
5 JT18A-1-AA J7D170117-1-SAMP 04/13/2007 08:56		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha:	Beta:
6 JT18E-1-AA J7D170117-2-SAMP 04/13/2007 09:55		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
7 JT18X-1-AA J7D170120-1-SAMP 04/13/2007 10:46		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:

4/19/2007 10:56:12 AM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-18 0 7am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7109298 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JT8LA-1-AA-B J7D190000-298-BLK 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JT8LA-1-AC-C J7D190000-298-LCS 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JT8LA-1-AD-BX J7D190000-298-MBLK 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JT8LA-1-AE-CM J7D190000-298-MLCS 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
12 JT8LA-1-AF-BN J7D190000-298-IBLK 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
13 JT8LA-1-AG-BN J7D190000-298-IBLK 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
14 JT8LA-1-AH-BN J7D190000-298-IBLK 04/13/2007 12:39		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

4/19/2007 10:56:21 AM

Sample Preparation/Analysis

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

Balance Id: A445
Pipet #:
Sep1 DT/Tm Tech: 5-18-07am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/04/2007

Batch: 7109298 pCi/L
SEQ Batch, Test: None

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

Comments:

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

JT14G1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JT8LA1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JT8LA1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JT8LA1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JT8LA1AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JT8LA1AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JT8LA1AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JT8LA1AH-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

JT14G1AA-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AD-MBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AE-MLCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AF-IBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AG-IBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JT8LA1AH-IBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

4/19/2007 10:56:21 AM

Sample Preparation/Analysis

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

Balance Id:

Pipet #: _____

AnalyDueDate: 06/04/2007

Sep1 DT/Tm Tech:

Batch: 7109298 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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

Approved By _____ Date: _____

5/25/2007 4:41:26 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/25/2006, 5/30/2007, Batch: '7109298', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109298						
AC		**CalcC**	**McDowellD**	5/14/2007 1:02:48 PM		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	5/14/2007 1:02:48 PM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	5/18/2007 3:10:14 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	5/18/2007 3:24:29 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	5/20/2007 10:38:05 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	5/18/2007 3:10:14 PM		
AC			**DAWKINSO**	5/18/2007 3:24:29 PM		
AC			**StringerR**	5/20/2007 10:38:05		

AC: Accepting Entry; SC: Status Change

4/19/2007 10:56:05 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/04/2007 WO5157

Batch: 7109296 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 4-30-07 bm
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 JT3M4-1-AA J7D170288-1-SAMP 04/16/2007 11:34		AmtRec: 20ML,500ML,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
2 JT3M4-1-AD-X J7D170288-1-DUP 04/16/2007 11:34		AmtRec: 20ML,500ML,2XLP	#Containers: 4			Scr:	Alpha:	Beta:
3 JT8K8-1-AA-B J7D190000-296-BLK 04/16/2007 11:34		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 JT8K8-1-AC-C J7D190000-296-LCS 04/16/2007 11:34		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JT8K8-1-AD-BN J7D190000-296-IBLK 04/16/2007 11:34		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JT3M41AA-SAMP Constituent List:
C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20

4/19/2007 10:56:11 AM

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
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AnalyDueDate: 06/04/2007

Batch: 7109296 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:

```
JT8K81AA-BLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:       UCL:       RPD:
JT8K81AC-LCS:
  C-14        RDL:200         pCi/L    LCL:70     UCL:130    RPD:20
JT8K81AD-IBLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:       UCL:       RPD:
JT3M41AA-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JT8K81AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JT8K81AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JT8K81AD-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

5/2/2007 2:04:49 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/2/2006, 5/7/2007, Batch: '7109296', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7109296						
AC		**CalcC**	**McDowellD**	4/30/2007 7:57:42		
SC			wagarr	IsBatched	4/19/2007 10:57:42 AM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	4/30/2007 7:57:42 AM	RICH-RC-5022 REVISION 3
SC			McDowellD	Sep1C	5/1/2007 1:30:52 PM	RICH-RC-5022 REVISION 3
SC			BlackCL	InCnt1	5/1/2007 1:39:11 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	5/2/2007 8:24:36 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	5/1/2007 1:30:52 PM		
AC			**BlackCL**	5/1/2007 1:39:11 PM		
AC			**StringerR**	5/2/2007 8:24:36 AM		

AC: Accepting Entry; SC: Status Change