Analytical Data Package Prepared For

Fluor Handord

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MAY 07 2008
EDMC

Radiochemical Analysis By

TAL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 36067

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05177	W07-005	B1N5V1	J7E170168-1	JW5XJ1AA	9JW5XJ10	7152466
		B1N5V1	J7E170168-1	JW5XJ1AE	9JW5XJ10	7152452
		B1N5V1	J7E170168-1	JW5XJ2AC	9JW5XJ20	7183190
		B1N5V1	J7E170168-1	JW5XJ2AD	9JW5XJ20	7184182
		B1N5V6	J7E170168-2	JW5XV1AA	9JW5XV10	7152466
		B1N5V6	J7E170168-2	JW5XV1AC	9JW5XV10	7152461
		B1N5V6	J7E170168-2	JW5XV1AD	9JW5XV10	7152452
		B1N5T8	J7E170168-3	JW5X01AA	9JW5X010	7152466
		B1N5T8	J7E170168-3	JW5X01AE	9JW5X010	7152452
		B1N5T8	J7E170168-3	JW5X02AC	9JW5X020	7183190
		B1N5T8	J7E170168-3	JW5X02AD	9JW5X020	7184182
		B1N5W1	J7E170168-4	JW5X61AA	9JW5X610	7152466
		B1N5W1	J7E170168-4	JW5X61AE	9JW5X610	7152452
		B1N5W1	J7E170168-4	JW5X62AC	9JW5X620	7183190
		B1N5W1	J7E170168-4	JW5X62AD	9JW5X620	7184182

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2/26/08

Comments:

0027168 Rev. 1

Report Nbr: 36067

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05177	W07-005	B1N4V0	J7E170168-5	JW5X71AA	9JW5X710	7152466
		B1N4V0	J7E170168-5	JW5X71AD	9JW5X710	7152452
		B1N4V0	J7E170168-5	JW5X72AC	9JW5X720	7184182
		B1N4V1	J7E170168-6	JW50C1AA	9JW50C10	7152466
		B1N4V1	J7E170168-6	JW50C1AD	9JW50C10	7152452
		B1N4V1	J7E170168-6	JW50C2AC	9JW50C20	7184182
	S07-005	B1N3Y6	J7E170177-1	JW50V1AC	9JW50V10	7152451
		B1N3Y6	J7E170177-1	JW50V1AE	9JW50V10	7152452
		B1N3Y6	J7E170177-1	JW50V2AA	9JW50V20	7183190
		B1N3Y6	J7E170177-1	JW50V2AD	9JW50V20	7184182
	S07-003	B1MDR1	J7E170190-1	JW5171AA	9JW51710	7152466
		B1MDR1	J7E170190-1	JW5171AD	9JW51710	7152448
		B1MDR1	J7E170190-1	JW5172AC	9JW51720	7152447
	W07-005	B1N593	J7E170202-1	JW5511AA	9JW55110	7152466
		B1N593	J7E170202-1	JW5511AC	9JW55110	7152447
		B1N593	J7E170202-1	JW5511AD	9JW55110	7152448
		B1N593	J7E170202-1	JW5511AF	9JW55110	7152451
		B1N593	J7E170202-1	JW5511AG	9JW55110	7152465
		B1N593	J7E170202-1	JW5512AE	9JW55120	7183190
		B1N593	J7E170202-1	JW5512AH	9JW55120	7184182
		B1N5B3	J7E170202-2	JW58N1AA	9JW58N10	7152466
		B1N5B3	J7E170202-2	JW58N1AC	9JW58N10	7152451
		B1N5B3	J7E170202-2	JW58N2AD	9JW58N20	7184182
		B1N598	J7E170202-3	JW5861AA	9JW58610	7152466
		B1N598	J7E170202-3	JW5862AC	9JW58620	7184182
		B1N5F3	J7E170202-4	JW59C1AA	9JW59C10	7152466

Comments:

Report Nbr: 36067

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05177	W07-005	B1N5F3	J7E170202-4	JW59C1AC	9JW59C10	7152451
		B1N5F3	J7E170202-4	JW59C2AD	9JW59C20	7184182
		B1N5D5	J7E170202-5	JW5951AA	9JW59510	7152466
		B1N5D5	J7E170202-5	JW5952AC	9JW59520	7184182
		B1N5L4	J7E170231-1	JW6CC2AA	9JW6CC20	7184182
		B1N5J9	J7E170231-2	JW6CQ2AA	9JW6CQ20	7184182
		B1N5K9	J7E170231-3	JW6C02AA	9JW6C020	7184182
		B1N5M4	J7E170231-4	JW6C42AA	9JW6C420	7184182
		B1N5K4	J7E230215-1	JXH602AA	9JXH6020	7184182
	I07-038	B1MN47	J7E290176-1	JXWPF1AA	9JXWPF10	7152451
	I07-042	B1N2L4	J7E310108-1	JX1CV1AA	9JX1CV10	7152448
		B1N2L4	J7E310108-1	JX1CV1AC	9JX1CV10	7152449

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

July 25, 2007

Attention: Steve Trent

SAF Number :W07-005, S07-005, S07-003, I07-042
Date SDG Closed :May 30, 2007
Number of Samples :Twenty (20)
Sample Type :Water
SDG Number :W05177
Data Deliverable:45-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 14, 2007 and May 30, 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
B1N5V1	JW5XJ	5/14/07	WATER
B1N5V6	JW5XV	5/14/07	WATER
B1N5T8	JW5X0	5/14/07	WATER
B1N5W1	JW5X6	5/14/07	WATER
B1N4V0	JW5X7	5/14/07	WATER
B1N4V1	JW50C	5/14/07	WATER
B1N3Y6	JW50V	5/14/07	WATER
B1MDR1	JW517	5/14/07	WATER
B1N593	JW551	5/15/07	WATER
B1N5B3	JW58N	5/15/07	WATER
B1N598	JW586	5/15/07	WATER
B1N5F3	JW59C	5/15/07	WATER
B1N5D5	JW595	5/15/07	WATER

B1N5L4	JW6CC	5/15/07	WATER
B1N5J9	JW6CQ	5/15/07	WATER
B1N5K9	JW6C0	5/15/07	WATER
B1N5M4	JW6C4	5/15/07	WATER
B1N5K4	JXH60	5/21/07	WATER
B1MN47	JXWPF	5/24/07	WATER
B1N2L4	JX1CV	5/30/07	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 (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counter
Technetium-99 by TEVA method RICH-RC-5065
Technetium-99 method RICH-RC-5078
Nickel-63 by method RICH-RC-5069
Tritium by method RICH-RC-5007
Total Uranium
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:
Samples B1MDR1, B1N593 and B1MDR1 (DUP) were analyzed with reduced aliquots based on weight screen results. The duplicates were not within RPD. A recount did not bring them within RPD, but the difference is within 1 CRDL so the data will be accepted. Except as noted, the LCS, batch blank, sample and sample duplicate (B1MDR1) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1MDR1 and B1N593 were analyzed with reduced aliquots based on weight screen results. Except as noted, the LCS, batch blank, sample and sample duplicate (B1N2L4) results are within contractual requirements.

Strontium 90 by method RICH-RC-5006:
The LCS, batch blank, sample and sample duplicate (B1N2L4) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec by method RICH-RC-5017:
The LCS had a high recovery on the first analysis. The entire batch was reanalyzed and had acceptable results. Except as noted, the LCS, batch blank, sample and sample duplicate (B1N5V1) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS and blank was switched. The samples were recounted to verify the switch, then renamed in the calculations. Except as noted, the LCS, batch blank, sample and sample duplicate (B1MN47) results are within contractual requirements.

Liquid Scintillation Counter

Technetium-99 by TEVA method RICH-RC-5065:
The TSIE was out on the original count. The samples were shaken, wiped and recounted with acceptable results. Except as noted, the LCS, batch blank, sample, sample duplicate (B1N5L4) and sample matrix spike (B1N5J9) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:
The sample and its duplicate (B1N5V6 and B1N5V6 DUP) did not agree on the first count. The samples were recounted and remained out of limits. The samples were reanalyzed. The blank was high and the samples verified the first results. The client was notified on July 24, 2007 by IRF 07-070. The client agreed to accept the proposed resolution which was to accept the results of the original analysis based on the rest of the QC results. Except as noted, the LCS, batch blank, samples, and sample matrix spike (B1N5V6) results are within contractual requirements.

Nickel-63 by method RICH-RC-5069:
The LCS, batch blank, sample and sample duplicate (B1N593) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, sample and sample duplicate (B1N5B3) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1N5V1), and sample matrix spike (B1N5V6) 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 Seger
Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.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:
9JW50C10	B1N4V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	4.33E+01	pCi/L	1.2E+02	1.3E+02	U	2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 14:00	I
7152452	Uranium	7440-61-1	-7.16E-03	ug/L	7.9E-04	7.9E-04	U	8.03E-02		UTOT_KPA	2.61E-02	ML	07/11/2007 14:27	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:
9JW50C20	B1N4V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	-9.36E-01	pCi/L	4.0E+00	5.4E+00	U	9.79E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	07/04/2007 15:45	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:
9JW50V10	B1N3Y6		MW6-SBB-A1	S07-005	W05177					05/14/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152451	I-129L	15046-84-1	2.82E+00	pCi/L	4.8E-01	4.8E-01		2.90E-01	94.3	I129LL_SEP_LEPS	3.9318E+00	L	07/12/2007 12:56	I
7152452	Uranium	7440-61-1	1.13E+01	ug/L	1.3E+00	1.3E+00		7.82E-02		UTOT_KPA	2.68E-02	ML	07/11/2007 14:32	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:
9JW50V20	B1N3Y6		MW6-SBB-A1	S07-005	W05177					05/14/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	-6.12E+00	pCi/L	2.4E+01	2.4E+01	U	4.29E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CO-60	10198-40-0	2.03E+00	pCi/L	2.4E+00	2.4E+00	U	4.94E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CS-134	13967-70-9	7.81E-01	pCi/L	1.6E+00	1.6E+00	U	3.24E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CS-137	10045-97-3	2.99E-01	pCi/L	1.5E+00	1.5E+00	U	2.93E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-152	14683-23-9	-9.39E-01	pCi/L	4.3E+00	4.3E+00	U	7.50E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-154	15585-10-1	-1.04E+00	pCi/L	4.5E+00	4.5E+00	U	8.52E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-155	14391-16-3	1.35E+00	pCi/L	3.1E+00	3.1E+00	U	5.90E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	K-40	13966-00-2	-2.50E+01	pCi/L	3.3E+01	3.3E+01	U	6.99E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	RU-106	13967-48-1	6.02E+00	pCi/L	1.4E+01	1.4E+01	U	2.80E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	SB-125	14234-35-6	9.46E-01	pCi/L	3.4E+00	3.4E+00	U	6.60E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7184182	TC-99	14133-76-7	1.13E+03	pCi/L	1.8E+01	7.3E+01		9.81E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	07/04/2007 15:45	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:

REVISED
Ulyses 2/26/08

TAL Richland

rptFeadRadSummaryEdd v3.48

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

10

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW51710	B1MDR1		MW6-SBB-A1	S07-003	W05177					05/14/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	1.06E+06	pCi/L	3.3E+03	4.0E+04		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 15:22	I
7152448	BETA	12587-47-2	1.87E+01	pCi/L	2.4E+00	4.2E+00		2.93E+00	100.0	9310_ALPHABETA	1.962E-01	L	07/02/2007 18:06	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:
9JW51720	B1MDR1		MW6-SBB-A1	S07-003	W05177					05/14/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152447	ALPHA	12587-46-1	2.41E+00	pCi/L	1.5E+00	1.6E+00		1.55E+00	100.0	9310_ALPHABETA	1.856E-01	L	07/03/2007 18:54	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:
9JW55110	B1N593		MW6-SBB-A1	W07-005	W05177					05/15/2007 08:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	1.36E+06	pCi/L	3.7E+03	5.0E+04		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 16:45	I
7152447	ALPHA	12587-46-1	1.90E+00	pCi/L	1.6E+00	1.7E+00	U	2.47E+00	100.0	9310_ALPHABETA	8.43E-02	L	07/03/2007 07:45	I
7152448	BETA	12587-47-2	1.26E+03	pCi/L	1.9E+01	1.6E+02		5.08E+00	100.0	9310_ALPHABETA	7.78E-02	L	07/02/2007 18:51	I
7152451	I-129L	15046-84-1	3.51E+01	pCi/L	3.8E+00	3.8E+00		4.94E-01	99.5	I129LL_SEP_LEPS	3.9543E+00	L	07/12/2007 12:59	I
7152465	NI-63	13981-37-8	3.63E+02	pCi/L	5.5E+00	2.6E+01		3.47E+00	98.6	NI63_LSC	4.001E-01	L	06/26/2007 20:32	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:
9JW55120	B1N593		MW6-SBB-A1	W07-005	W05177					05/15/2007 08:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	-2.12E+01	pCi/L	3.3E+01	3.3E+01	U	5.40E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CO-60	10198-40-0	3.27E+00	pCi/L	3.0E+00	3.0E+00	U	6.25E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CS-134	13967-70-9	-9.58E-02	pCi/L	2.8E+00	2.8E+00	U	4.99E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CS-137	10045-97-3	-2.23E-01	pCi/L	2.1E+00	2.1E+00	U	3.69E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-152	14683-23-9	4.50E-01	pCi/L	6.1E+00	6.1E+00	U	1.06E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-154	15585-10-1	-1.20E+00	pCi/L	8.3E+00	8.3E+00	U	1.48E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-155	14391-16-3	4.83E+00	pCi/L	6.7E+00	6.7E+00	U	1.20E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	K-40	13966-00-2	-5.65E+01	pCi/L	6.8E+01	6.8E+01	U	1.49E+02		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	RU-106	13967-48-1	-5.14E+00	pCi/L	2.2E+01	2.2E+01	U	3.87E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	SB-125	14234-35-6	2.00E+00	pCi/L	5.6E+00	5.6E+00	U	1.03E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7184182	TC-99	14133-76-7	6.28E+03	pCi/L	4.2E+01	3.8E+02		9.71E+00	100.0	TC99_ETVDSK_LS	1.259E-01	L	07/04/2007 15:45	I

REVISED Rlayne 3/26/08

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.

7/25/2007 10:24:51 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	5.43E+03	pCi/L	2.6E+02	3.5E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 00:56	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:
9JW58620	B1N598		MW6-SBB-A1	W07-005	W05177					05/15/2007 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.11E+02	pCi/L	6.9E+00	1.2E+01		9.79E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	07/04/2007 15:45	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:
9JW58N10	B1N5B3		MW6-SBB-A1	W07-005	W05177					05/15/2007 09:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	9.58E+04	pCi/L	1.0E+03	3.7E+03		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 22:13	I
7152451	I-129L	15046-84-1	3.65E+00	pCi/L	5.8E-01	5.8E-01		2.89E-01	91.9	I129LL_SEP_LEPS	3.959E+00	L	07/12/2007 13:00	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:
9JW58N20	B1N5B3		MW6-SBB-A1	W07-005	W05177					05/15/2007 09:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.80E+03	pCi/L	2.3E+01	1.1E+02		9.76E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	07/04/2007 15:45	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:
9JW59510	B1N5D5		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	1.17E+03	pCi/L	1.6E+02	1.8E+02		2.90E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 03:40	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:
9JW59520	B1N5D5		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	2.31E+02	pCi/L	9.1E+00	1.9E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	07/04/2007 15:45	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:
9JW59C10	B1N5F3		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:02

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	6.43E+03	pCi/L	2.8E+02	3.9E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 02:18	I
7152451	I-129L	15046-84-1	-1.38E-01	pCi/L	1.2E-01	1.2E-01	U	1.94E-01	93.8	I129LL_SEP_LEPS	3.8935E+00	L	07/12/2007 14:41	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.

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	6.43E+03	pCi/L	2.8E+02	3.9E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 02:18	I
7152451	I-129L	15046-84-1	-1.38E-01	pCi/L	1.2E-01	1.2E-01	U	1.94E-01	93.8	I129LL_SEP_LEPS	3.8935E+00	L	07/12/2007 14:41	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:
9JW59C20	B1N5F3		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:02

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.64E+03	pCi/L	2.2E+01	1.0E+02		9.79E+00	100.0	TC99_ETVDSK_LS	1.249E-01	L	07/04/2007 15:45	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:
9JW5X010	B1N5T8		MW6-SBB-A1	W07-005	W05177					05/14/2007 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	4.64E+03	pCi/L	2.5E+02	3.2E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 09:55	I
7152452	Uranium	7440-61-1	3.72E+02	ug/L	4.4E+01	4.4E+01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/11/2007 14:13	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X020	B1N5T8		MW6-SBB-A1	W07-005	W05177					05/14/2007 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	5.49E-02	pCi/L	3.1E+01	3.1E+01	U	5.68E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CO-60	10198-40-0	2.09E+00	pCi/L	2.8E+00	2.8E+00	U	6.13E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CS-134	13967-70-9	-2.15E+00	pCi/L	2.6E+00	2.6E+00	U	4.10E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CS-137	10045-97-3	-2.31E+00	pCi/L	2.3E+00	2.3E+00	U	3.57E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-152	14683-23-9	-2.12E+00	pCi/L	6.4E+00	6.4E+00	U	1.09E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-154	15585-10-1	-8.68E-01	pCi/L	5.9E+00	5.9E+00	U	1.16E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-155	14391-16-3	-3.65E+00	pCi/L	5.0E+00	5.0E+00	U	8.08E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	K-40	13966-00-2	3.04E+01	pCi/L	4.9E+01	4.9E+01	U	1.12E+02		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	RU-106	13967-48-1	9.86E+00	pCi/L	2.2E+01	2.2E+01	U	4.21E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	SB-125	14234-35-6	1.53E+00	pCi/L	5.7E+00	5.7E+00	U	1.08E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7184182	TC-99	14133-76-7	5.85E+03	pCi/L	4.1E+01	3.5E+02		9.74E+00	100.0	TC99_ETVDSK_LS	1.261E-01	L	07/04/2007 15:45	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:
9JW5X610	B1N5W1		MW6-SBB-A1	W07-005	W05177					05/14/2007 11:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	1.08E+04	pCi/L	3.5E+02	5.6E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 11:16	I

REVISED Nayan 2/26/08

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.

13

7152452	Uranium	7440-61-1	2.31E+02	ug/L	2.7E+01	2.7E+01		8.06E-02		UTOT_KPA	2.60E-02	ML	07/11/2007 14:15	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:
9JW5X620	B1N5W1		MW6-SBB-A1	W07-005	W05177					05/14/2007 11:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	2.58E+01	pCi/L	3.2E+01	3.2E+01	U	6.43E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CO-60	10198-40-0	3.26E+01	pCi/L	7.8E+00	7.8E+00		2.58E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CS-134	13967-70-9	-1.68E+00	pCi/L	3.0E+00	3.0E+00	U	5.08E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CS-137	10045-97-3	3.87E-01	pCi/L	2.3E+00	2.3E+00	U	4.25E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-152	14683-23-9	-1.76E+00	pCi/L	5.4E+00	5.4E+00	U	9.23E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-154	15585-10-1	-6.93E-01	pCi/L	6.3E+00	6.3E+00	U	1.22E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-155	14391-16-3	3.02E+00	pCi/L	4.5E+00	4.5E+00	U	8.30E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	K-40	13966-00-2	-2.63E+01	pCi/L	3.0E+01	3.0E+01	U	6.09E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	RU-106	13967-48-1	8.88E+00	pCi/L	2.3E+01	2.3E+01	U	4.31E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	SB-125	14234-35-6	-1.83E+00	pCi/L	6.2E+00	6.2E+00	U	1.09E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7184182	TC-99	14133-76-7	1.08E+04	pCi/L	5.6E+01	6.5E+02		9.80E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	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:
9JW5X710	B1N4V0		MW6-SBB-A1	W07-005	W05177					05/14/2007 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	7.31E+02	pCi/L	1.5E+02	1.6E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 12:38	I
7152452	Uranium	7440-61-1	3.80E+00	ug/L	3.9E-01	3.9E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	07/11/2007 14:25	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:
9JW5X720	B1N4V0		MW6-SBB-A1	W07-005	W05177					05/14/2007 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	7.27E+02	pCi/L	1.5E+01	4.9E+01		9.81E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	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:
9JW5XJ10	B1N5V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	5.02E+03	pCi/L	2.6E+02	3.4E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 07:11	I
7152452	Uranium	7440-61-1	4.83E+01	ug/L	5.7E+00	5.7E+00		8.45E-02		UTOT_KPA	2.48E-02	ML	07/11/2007 14:02	I

REVISED

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

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.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:
9JW5XJ20	B1N5V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	2.33E+00	pCi/L	3.7E+01	3.7E+01	U	6.83E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CO-60	10198-40-0	4.14E+00	pCi/L	3.3E+00	3.3E+00	U	7.42E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CS-134	13967-70-9	5.48E-01	pCi/L	2.6E+00	2.6E+00	U	5.20E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CS-137	10045-97-3	1.43E+00	pCi/L	2.5E+00	2.5E+00	U	5.02E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-152	14683-23-9	-1.31E+00	pCi/L	6.5E+00	6.5E+00	U	1.14E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-154	15585-10-1	-5.97E+00	pCi/L	8.3E+00	8.3E+00	U	1.38E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-155	14391-16-3	-1.13E+00	pCi/L	5.2E+00	5.2E+00	U	9.39E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	K-40	13966-00-2	-4.46E+01	pCi/L	5.9E+01	5.9E+01	U	1.30E+02		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	RU-106	13967-48-1	1.23E+01	pCi/L	2.4E+01	2.4E+01	U	4.74E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	SB-125	14234-35-6	-2.61E+00	pCi/L	5.9E+00	5.9E+00	U	1.03E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7184182	TC-99	14133-76-7	3.14E+03	pCi/L	3.0E+01	1.9E+02		9.86E+00	100.0	TC99_ETVDSK_LS	1.244E-01	L	07/04/2007 15:45	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:
9JW5XV10	B1N5V6		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	10028-17-8	1.22E+04	pCi/L	3.7E+02	6.1E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 08:33	I
7152461	TC-99	14133-76-7	6.66E+02	pCi/L	1.5E+01	4.5E+01		1.03E+01	100.0	TC99_SEP_LSC	1.246E-01	L	06/27/2007 10:47	I
7152452	Uranium	7440-61-1	6.25E+00	ug/L	7.4E-01	7.4E-01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/11/2007 14:06	I

REVISED RLyons 2/28/08

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW6C020	B1N5K9		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.24E+03	pCi/L	1.9E+01	7.9E+01		9.77E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	07/04/2007 15:45	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:
9JW6C420	B1N5M4		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.50E+03	pCi/L	2.1E+01	9.5E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	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:

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.

7/25/2007 10:24:51 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 36067 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	3.64E+02	pCi/L	1.1E+01	2.7E+01		9.78E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	07/04/2007 15:45	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:
9JX1CV10	B1N2L4		MW6-SBB-A1	I07-042	W05177					05/30/2007 11:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152448	BETA	12587-47-2	1.03E+03	pCi/L	1.5E+01	1.3E+02		2.69E+00	100.0	9310_ALPHABETA	1.984E-01	L	07/02/2007 18:06	I
7152449	SR-90	10098-97-2	5.18E+02	pCi/L	4.2E+00	7.4E+01		4.54E-01	81.3	SRISO_SEP_PRE	1.0048E+00	L	07/07/2007 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:
9JXH6020	B1N5K4		MW6-SBB-A1	W07-005	W05177					05/21/2007 10:28

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	4.26E+01	pCi/L	5.3E+00	7.9E+00		9.76E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	07/04/2007 15:45	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:
9JXWPF10	B1MN47		MW6-SBB-A1	I07-038	W05177					05/24/2007 08:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152451	I-129L	15046-84-1	7.52E-02	pCi/L	1.8E-01	1.8E-01	U	2.71E-01	96.5	I129LL_SEP_LEPS	3.8929E+00	L	07/12/2007 14:45	I

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5111AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

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
7152447	ALPHA	3.35E-01	pCi/L	3.2E-01	U	4.83E-01	100.0		9310_ALPHAB	2.00E-01	07/03/2007				D
BLK	12587-46-1			3.1E-01						L	07:45				

TAL Richland
rptFeadRadEdd v3.68

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5121AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/30/2007

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
7152448	BETA	1.08E+00	pCi/L	9.0E-01	U	1.70E+00	100.0		9310_ALPHAB	2.004E-01	07/02/2007				D
BLK	12587-47-2			8.9E-01						L	18:51				

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5131AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/30/2007

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
7152449	SR-90	2.13E-01	pCi/L	2.5E-01	U	4.90E-01	81.7		SRISO_SEP_P	1.0001E+00	07/07/2007				D
BLK	10098-97-2			2.5E-01						L	10:44				

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5151AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/24/2007 08:50
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/24/2007

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
7152451	I-129L	-4.47E-02	pCi/L	1.5E-01	U	2.62E-01	95.4		I129LL_SEP_L	3.97E+00	07/12/2007				D
BLK	15046-84-1			1.5E-01						L	17:09				

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5171AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

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
7152452	Uranium	0.00E+00	ug/L	0.0E+00	U	8.22E-02			UTOT_KPA	2.55E-02	07/11/2007				D
BLK	7440-61-1			0.0E+00						ML	13:54				

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52E2AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:49
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

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
7184182	TC-99	9.98E-01	pCi/L	5.4E+00	U	9.67E+00	100.0		TC99_ETVDSK	1.267E-01	07/04/2007				D
BLK	14133-76-7			4.0E+00						L	15:45				

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52G1AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:57
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

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
7152461	TC-99	3.87E+00	pCi/L	6.2E+00	U	1.03E+01	100.0		TC99_SEP_LS	1.269E-01	06/27/2007				D
BLK	14133-76-7			4.4E+00						L	10:47				

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.

Monday, October 08, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52J2AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

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
7183190	BE-7	-2.78E+01	pCi/L	3.3E+01	U	5.36E+01			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	13966-02-4			3.3E+01						L	12:57				
7183190	CO-60	5.00E-01	pCi/L	2.7E+00	U	5.31E+00			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	10198-40-0			2.7E+00						L	12:57				
7183190	CS-134	1.93E+00	pCi/L	2.4E+00	U	5.09E+00			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	13967-70-9			2.4E+00						L	12:57				
7183190	CS-137	-1.02E+00	pCi/L	2.4E+00	U	4.11E+00			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	10045-97-3			2.4E+00						L	12:57				
7183190	EU-152	-1.63E+00	pCi/L	5.2E+00	U	8.98E+00			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	14683-23-9			5.2E+00						L	12:57				
7183190	EU-154	1.55E+00	pCi/L	7.1E+00	U	1.43E+01			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	15585-10-1			7.1E+00						L	12:57				
7183190	EU-155	-6.72E-01	pCi/L	3.9E+00	U	6.94E+00			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	14391-16-3			3.9E+00						L	12:57				
7183190	K-40	-2.06E+00	pCi/L	4.8E+01	U	1.08E+02			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	13966-00-2			4.8E+01						L	12:57				
7183190	RU-106	6.16E+00	pCi/L	2.0E+01	U	3.89E+01			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	13967-48-1			2.0E+01						L	12:57				
7183190	SB-125	2.71E+00	pCi/L	5.8E+00	U	1.09E+01			GAMMALL_GS	1.9938E+00	07/06/2007				D
BLK	14234-35-6			5.8E+00						L	12:57				

REVISED

Myers 2/28/08

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.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52N1AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

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
7152465	NI-63	7.33E-01	pCi/L	2.6E+00	U	3.64E+00	94.6		NI63_LSC	3.998E-01	06/26/2007				D
BLK	13981-37-8			1.5E+00						L	23:57				

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.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52Q1AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 09:19
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

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
7152466	H-3	1.67E+01	pCi/L	1.3E+02	U	2.90E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007				
BLK	10028-17-8			1.2E+02						L	04:28				D

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

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52Q1DX	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 09:19
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CN	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
7152466	H-3	1.99E+02	pCi/L	1.4E+02	U	2.97E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007				D
BLK	10028-17-8			1.3E+02						L	19:29				

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5111CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/14/2007 10:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/14/2007

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
7152447	ALPHA	2.00E+01	pCi/L	5.0E+00		5.78E-01	100.0	2.26E+01	9310_ALPHAB	2.017E-01	07/03/2007			70	D
BS	12587-46-1			2.0E+00				88.5		L	07:45			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5121CS	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/30/2007

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
7152448	BETA	2.04E+01	pCi/L	4.6E+00		1.64E+00	100.0	2.27E+01	9310_ALPHAB	1.999E-01	07/02/2007			70	D
BS	12587-47-2			1.6E+00				90.0		L	18:51			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5131CS	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	05/30/2007

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
7152449	SR-90	1.35E+01	pCi/L	2.1E+00		4.99E-01	83.0	1.39E+01	SRISO_SEP_P	9.995E-01	07/07/2007			70	D
BS	10098-97-2			7.2E-01				97.6		L	10:44			130	

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5151CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/24/2007 08:50

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/24/2007

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
7152451	I-129L	8.03E+00	pCi/L	1.1E+00		3.94E-01	96.1	9.54E+00	I129LL_SEP_L	3.9577E+00	07/12/2007			70	D
BS	15046-84-1			1.1E+00				84.2		L	17:06			130	

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5171CS	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	05/14/2007

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
7152452	Uranium	3.52E+01	ug/L	4.1E+00		8.15E-02		3.50E+01	UTOT_KPA	2.57E-02	07/11/2007			70	D
BS	7440-61-1			4.1E+00				100.7		ML	13:58			130	

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5171DS	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/14/2007

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
7152452	Uranium	3.60E+00	ug/L	3.7E-01		8.42E-02		3.64E+00	UTOT_KPA	2.49E-02	07/11/2007			70	D
BS	7440-61-1			3.7E-01				99.0		ML	14:00			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52E2CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 08:49

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

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
7184182	TC-99	5.19E+02	pCi/L	3.6E+01		9.79E+00	100.0	5.42E+02	TC99_ETVDSK	1.254E-01	07/04/2007			70	D
BS	14133-76-7			1.3E+01				95.7		L	15:45			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52G1CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/14/2007 12:57

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/14/2007

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
7152461	TC-99	4.35E+02	pCi/L	3.1E+01		1.04E+01	100.0	5.32E+02	TC99_SEP_LS	1.274E-01	06/27/2007			70	D
BS	14133-76-7			1.2E+01				81.8		L	10:47			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52J3CS	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/14/2007

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
7183190	CO-60	4.13E+01	pCi/L	9.6E+00		2.77E+00		3.84E+01	GAMMALL_GS	1.997E+00	07/06/2007			70	D
BS	10198-40-0			9.6E+00				107.6		L	12:58			130	
7183190	CS-137	2.62E+01	pCi/L	7.9E+00		3.93E+00		2.50E+01	GAMMALL_GS	1.997E+00	07/06/2007			70	D
BS	10045-97-3			7.9E+00				105.1		L	12:58			130	
7183190	EU-152	9.14E+01	pCi/L	2.1E+01	U	2.89E+01		7.68E+01	GAMMALL_GS	1.997E+00	07/06/2007			70	D
BS	14683-23-9			2.1E+01				119.1		L	12:58			130	

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52N1CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 08:27

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

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
7152465	NI-63	2.87E+02	pCi/L	2.1E+01		3.45E+00	100.2	3.80E+02	NI63_LSC	3.986E-01	06/27/2007			70	D
BS	13981-37-8			4.9E+00				75.6		L	01:40			130	

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

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52Q1CS	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/15/2007 09:19
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CM	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
7152466	H-3	2.59E+03	pCi/L	2.4E+02		2.91E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/24/2007			70	D
BS	10028-17-8			2.0E+02				94.9		L	05:49			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.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52Q1EM **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CO	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
7152466	H-3	2.47E+03	pCi/L	2.4E+02		2.97E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/24/2007			70	D
BS	10028-17-8			2.0E+02				90.7		L	20:51			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.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5172ER	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 10:00
Client Id:	B1MDR1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152447	ALPHA	3.33E+00	pCi/L	1.9E+00		1.41E+00	100.0		9310_ALPHAB	1.857E-01	07/03/2007	32.1	0.7		D
DUP	12587-46-1	2.41E+00		1.7E+00						L	18:54	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.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5511JR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:27
Client Id:	B1N593	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152465	NI-63	3.60E+02	pCi/L	2.7E+01		4.83E+00	71.2		NI63_LSC	3.986E-01	06/26/2007	.9	0.2		D
DUP	13981-37-8	3.63E+02		6.6E+00						L	22:15	20.0	3		

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

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW58N1ER **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19
Client Id: B1N5B3 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152466	H-3	9.58E+04	pCi/L	3.7E+03		2.91E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007	.0	0.		D
DUP	10028-17-8	9.58E+04		1.0E+03						L	23:34	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.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XJ1FR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	B1N5V1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152452	Uranium	4.83E+01	ug/L	5.7E+00		8.42E-02			UTOT_KPA	2.49E-02	07/11/2007	.1	0.		D
DUP	7440-61-1	4.83E+01		5.7E+00						ML	14:05	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.

Monday, October 08, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XJ2GR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	B1N5V1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7183190	BE-7	3.13E+01	pCi/L	3.7E+01	U	7.36E+01			GAMMALL_GS	1.8374E+00	07/06/2007	172.3	1.1		D
DUP	13966-02-4	2.33E+00		3.7E+01						L	14:50	20.0	3		
7183190	CO-60	3.68E+00	pCi/L	3.4E+00	U	7.61E+00			GAMMALL_GS	1.8374E+00	07/06/2007	11.6	0.2		D
DUP	10198-40-0	4.14E+00		3.4E+00						L	14:50	20.0	3		
7183190	CS-134	-1.70E+00	pCi/L	2.6E+00	U	4.27E+00			GAMMALL_GS	1.8374E+00	07/06/2007	0.0	1.2		D
DUP	13967-70-9	5.48E-01		2.6E+00						L	14:50	20.0	3		
7183190	CS-137	2.33E+00	pCi/L	2.1E+00	U	4.68E+00			GAMMALL_GS	1.8374E+00	07/06/2007	47.5	0.6		D
DUP	10045-97-3	1.43E+00		2.1E+00						L	14:50	20.0	3		
7183190	EU-152	-1.53E+00	pCi/L	5.7E+00	U	1.00E+01			GAMMALL_GS	1.8374E+00	07/06/2007				D
DUP	14683-23-9			5.7E+00						L	14:50				
7183190	EU-154	-2.76E+00	pCi/L	7.1E+00	U	1.29E+01			GAMMALL_GS	1.8374E+00	07/06/2007	0.0	0.6		D
DUP	15585-10-1	-5.97E+00		7.1E+00						L	14:50	20.0	3		
7183190	EU-155	4.22E+00	pCi/L	4.5E+00	U	8.05E+00			GAMMALL_GS	1.8374E+00	07/06/2007	346.9	1.7		D
DUP	14391-16-3	-1.13E+00		4.5E+00						L	14:50	20.0	3		
7183190	K-40	-7.51E+01	pCi/L	4.3E+01	U	9.09E+01			GAMMALL_GS	1.8374E+00	07/06/2007	0.0	1.		D
DUP	13966-00-2	-4.46E+01		4.3E+01						L	14:50	20.0	3		
7183190	RU-106	-5.07E+00	pCi/L	2.2E+01	U	3.98E+01			GAMMALL_GS	1.8374E+00	07/06/2007	481.4	1.1		D
DUP	13967-48-1	1.23E+01		2.2E+01						L	14:50	20.0	3		
7183190	SB-125	2.76E+00	pCi/L	6.4E+00	U	1.23E+01			GAMMALL_GS	1.8374E+00	07/06/2007	6908.3	1.2		D
DUP	14234-35-6	-2.61E+00		6.4E+00						L	14:50	20.0	3		

REVISED
Rhynes
3/26/08

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.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XV1FR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:57
Client Id:	B1N5V6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152461	TC-99	5.30E+02	pCi/L	3.7E+01		1.07E+01	100.0		TC99_SEP_LS	1.252E-01	06/27/2007	22.9	5.2		D
DUP	14133-76-7	6.66E+02		1.3E+01						L	10:47	20.0	3		

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J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW6CC2CR	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/15/2007 08:49
Client Id:	B1N5L4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7184182	TC-99	1.69E+02	pCi/L	1.5E+01		9.82E+00	100.0		TC99_ETVDSK	1.25E-01	07/04/2007	1.4	0.2		D
DUP	14133-76-7	1.72E+02		8.1E+00						L	15:45	20.0	3		

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

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX1CV1DR	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/30/2007 11:21
Client Id:	B1N2L4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-042	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
7152448	BETA	9.86E+02	pCi/L	1.9E+02		2.61E+00	100.0		9310_ALPHAB	2.001E-01	07/02/2007	3.9	0.3		D
DUP	12587-47-2	1.03E+03		1.4E+01						L	18:06	20.0	3		

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

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX1CV1ER	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/30/2007 11:21
Client Id:	B1N2L4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-042	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
7152449	SR-90	5.59E+02	pCi/L	7.9E+01		5.55E-01	75.8		SRISO_SEP_P	1.0043E+00	07/07/2007	7.6	0.7		D
DUP	10098-97-2	5.18E+02		4.5E+00						L	10:44	20.0	3		

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

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JXWPF1CR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/24/2007 08:50
Client Id:	B1MN47	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-038	MW6-SBB-A19981								CP	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
7152451	I-129L	-7.47E-03	pCi/L	1.3E-01	U	2.43E-01	95.1		I129LL_SEP_L	3.918E+00	07/12/2007	244.1	0.9		D
DUP	15046-84-1	7.52E-02		1.3E-01						L	14:46	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.

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW5XV1EW
Client Id: B1N5V6
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: MS

Collection Date: 05/14/2007 12:57
Sample On Date:
Received Date: 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152452	Uranium	3.52E+01	ug/L	4.9E+00		7.94E-02		3.41E+01	UTOT_KPA	2.64E-02	07/11/2007			60	D
MS	7440-61-1			4.9E+00				103.4		ML	14:08			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.

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XV1GW	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:**	05/14/2007 12:57
Client Id:	B1N5V6	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:**	05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7152461	TC-99	3.00E+03	pCi/L	2.3E+02		1.04E+01	100.0	3.63E+03	TC99_SEP_LS	1.252E-01	06/27/2007			60	D
MS	14133-76-7			3.3E+01				82.7		L	10:47			140	

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

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW6CQ2CW
Client Id: B1N5J9
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: MS

Collection Date: 05/15/2007 10:06
Sample On Date:
Received Date: 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	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
7184182	TC-99	3.44E+03	pCi/L	2.3E+02		9.79E+00	100.0	3.61E+03	TC99_ETVDSK	1.252E-01	07/04/2007			60	D
MS	14133-76-7			3.3E+01				95.2		L	15:45			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
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SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/6/2007 3:45:54 PM

Lot No., Due Date: J7E170190,J7E170202; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152447; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05177; 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 => JW5171AC 185.60<200.00 JW5511AC 84.30<200.00 JW5172AC 185.60<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JW5171AE ALPHA 22.0 (RPD) See NCM		✓	
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 => JW5171AC ALPHA 3.9E+00 L:1.7E+00 JW5172AC ALPHA 2.4E+00 L:1.5E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments: NCM - 10-10312

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

MA 7/6/07

First Level Review Kizer Christenson Date 7/6/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152447
W05177

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

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adam Date: 7-9-07

Clouseau
Nonconformance Memo

STL

NCM #: **10-10312**
NCM Initiated By: Lisa Antonson
Date Opened: 07/06/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Alpha by GPC-Am
Lot #'s (Sample #'s): J7E170190 (1), J7E170202 (1), J7F010000 (447),
QC Batches: 7152447,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	07/06/2007	In this alpha batch, the dups were not with in RPD. A recount didn't bring them within RPD, but the difference is within 1CRDL so the data will be accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	07/06/2007	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

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/3/2007 11:11:35 AM

Lot No., Due Date: J7E170190,J7E170202,J7E310108; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152448; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05177; 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 => JW5511AD 77.80<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JW5511AD BETA 5.1E+00>4.0E+00 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JW5171AD BETA 1.9E+01 L:2.9E+00 JW5511AD BETA 1.3E+03 L:5.1E+00 JX1CV1AA BETA 1.0E+03 L:2.7E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Lisa Anderson **Date** 7/3/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152445
W05177

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: 7-5-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/10/2007 8:55:52 AM

Lot No., Due Date: J7E310108; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152449; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05177; 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 Angela Long **Date** 7/10/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152449

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

Comments on any "No" response: _____

Second Level Review: Erika Jordo Date: 7/11/7

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/10/2007 3:30:48 PM

Lot No., Due Date: J7E170177,J7E170202,J7E170168; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7183190; RGAMMA Gamma by GER

SDG, Matrix: W05177; WATER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response: NCM 10-10339

First Level Review Lisa Anderson **Date** 7/10/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7183190

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 Gordon Date: 7/11/7

Clouseau
Nonconformance Memo

STL

NCM #: **10-10339**
NCM Initiated By: Lisa Antonson
Date Opened: 07/11/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7E170168 (1,3,4), J7E170177 (1), J7E170202 (1), J7F010000 (464),
QC Batches: 7183190,

Nonconformance: LCS result out of limits
Subcategory: Analyte was recovered high in the LCS

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	07/11/2007	This gamma batch is a rerun of 7152464 due to a high LCS recovery. The rerun has good results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	07/11/2007	The samples were rerun.

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

7/16/2007 5:03:49 PM

Lot No., Due Date: J7E170177,J7E170202,J7E290176; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152451; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05177; WATER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:
NCM 10-10384

First Level Review Lisa Antonson **Date** 7/16/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152451
W05177

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

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adam Date: 7-17-07

Clouseau
Nonconformance Memo

STL

NCM #: **10-10384**
NCM Initiated By: Lisa Antonson
Date Opened: 07/16/2007
Date Closed:

Classification: **Deficiency**
Status: **CHREVIEW**
Production Area: Counting
Tests: Gamma by LEPS
Lot #'s (Sample #'s): J7E170177 (1), J7E170202 (1,2,4), J7E290176 (1), J7F010000 (451),
QC Batches: 7152451,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	07/16/2007	In this I-129 batch, the LCS and Blank were switched. The samples were recounted to verify the switch, then renamed in the calculations.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	07/16/2007	Switch was verified by recount and corrected.

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

7/11/2007 4:24:55 PM

Lot No., Due Date: J7E170168,J7E170177,J7E170202,J7E170231,J7E230215; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7184182; RTC99 Tc-99 by LSC

SDG, Matrix: W05177; 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. 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. Yes No N/A ✓
No Count Library found in Batch Data!

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

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

8.3 Comments:

MCM 10-103 LLC

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

First Level Review Lisa Autenson **Date** 7/11/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7184182

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

Comments on any "No" response: _____

Second Level Review: Erika [illegible] Date: 7/12/7

Clouseau
Nonconformance Memo

STL

NCM #: 10-10346
NCM Initiated By: Lisa Antonson
Date Opened: 07/11/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J7E170168 (1,3,4,5,6), J7E170177 (1), J7E170202 (1,2,3,4,5), J7E170231 (1,2,3,4), J7E230215 (1), J7F010000 (456),
QC Batches: 7184182,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	07/11/2007	The TSIE was out on the original count of this Tc99 batch. The samples were shaken, rewiped and submitted for recounting with good results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	07/11/2007	Samples were shaken and rewiped, then 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

7/24/2007 4:21:04 PM

Lot No., Due Date: J7E170168; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152461; RTC99 Tc-99 by LSC

SDG, Matrix: W05177; 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. RPD > UCL : 20.0=> JW5XV1AF TC-99 23.0 (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. Yes No N/A ✓
No Count Library found in Batch Data!

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

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

8.3 Comments:

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

First Level Review Kim Autonson **Date** 7/24/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152461
W0J177

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

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adkins Date: 7-25-07

Clouseau
Nonconformance Memo

STL

NCM #: 10-10462
NCM Initiated By: Lisa Antonson
Date Opened: 07/24/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J7E170168 (2), J7F010000 (461),
QC Batches: 7152461,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	07/24/2007	In this Tc99 batch, the dups were out of limits. The samples were recounted, and remained out of limints. The samples were rerun. In the rerun batch, the blank was high. The samples verified the first results. The client was contacted and agree to accept the first batch.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	07/24/2007	The samples were rerun.

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

STL RICHLAND ISSUE RESOLUTION FORM
FOR CONTRACT 615 WITH BHI/FH/PNNL

IRF Tracking Number: 07-070
SAF No.: W07-005
Date: July 24, 2007
SDG: W05177
Sample No.(s) B1N5V6

Submitted By: Sherryl Adam

Phone No. 509-375-3131 x164
Fax No. 509-375-5590

Submitted To: **Dot Stewart (PNNL)**

Phone No. **509-376-5056**
Fax No. 509-372-1704

ISSUE	PROPOSED RESOLUTION
On the first analysis, the duplicate RPD was over 20%. All of the other QC is acceptable. The sample was reanalyzed and the blank is high. The results from the two runs compare. Please see attached results.	Accept the results of the original run based on the rest of the QC results.

BHI/FH/PNNL COMMENTS -
Accept proposed resolution.

Heidi Hampt 7/24/07
Signature and date

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/10/2007 4:47:36 PM

Lot No., Due Date: J7E170202; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152465; RNI63 Ni-63 by LSC

SDG, Matrix: W05177; 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 => NI-63 OK; No Callin Level Found => NI-63	✓		
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. Yes No N/A ✓
No Count Library found in Batch Data!

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

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

8.3 Comments:

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

First Level Review Lisa Anderson **Date** 7/10/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 71S2465

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

Comments on any "No" response: _____

Second Level Review: Erika Fowler Date: 7/11/7

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/25/2007 1:59:55 PM

Lot No., Due Date: J7E170168,J7E170190,J7E170202; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152466; RTRITIUM H-3 by LSC

SDG, Matrix: W05177; WATER

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

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

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

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

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

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

8.06 At Least the Minimum Sample Volume Was Used Yes No N/A ✓

Analysis Volume => JW5XJ1AA 5.00<10.00
JW5XV1AA 5.00<10.00
JW5X01AA 5.00<10.00
JW5X61AA 5.00<10.00
JW5X71AA 5.00<10.00
JW50C1AA 5.00<10.00
JW5171AA 5.00<10.00
JW5511AA 5.00<10.00
JW58N1AA 5.00<10.00
JW5861AA 5.00<10.00
JW59C1AA 5.00<10.00
JW5951AA 5.00<10.00 Q:VB

OK AL 6/25/07

8.07 The Correct Count Geometry was Used. Yes No N/A ✓

Count Geometry => JX52Q1AF SVP15/5<>SVP10/10
JX52Q1AG SVP15/5<>SVP10/10
JX52Q1AA SVP15/5<>SVP10/10
JX52Q1AC SVP15/5<>SVP10/10
JW5XJ1AA SVP15/5<>SVP10/10
JW5XV1AA SVP15/5<>SVP10/10
JW5X01AA SVP15/5<>SVP10/10
JW5X61AA SVP15/5<>SVP10/10
JW5X71AA SVP15/5<>SVP10/10
JW50C1AA SVP15/5<>SVP10/10
JW5171AA SVP15/5<>SVP10/10
JW5511AA SVP15/5<>SVP10/10
JX52Q1AH SVP15/5<>SVP10/10
JX52Q1AD SVP15/5<>SVP10/10
JX52Q1AE SVP15/5<>SVP10/10
JW58N1AA SVP15/5<>SVP10/10
JW58N1AE SVP15/5<>SVP10/10
JW5861AA SVP15/5<>SVP10/10
JW59C1AA SVP15/5<>SVP10/10
JW5951AA SVP15/5<>SVP10/10 Q:VC

OK AL 6/25/07

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

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

8.1 Comments:

8.11 Matrix Blank is within Control Limits. Yes No N/A
OK ✓

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

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

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

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

First Level Review Angela Long **Date** 6/25/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152466
W05177

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: 6-25-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/11/2007 3:51:13 PM

Lot No., Due Date: J7E170168,J7E170177; 07/16/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7152452; RUNAT UNat by KPA

SDG, Matrix: W05177; 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 [signature] **Date** 7-11-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7152452

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: Eirhe [illegible] Date: 7/12/7

PNNL J7E170168
WO 5177
Due 06.28.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-168

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** SPP-03-021 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5V1		W	5-14-07	1213	1x20-mL P	Activity Scan	None
B1N5V1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5V1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5V1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5V1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5XJ	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON		D.R. Brewington	MAY 14 2007 1440		S. Smith	S. Smith	MAY 14 2007 1640
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 J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-174**

Page 1 of 1

Collector Fluor Hanford ~~G. R. BREWINGTON~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-W-506-2	**Ice Chest No.** GPP-03-027 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5V6		W	5-14-07	1257	1x20-mL P	Activity Scan	None
B1N5V6		W			3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N5V6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5V6		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5XV	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford ~~G. R. BREWINGTON~~			1440 MAY 14 2007		S. Smith	S. Smith	1440 MAY 14 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

RECEIVED

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-162**

Page 1 of 1

Collector Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** GRP-03-027 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5T8		W	5-14-07	1027	1x20-mL P	Activity Scan	None
B1N5T8		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5T8		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5T8		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5T8		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5XC	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Hanford D. R. BREWINGTON	D. R. Brewington		MAY 14 2007 1140	S. Smith	S. Smith		MAY 14 2007 1340
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-182**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** GRP-03-027 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5W1		W	5-14-07	1120	1x20-mL P	Activity Scan	None
B1N5W1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5W1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5W1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5W1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5X6	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		1440 MAY 14 2007		S. Smith	S. Smith	1440 MAY 14 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

88

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-150

Page 1 of 1

Collector Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNI-N-506-8	**Ice Chest No.** GRP-03-027 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4V0		W	5-14-07	0936	1x20-mL P	Activity Scan	None
B1N4V0		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4V0		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4V0		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5X7	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Hanford D. R. BREWINGTON			MAY 14 2007 1440		S. Smith	S. Smith	MAY 14 2007 1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

89

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-151**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	H1N.F-N-506-8	**Ice Chest No.** GRP-03-027 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4V1		W	5-14-07	0800	1x20-mL P	Activity Scan	None
B1N4V1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4V1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4V1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW.50C	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			1440 MAY 14 2007		S. Smith	S. Smith	1440 MAY 14 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SHF RICHLAND

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5·14·07 1440

Client: PGW SDG #: W05177 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: J7E170168 Chain of Custody # W07-005-168, 174, 162, 182, 150, 151

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: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 5 14 07 1440

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 J7E170177
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-005-138

Page 1 of 1

Collector Fluor Hanford F.M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. S07-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV. MAY 2007	HNF-N-506-7	Ice Chest No. 595 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N3Y6		W	5/14/7	1236	1x20-mL P	Activity Scan	None
B1N3Y6		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N3Y6		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N3Y6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N3Y6		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						JW.50V	

Relinquished By	Date/Time	Received By	Date/Time
Print Fluor Hanford F.M. HALL Sign MAY 14 2007	1440	Print S. Smith Sign S. Smith MAY 14 2007	1440
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

STL RICHLAND

92

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5·14·07 1440

Client: PGW SDG #: W05177 NA [ ] SAF #: S07-003 NA [ ]

Work Order Number: J7E170177 Chain of Custody # S07-003-158, 205 SS

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: 21
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Smith Date: 5·14·07 1440

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 J7E170190
WC5177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-205

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, MARCH 2007	HNF-N-506-7	Ice Chest No.: 562 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
B1MDR1		W	5/14/7	1000	1x20-mL P	Activity Scan	None
B1MDR1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MDR1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						JW517	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		MAY 14 2007	1440			MAY 14 2007	1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

5

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05/14/07 1440

Client: PGW SDG #: W05177 NA [ ] SAF #: 807-003 NA [ ]

Work Order Number: J7E170190 Chain of Custody # 807-003-205

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

Sample Custodian: S. Smith Date: 05-14-07

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 J7E170202
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-386

Page 1 of 1

Collector L.D. WALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, MAY 2007	HNF-N-506-6	Ice Chest No. 447 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N593		W	5-15-07	0827	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1N593		W			1x20-mL P	Activity Scan	None
B1N593		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N593		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N593		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N593		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N593		W			1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	HNO3 to pH <2
						JW551	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 15 2007 1315	S. Smith	S. Smith		MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL 37E170202
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-402

Collector: L.D. WALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	1/NF-N-506-6	Ice Chest No.: 443 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5B3		W	5-15-07	0919	1x20-mL P	Activity Scan	None
B1N5B3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5B3		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N5B3		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JW58N	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	R.D. Wall	R.D. Wall	MAY 15 2007 1315	S. Smith	S. Smith	S. Smith	MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J7E170202
WC5177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-394**

Page 1 of 1

Collector: L.D. WALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HNF-N-606-6	Ice Chest No.: 443 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N598		W	5-15-07	1010	1x20-mL P	Activity Scan	None
B1N598		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N598		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JW586

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 15 2007 1315		S. Smith	S. Smith	MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SIL RICHLAND

98

PNNL J7E170202
W05177
Due 06 29 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-450

Page 1 of 1

Collector: L.D. WALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	1H NE-N-506-6	Ice Chest No.: 443 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5F3		W	5/15/07	1102	1x20-mL P	Activity Scan	None
B1N5F3		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5F3		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N5F3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JW59C	

Relinquished By	Date/Time	Received By	Date/Time
Print: L.D. WALL Sign: L.D. Wall	MAY 15 2007 1315	Print: S. Smith Sign: S. Smith	MAY 15 2007 1315
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

RECEIVED

96

PNNL J7E170202
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-438**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-6	**Ice Chest No.** 443 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5D5		W	5/15/07	1155	1x20-mL P	Activity Scan	None
B1N5D5		W	↓		1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5D5		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW585	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall	MAY 15 2007	1315	S. Smith	S. Smith	MAY 15 2007	1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

100

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5·15·07 13:15

Client: PGW SDG #: W05177 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: J7E170202 Chain of Custody # W07-005-386, 402, 394, 450, 438

Shipping Container ID:_____ Air Bill # _____

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

Sample Custodian: L. Smith Date: 5·15·07 13:15

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

STL RICHLAND

PNNL ~~J7E170238~~ 58 J7E170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-518

Page 1 of 1

Collector: ~~Fluor Hanford~~ D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	NWF-N-5068	Ice Chest No.: SMC 24 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5L4		W	5-15-07	0849	1x20-mL P	Activity Scan	None
B1N5L4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JWLCC	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ D. E. PARCHEN			1315 MAY 15 2007		S. Smith	S. Smith	1315 MAY 15 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

102

PNNL J7E170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-494**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 8	**Ice Chest No** SMC 24 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5J9		W	5-15-07	1006	1x20-mL P	Activity Scan	None
B1N5J9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JW6CG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 15 2007 1315		S. Smith	S. Smith	MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

TOC

STL RICHLAND

PNNL J7F170231
W05177
due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-510

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 8	**Ice Chest No.** SM6 24 **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5K9		W	5-15-07	1110	1x20-mL P	Activity Scan	None
B1N5K9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JW6CU	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 1 5 2007 1315		S. Smith	S. Smith	MAY 1 5 2007 1315
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

104

PNNL JTE170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-534**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 9	**Ice Chest No.** SML 24 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5M4		W	5-15-07	1153	1x20-mL P	Activity Scan	None
B1N5M4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JWGC4	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 15 2007		S. Smith	S. Smith	MAY 15 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

105

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05 15 07 13:15

Client: PGW SDG #: W05177 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: JTE170231 Chain of Custody # W07-005-518, 494, 510, 534

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: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 05.15.07 15:15

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 JTF230215 W05177 Due 07.05.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-502

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA MAY 2007	HNF-N-506-7	Ice Chest No.: 562 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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5K4		W	5/21/7	1028	1x20-mL P	Activity Scan	None
B1N5K4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JXH60	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		MAY 2 1 2007	1508		S. Smith	MAY 2 1 2007	1508
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

107

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05-21-07 1508

Client: PGW SDG #: W05177 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: JTE3302L5 Chain of Custody # W07-005 502

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. Smith Date: 05-21-07 1508

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 J7E290176
W05177
Due 07 09 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-038-12

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, APRIL 2007	HHF-N-506-7	**Ice Chest No.** 362 **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
B1MN47		W	5/24/7	0650	1x20-mL P	Activity Scan	None
B1MN47		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JXWPF	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		MAY 24 2007	1550	LINDSEY ANDERSON		MAY 24 2007	1550
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

109

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 5/24/07 3:30pm

Client: PNNL SDG #: W05177 NA [ ] SAF #: I07-038 NA [ ]

Work Order Number: J7E290176 Chain of Custody # I07-038-12

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 1x20ML 2x4000ML
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: [signature] Date: 5/24/07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date 5/24/07

LS-023, 9/03, Rev. 5

PNNL JTE 310108
WOS 177
Due 07.13.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-042-2

Collector	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-042	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100NR2IAM-LOI, MAY 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SKINS **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 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 GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N2L4		W	5/30/07	1121	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1N2L4		W	↓	↓	1x20-mL P	Activity Scan	None
B1N2L4		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JXICV	

R. Wall 5/30/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D.K. Brewer	D.K. Brewer	MAY 30 2007 1530	A. Smith	S. Smith	S. Smith	MAY 30 2007 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

111

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05/30/07 1530

Client: PGW SDG #: W05177 NA [ ] SAF #: I07-042 NA [ ]

Work Order Number: JTE310108 Chain of Custody # I07-042-2

Shipping Container ID: _____ Air Bill # _____

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

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

3. Chain of Custody record present? 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? * 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: [signature] Date: 05/30/07

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

STL RICHLAND

7/2/2007 4:24:48 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152447 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7152447 AZS7, 7152448 BCS8, 7152466 ARS6,

Prep Tech: BockJ,HARBINSOND

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 JW517-1-AC J7E170190-1-SAMP		185.60g,in			43.3mg	50	10A	2115	7/2/07 DD	
05/14/2007 10:00		AmtRec: 20ML,2XLP	#Containers: 3				Scr:	Alpha: -1.79E-04 uCi/Sa		Beta: -4.85E-05 uCi/Sa
2 JW517-1-AE-X J7E170190-1-DUP		185.70g,in			40.5mg	50	10B			
05/14/2007 10:00		AmtRec: 20ML,2XLP	#Containers: 3				Scr:	Alpha: -1.79E-04 uCi/Sa		Beta: -4.85E-05 uCi/Sa
3 JW551-1-AC J7E170202-1-SAMP		84.30g,in			48.6mg	100	11A	1836	7/3/07	
05/15/2007 08:27		AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8				Scr:	Alpha: 1.16E-03 uCi/Sa		Beta: -2.11E-04 uCi/Sa
4 JX511-1-AA-B J7F010000-447-BLK		200.00g,in			1.8mg	100	11B			
05/14/2007 10:00		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
5 JX511-1-AC-C J7F010000-447-LCS		201.70g,in	ASD4221 06/11/07,pd 06/01/01,r		1.7mg	100	11C			
05/14/2007 10:00		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

Comments: JW517-SAMP "Comments Aliquots reduced due to weight screen. JB 6/26/07"
JW551-SAMP ""

DH 2-7-07

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

113

7/2/2007 4:24:50 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152447 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:

```
JW5171AC-SAMP Constituent List:
  ALPHA        RDL:3          pCi/L    LCL:       UCL:       RPD:
JX5111AA-BLK:
  ALPHA        RDL:3          pCi/L    LCL:       UCL:       RPD:
JX5111AC-LCS:
  Am-241       RDL:           pCi/L    LCL:70     UCL:130    RPD:20
JW5171AC-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5111AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5111AC-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 6/28/07

CUSTOMER PGW

ANALYSIS Alpha

MATRIX Water

LOT NUMBER J7270190

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7152447

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) JW5171AC	Dups OOL
2) JW5171AE	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	

7/3/2007 9:43:32 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152447 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ,HARBINSOND

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 JW517-1-AC J7E170190-1-SAMP 05/14/2007 10:00		185.60g,in AmtRec: 20ML,2XLP	#Containers: 3		43.3mg	50		Scr:	Alpha: -1.79E-04 uCi/Sa	Beta: -4.85E-05 uCi/Sa
2 JW517-1-AE-X J7E170190-1-DUP 05/14/2007 10:00		185.70g,in AmtRec: 20ML,2XLP	#Containers: 3		40.5mg	50		Scr:	Alpha: -1.79E-04 uCi/Sa	Beta: -4.85E-05 uCi/Sa
[redacted] J7E170190-1-SAMP 05/14/2007 10:00		185.60g AmtRec: 20ML,2XLP	#Containers: 3		43.3mg	50	1CB Scr:	1920 Alpha: -1.79E-04 uCi/Sa	7/3/07 0700 Beta: -4.85E-05 uCi/Sa	
[redacted] J7E170190-1-DUP 05/14/2007 10:00		185.70g AmtRec: 20ML,2XLP	#Containers: 3		40.5mg		1CD Scr:	Alpha: -1.79E-04 uCi/Sa	Beta: -4.85E-05 uCi/Sa	
5 JW551-1-AC J7E170202-1-SAMP 05/15/2007 08:27		84.30g,in AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8		48.6mg	100		Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa
6 JX511-1-AA-B J7F010000-447-BLK 05/14/2007 10:00		200.00g,in AmtRec:	#Containers: 1		1.8mg	100		Scr:	Alpha:	Beta:
7 JX511-1-AC-C J7F010000-447-LCS 05/14/2007 10:00		201.70g,in AmtRec:	ASD4221 06/11/07,pd 06/01/01,r #Containers: 1		1.7mg	100		Scr:	Alpha:	Beta:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

7/3/2007 9:43:33 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152447 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: JW517-SAMP "Comments Aliquots reduced due to weight screen. JB 6/26/07"
JW551-SAMP ""

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

JW5171AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JX5111AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JX5111AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JW5171AC-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JX5111AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JX5111AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

7/6/2007 3:44:35 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/6/2006, 7/11/2007, Batch: '7152447', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152447						
AC		CalcC	BockJ	6/26/2007 11:35:42		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/26/2007 11:35:42 AM	RICH-RC-5015 Revision 6
SC			BockJ	Prep1C	6/26/2007 11:39:59 AM	RICH-RC-5014 REVISION 7
SC			HARBINSOND	InPrep	7/2/2007 4:18:03 PM	RICHRC5014 REV6
SC			HARBINSOND	Prep1C	7/2/2007 4:19:18 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	7/2/2007 5:01:20 PM	RICH-RD-0003 REVISION 5
SC			BlackCL	CalcC	7/3/2007 8:46:40 AM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	InCnt1	7/3/2007 4:57:02 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	7/3/2007 7:44:17 PM	RICH-RD-0003 REVISION 5
AC			BockJ	6/26/2007 11:39:59		
AC			HARBINSOND	7/2/2007 4:18:03 PM		
AC			HARBINSOND	7/2/2007 4:19:18 PM		
AC			DAWKINSO	7/2/2007 5:01:20 PM		
AC			BlackCL	7/3/2007 8:46:40 AM		
AC			DAWKINSO	7/3/2007 4:57:02 PM		
AC			DAWKINSO	7/3/2007 7:44:17 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.27

STL RICHLAND

7/2/2007 4:26:52 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152448 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7152447 AZS7, 7152448 BCS8, 7152466 ARS6,

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW517-1-AD J7E170190-1-SAMP 05/14/2007 10:00		196.20g,in AmtRec: 20ML,2XLP	#Containers: 3		87.4mg	100	31A Scr:	1856 Alpha: -1.79E-04 uCi/Sa	7/2/07 DH Beta: -4.85E-05 uCi/Sa	
2 JW551-1-AD J7E170202-1-SAMP 05/15/2007 08:27		77.80g,in AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8		92.2mg	200	27A Scr:	2031 Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa	
3 JX1CV-1-AA J7E310108-1-SAMP 05/30/2007 11:21		198.40g,in AmtRec: 20ML,4XLP	#Containers: 5		29.4mg	100	31C 7/2/07 DH Scr:	1856 Alpha: 2.25E-04 uCi/Sa	Beta: 1.02E-03 uCi/Sa	
4 JX1CV-1-AD-X J7E310108-1-DUP 05/30/2007 11:21		200.10g,in AmtRec: 20ML,4XLP	#Containers: 5		29.9mg	100	31D Scr:	1856 Alpha: 2.25E-04 uCi/Sa	Beta: 1.02E-03 uCi/Sa	
5 JX512-1-AA-B J7F010000-448-BLK 05/30/2007 11:21		200.40g,in AmtRec:	#Containers: 1		0.2mg	200	27D Scr:	2031 Alpha:	Beta:	
6 JX512-1-AC-C J7F010000-448-LCS 05/30/2007 11:21		199.90g,in AmtRec:	BESB3074 06/13/07,pd 08/08/06,r #Containers: 1		0.8mg	200	28A Scr:	Alpha:	Beta:	

DH 7-2-07

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 6
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

119

STL RICHLAND

7/2/2007 4:26:54 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152448 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: JW517-SAMP "Comments Aliquots reduced due to weight screen. JB 6/26/07"
JW551-SAMP ""

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

JW5171AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JX5121AA-BLK:					
BETA	RDL:4.00E+00	pCi/L	LCL:	UCL:	RPD:
JX5121AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JW5171AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5121AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5121AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

120

7/3/2007 11:10:56 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/3/2006, 7/8/2007, Batch: '7152448', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152448						
AC		**CalcC**	**BockJ**	6/26/2007 11:30:59		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/26/2007 11:30:59 AM	RICH-RC-5015 Revision 6
SC			BockJ	Prep1C	6/26/2007 11:35:01 AM	RICH-RC-5014 REVISION 7
SC			HARBINSOND	InPrep	7/2/2007 4:18:22 PM	RICHRC5014 REV6
SC			HARBINSOND	Prep1C	7/2/2007 4:19:36 PM	RICHRC5014 REV6
SC			DAWKINSO	InCnt1	7/2/2007 5:00:39 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	7/2/2007 9:13:26 PM	RICH-RD-0003 REVISION 5
AC			**BockJ**	6/26/2007 11:35:01		
AC			**BockJ**	6/26/2007 11:40:09		
AC			**HARBINSOND**	7/2/2007 4:18:22 PM		
AC			**HARBINSOND**	7/2/2007 4:19:36 PM		
AC			**DAWKINSO**	7/2/2007 5:00:39 PM		
AC			**DAWKINSO**	7/2/2007 9:13:26 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.27

7/5/2007 3:59:13 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: 07/13/2007

Sep1 DT/Tm Tech: 06/28/2007 17:42,ManisD

Batch: 7152449 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7152448 BCS8, 7152449 CLTL,

Prep Tech: ManisD

STL RICHLAND

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 JX1CV-1-AC J7E310108-1-SAMP		1004.80g,in	srtb14945 06/18/07,pd 05/22/07,r	0.8641	1.5	23.9	100	5A 5A	dcuy 1129	7/6/07 7/7/07 m	
						~~06/28/2007 17:42,s1~~					
05/30/2007 11:21		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: 2.25E-04 uCi/Sa	Beta: 1.02E-03 uCi/Sa	
2 JX1CV-1-AE-X J7E310108-1-DUP		1004.30g,in	srtb14946 06/18/07,pd 05/22/07,r	0.7920	1.5	24.3	100	5B 5b	dcuy 1129	7/6/07 7/7/07 m	
						~~06/28/2007 17:42,s1~~					
05/30/2007 11:21		AmtRec: 20ML,4XLP	#Containers: 5					Scr:	Alpha: 2.25E-04 uCi/Sa	Beta: 1.02E-03 uCi/Sa	
3 JX513-1-AA-B J7F010000-449-BLK		1000.10g,in	srtb14947 06/18/07,pd 05/22/07,r	0.8572	1.5	24.2	100	5C 5c	dcuy 1129	7/6/07 7/7/07 m	
						~~06/28/2007 17:42,s1~~					
05/30/2007 11:21		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
4 JX513-1-AC-C J7F010000-449-LCS		999.50g,in	srsg1351 05/24/07,pd 09/11/06,r	0.8821	1.5	23.9	100	5D 5d	dcuy 1129	7/6/07 7/7/07 m	
						~~06/28/2007 17:42,s1~~					
05/30/2007 11:21		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

122

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 4
Prep_SamplePrep v4.8.26

STL RICHLAND

7/5/2007 3:59:18 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: 07/13/2007

Sep1 DT/Tm Tech: 06/28/2007 17:42,ManisD

Batch: 7152449 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

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:

Comments:

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

JX1CV1AC-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

JX5131AA-BLK:

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

JX5131AC-LCS:

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

JX1CV1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JX5131AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JX5131AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

123

7/10/2007 8:54:26 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/10/2006, 7/15/2007, Batch: '7152449', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152449						
AC		CalcC	BockJ	6/27/2007 12:02:04		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	Prep1C	6/27/2007 12:02:04 PM	RICH-RC-5016 REVISION 7
SC			ManisD	InSep1	6/27/2007 1:17:11 PM	RICH-RC-5006 REV 7
SC			ManisD	Sep1C	6/28/2007 5:57:04 PM	RICH-RC-5006 REVISION 7
SC			DAWKINSO	InCnt1	6/28/2007 6:18:37 PM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	Cnt1C	6/28/2007 8:41:17 PM	RICH-RD-0007 REVISION 6
SC			ManisD	InSep2	7/5/2007 8:01:28 AM	RICH-RC-5071 REVISION 5
SC			ManisD	Sep2C	7/5/2007 4:08:48 PM	RICH-RC-5071 REVISION 5
SC			DAWKINSO	InCnt2	7/5/2007 4:40:24 PM	RICH-RD-0003 REVISION 5
SC			StringerR	CalcC	7/7/2007 12:33:58 PM	RICH-RD-0003 REVISION 5
AC			ManisD	6/27/2007 1:17:11 PM		
AC			ManisD	6/28/2007 5:57:04 PM		
AC			DAWKINSO	6/28/2007 6:18:37 PM		
AC			DAWKINSO	6/28/2007 8:41:17 PM		
AC			ManisD	7/5/2007 8:01:28 AM		
AC			ManisD	7/5/2007 4:08:48 PM		
AC			DAWKINSO	7/5/2007 4:40:24 PM		
AC			StringerR	7/7/2007 12:33:58 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 9

ICOCFractions v4.8.27

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 12/28/07

CUSTOMER PGW

ANALYSIS Gamma

MATRIX Water

LOT NUMBER J7E170168

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7152164

NEW BATCH NUMBER 7183190

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) all	133% recovery.
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

STL RICHLAND

7/3/2007 8:24:24 AM

Sample Preparation/Analysis

Balance Id:11

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7183190 **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 JW5XJ-2-AC J7E170168-1-SAMP 05/14/2007 12:13		1837.40g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5		1 Count	100	G4 Scr:	1428 Alpha: 8.20E-04 uCi/Sa	7/6/07 r Beta: -4.04E-04 uCi/Sa	
2 JW5XJ-2-AG-X J7E170168-1-DUP 05/14/2007 12:13		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G7 Scr:	#30 Alpha: 8.20E-04 uCi/Sa	7/6/07 r Beta: -4.04E-04 uCi/Sa	
3 JW5X0-2-AC J7E170168-3-SAMP 05/14/2007 10:27		1988.70g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G5 Scr:	1428 Alpha: 2.82E-03 uCi/Sa	7/6/07 r Beta: -4.04E-04 uCi/Sa	
4 JW5X6-2-AC J7E170168-4-SAMP 05/14/2007 11:20		1974.90g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G8 Scr:	1432 Alpha: 2.89E-03 uCi/Sa	7/6/07 r Beta: -9.23E-04 uCi/Sa	
5 JW50V-2-AA J7E170177-1-SAMP 05/14/2007 12:36		1965.60g,in AmtRec: 20ML,2X500ML,3X4LP	#Containers: 6				G12 Scr:	1434 Alpha: 1.92E-03 uCi/Sa	7/6/07 r Beta: -2.00E-03 uCi/Sa	
6 JW551-2-AE J7E170202-1-SAMP 05/15/2007 08:27		1935.80g,in AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8				G13 Scr:	1435 Alpha: 1.16E-03 uCi/Sa	7/6/07 r Beta: -2.11E-04 uCi/Sa	
7 JX52J-2-AA-B J7F010000-464-BLK 05/14/2007 12:13		1993.80g,in AmtRec:	#Containers: 1				G6 Scr:	1437 Alpha:	7/6/07 r 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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

STL RICHLAND

7/3/2007 8:24:26 AM

Sample Preparation/Analysis

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

Balance Id:11

Pipet #:

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7183190 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 JX52J-3-AC-C J7F010000-464-LCS		1997.00g,in	QCAG1375 05/30/07,pd 03/07/05,r		100mL	100		67	1438	7/6/07 R
05/14/2007 12:13		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: JW5XJ-SAMP "No DUP. poured due to being out of sample. Please recount on diff. detector. JB 7/3/07" Out of original gamma sample for #1-JW5XJ.
~~JW551-SAMP~~ Used samples labeled for tritium (I acidified), tc-99 and 4TOT. PH<2.0 JB 7-3-07

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

JW5XJ2AC-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:

JX52J2AA-BLK:

Co-60	RDL:25	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:6	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:15	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:15	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:50	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:50	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:6	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:6	pCi/L	LCL:	UCL:	RPD:

JX52J3AC-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						

JW5XJ2AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JX52J2AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JX52J3AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

10/8/2007 1:44:51 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/8/2006, 10/13/2007, Batch: '7183190', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7183190						
AC		IsRpt	BockJ	7/3/2007 8:09:21 AM		
SC			antonsonl	IsBatched	7/2/2007 8:44:14 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	7/3/2007 8:09:21 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	7/3/2007 8:24:42 AM	RICH-RC-5017 REVISION 6
SC			AshworthA	InPrep2	7/5/2007 9:34:40 AM	RICH-RC-5017 REVISION 6
SC			AshworthA	Prep2C	7/6/2007 12:38:36 PM	RICH-RC-5017 REVISION 6
SC			StringerR	InCnt1	7/6/2007 12:41:10 PM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	CalcC	7/6/2007 6:59:57 PM	RICH-RD-0007 REVISION 6
SC			AntonsonL	Rev1C	7/10/2007 5:16:08 PM	RICH-RC-0002 REVISION 8
SC			ICOC	IsRpt	7/26/2007 4:31:14 AM	ICOC_RADCALC v4.8.17
AC			BockJ	7/3/2007 8:24:42 AM		
AC			AshworthA	7/5/2007 9:34:40 AM		
AC			AshworthA	7/6/2007 12:38:36 PM		
AC			StringerR	7/6/2007 12:41:10 PM		
AC			StringerR	7/6/2007 12:45:06 PM		
AC			DAWKINSO	7/6/2007 6:59:57 PM		
AC			AntonsonL	7/10/2007 5:16:08 PM		

REVISED
Dlynes
2/26/08

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4 8 27

128

STL RICHLAND

6/22/2007 10:20:00 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: 06/28/2007 1005177

Sep1 DT/Tm Tech:

Batch: 7152451 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 JW50V-1-AC J7E170177-1-SAMP 05/14/2007 12:36	AmtRec: 20ML,2X500ML,3X4LP #Containers: 6	3931.80g,in	ITA6400 06/14/07		34.9	100	L2	1436 Scr: Alpha: 1.92E-03 uCi/Sa	7/12/07 DD Beta: -2.00E-03 uCi/Sa	
2 JW551-1-AF J7E170202-1-SAMP 05/15/2007 08:27	AmtRec: 20ML,500ML,3XLP,3X4LP #Containers: 8	3954.30g,in	ITA6402 06/14/07		36.8		L4	1439 Scr: Alpha: 1.16E-03 uCi/Sa	7/12/07 DD Beta: -2.11E-04 uCi/Sa	
3 JW58N-1-AC J7E170202-2-SAMP 05/15/2007 09:19	AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5	3959.00g,in	ITA6403 06/14/07		34.0		L5	1440 Scr: Alpha: 7.86E-04 uCi/Sa	7/12/07 DD Beta: -6.39E-04 uCi/Sa	
4 JW59C-1-AC J7E170202-4-SAMP 05/15/2007 11:02	AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5	3893.50g,in	ITA6404 06/14/07		34.7		L2	1621 Scr: Alpha: -5.42E-04 uCi/Sa	7/12/07 DD Beta: 1.78E-04 uCi/Sa	
5 JXWPF-1-AA J7E290176-1-SAMP 05/24/2007 08:50	AmtRec: 20ML,2X4LP #Containers: 3	3892.90g,in	ITA6405 06/14/07		35.7		L4	1625 Scr: Alpha: -9.31E-04 uCi/Sa	7/12/07 DD Beta: 1.36E-03 uCi/Sa	
6 JXWPF-1-AC-X J7E290176-1-DUP 05/24/2007 08:50	AmtRec: 20ML,2X4LP #Containers: 3	3918.00g,in	ITA6407 06/14/07		35.2		L5	1626 Scr: Alpha: -9.31E-04 uCi/Sa	7/12/07 DD Beta: 1.36E-03 uCi/Sa	
7 JX515-1-AA-B J7F010000-451-BLK 05/24/2007 08:50	AmtRec: #Containers: 1	3970.00g,in	ITA6406 06/14/07		36.4		L2	1846 Scr: Alpha:	7/12/07 DD Beta:	

129

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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

STL RICHLAND

6/22/2007 10:20:05 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152451 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 JX515-1-AC-C J7F010000-451-LCS		3957.70g,in	ISD0756 06/13/07		36.4	100	L4	1:49	7/12/07 OD	
05/24/2007 08:50		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: PH-neutral JB 6-22-07

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

JW50V1AC-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JX5151AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JX5151AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

JW50V1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5151AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5151AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

130

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 7/16/07

CUSTOMER PGW

ANALYSIS I-129

MATRIX Water

LOT NUMBER

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7152157

	LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1)	JV5151AA	LCS/BLK Switch- please
2)	JV5151AC	switch + recount.
3)		
4)		
5)		
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18)		
19)		
20)		

RC-126 10/03 REV 4

7/16/2007 11:05:20 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: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152451 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 JW50V-1-AC J7E170177-1-SAMP 05/14/2007 12:36		3931.80g,in AmtRec: 20ML,2X500ML,3X4LP	ITA6400 06/14/07 #Containers: 6						Scr: Alpha: 1.92E-03 uCi/Sa	Beta: -2.00E-03 uCi/Sa
2 JW551-1-AF J7E170202-1-SAMP 05/15/2007 08:27		3954.30g,in AmtRec: 20ML,500ML,3XLP,3X4LP	ITA6402 06/14/07 #Containers: 8						Scr: Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa
3 JW58N-1-AC J7E170202-2-SAMP 05/15/2007 09:19		3959.00g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6403 06/14/07 #Containers: 5						Scr: Alpha: 7.86E-04 uCi/Sa	Beta: -6.39E-04 uCi/Sa
4 JW59C-1-AC J7E170202-4-SAMP 05/15/2007 11:02		3893.50g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6404 06/14/07 #Containers: 5						Scr: Alpha: -5.42E-04 uCi/Sa	Beta: 1.78E-04 uCi/Sa
5 JXWPF-1-AA J7E290176-1-SAMP 05/24/2007 08:50		3892.90g,in AmtRec: 20ML,2X4LP	ITA6405 06/14/07 #Containers: 3						Scr: Alpha: -9.31E-04 uCi/Sa	Beta: 1.36E-03 uCi/Sa
6 JXWPF-1-AC-X J7E290176-1-DUP 05/24/2007 08:50		3918.00g,in AmtRec: 20ML,2X4LP	ITA6407 06/14/07 #Containers: 3						Scr: Alpha: -9.31E-04 uCi/Sa	Beta: 1.36E-03 uCi/Sa
7 JX515-1-AA-B J7F010000-451-BLK 05/24/2007 08:50		3970.00g,in AmtRec:	ITA6406 06/14/07 #Containers: 1						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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.26

STL RICHLAND

Sample Preparation/Analysis

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

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

AnalyDueDate: 06/28/2007

Batch: 7152451 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JX515-1-AC-C J7F010000-451-LCS 05/24/2007 08:50		3957.70g,in AmtRec:	ISD0756 06/13/07 #Containers: 1				Scr:	Alpha:		Beta:
9 JX515-2-AA-B J7F010000-451-BLK 05/24/2007 08:50		3970.00g AmtRec:	ITALCUL #Containers: 1		36.4		L4 Scr:	1257 Alpha:	7/16/07 Beta:	
10 JX515-2-AC-C J7F010000-451-LCS 05/24/2007 08:50		3957.70g AmtRec:	ISD0756 #Containers: 1		35.3 ~~36.4~~		L5 Scr:	1257 Alpha:		Beta:

Comments: JW551-SAMP ""

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

```
JW50V1AC-SAMP Constituent List:
  I-129       RDL:1.00E+00    pCi/L    LCL:       UCL:       RPD:
JX5151AA-BLK:
  I-129       RDL:1.00E+00    pCi/L    LCL:       UCL:       RPD:
JX5151AC-LCS:
  I-129       RDL:5           pCi/L    LCL:70     UCL:130    RPD:20
JX5152AA-BLK:
  I-129       RDL:5           pCi/L    LCL:       UCL:       RPD:
JX5152AC-LCS:
  I-129       RDL:5           pCi/L    LCL:70     UCL:130    RPD:20
JW50V1AC-SAMP Calc Info:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5151AA-BLK:
```


STL RICHLAND
133

Sample Preparation/Analysis

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

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

AnalyDueDate: 06/28/2007

Batch: 7152451 pCi/L
SEQ Batch, Test: None

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

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5151AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5152AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX5152AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND 134

7/16/2007 5:02:52 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/16/2006, 7/21/2007, Batch: '7152451', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152451						
AC		InCnt1	BockJ	6/22/2007 10:20:04		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	Prep1C	6/22/2007 10:20:04 AM	RICH-RC-5017 REVISION 6
SC			BostedD	InPrep2	6/25/2007 9:39:10 AM	RICHRC5025 REVISION 4
SC			BostedD	Prep2C	7/12/2007 11:59:09 AM	RICHRC5025 REVISION 4
SC			DAWKINSO	InCnt1	7/12/2007 1:00:56 PM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	CalcC	7/12/2007 8:40:19 PM	RICH-RD-0007 REVISION 6
SC			BlackCL	InCnt1	7/16/2007 11:12:48 AM	RICH-RD-0007 REVISION 6
AC			BockJ	6/22/2007 10:20:17		
AC			BostedD	6/25/2007 9:39:10		
AC			BostedD	7/12/2007 11:59:09		
AC			DAWKINSO	7/12/2007 1:00:56 PM		
AC			DAWKINSO	7/12/2007 8:40:19 PM		
AC			BlackCL	7/16/2007 11:12:48		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.27

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 7/16/07

CUSTOMER PGW

ANALYSIS TC99

MATRIX water

LOT NUMBER J7217016 8

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7152152

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

7/3/2007 8:59:59 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:
Pipet #:

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7184182 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

STL RICHLAND

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW5XJ-2-AD J7E170168-1-SAMP 05/14/2007 12:13	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 8.20E-04 uCi/Sa	Beta: -4.04E-04 uCi/Sa	
2 JW5X0-2-AD J7E170168-3-SAMP 05/14/2007 10:27	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 2.82E-03 uCi/Sa	Beta: -4.04E-04 uCi/Sa	
3 JW5X6-2-AD J7E170168-4-SAMP 05/14/2007 11:20	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5					Scr:	Alpha: 2.89E-03 uCi/Sa	Beta: -9.23E-04 uCi/Sa	
4 JW5X7-2-AC J7E170168-5-SAMP 05/14/2007 09:36	AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr:	Alpha: 3.49E-04 uCi/Sa	Beta: -4.37E-04 uCi/Sa	
5 JW50C-2-AC J7E170168-6-SAMP 05/14/2007 08:00	AmtRec: 20ML,2X500ML,LP	#Containers: 4					Scr:	Alpha: 2.08E-04 uCi/Sa	Beta: -2.21E-04 uCi/Sa	
6 JW50V-2-AD J7E170177-1-SAMP 05/14/2007 12:36	AmtRec: 20ML,2X500ML,3X4LP	#Containers: 6					Scr:	Alpha: 1.92E-03 uCi/Sa	Beta: -2.00E-03 uCi/Sa	
7 JW551-2-AH J7E170202-1-SAMP 05/15/2007 08:27	AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8					Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa	

7/3/2007 9:00:00 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/28/2007

Batch: 7184182 **WATER** **pCi/L** **PM, Quote: SA , 57671**

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:
8 JW58N-2-AD J7E170202-2-SAMP 05/15/2007 09:19	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5						Scr:	Alpha: 7.86E-04 uCi/Sa	Beta: -6.39E-04 uCi/Sa
9 JW586-2-AC J7E170202-3-SAMP 05/15/2007 10:10	AmtRec: 20ML,500ML,LP	#Containers: 3						Scr:	Alpha: -6.58E-05 uCi/Sa	Beta: -1.49E-04 uCi/Sa
10 JW59C-2-AD J7E170202-4-SAMP 05/15/2007 11:02	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5						Scr:	Alpha: -5.42E-04 uCi/Sa	Beta: 1.78E-04 uCi/Sa
11 JW595-2-AC J7E170202-5-SAMP 05/15/2007 11:51	AmtRec: 20ML,500ML,LP	#Containers: 3						Scr:	Alpha: -1.10E-04 uCi/Sa	Beta: 1.90E-04 uCi/Sa
12 JW6CC-2-AA J7E170231-1-SAMP 05/15/2007 08:49	AmtRec: 20ML,500MLP	#Containers: 2						Scr:	Alpha: 5.22E-05 uCi/Sa	Beta: -9.85E-05 uCi/Sa
13 JW6CC-2-AC-X J7E170231-1-DUP 05/15/2007 08:49	AmtRec: 20ML,500MLP	#Containers: 2						Scr:	Alpha: 5.22E-05 uCi/Sa	Beta: -9.85E-05 uCi/Sa
14 JW6CQ-2-AA J7E170231-2-SAMP 05/15/2007 10:06	AmtRec: 20ML,500MLP	#Containers: 2						Scr:	Alpha: 3.33E-05 uCi/Sa	Beta: -4.44E-05 uCi/Sa

7/3/2007 9:00:01 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/28/2007

Batch: 7184182 **WATER** **pCi/L** **PM, Quote: SA , 57671**
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:
15 JW6CQ-2-AC-S J7E170231-2-MS 05/15/2007 10:06		AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: 3.33E-05 uCi/Sa		Beta: -4.44E-05 uCi/Sa
16 JW6C0-2-AA J7E170231-3-SAMP 05/15/2007 11:10		AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: 6.42E-06 uCi/Sa		Beta: 2.02E-05 uCi/Sa
17 JW6C4-2-AA J7E170231-4-SAMP 05/15/2007 11:53		AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: 4.55E-05 uCi/Sa		Beta: 4.71E-05 uCi/Sa
18 JXH60-2-AA J7E230215-1-SAMP 05/21/2007 10:28		AmtRec: 20ML,500ML	#Containers: 2				Scr:	Alpha: -5.70E-05 uCi/Sa		Beta: 2.57E-05 uCi/Sa
19 JX52E-2-AA-B J7F010000-456-BLK 05/15/2007 08:49		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
20 JX52E-2-AC-C J7F010000-456-LCS 05/15/2007 08:49		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
21 JX52E-2-AD-BN J7F010000-456-IBLK 05/15/2007 08:49		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

STL RICHLAND

Sample Preparation/Analysis

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

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

AnalyDueDate: 06/28/2007

Batch: 7184182 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22 JX52E-2-AE-BN J7F010000-456-IBLK 05/15/2007 08:49	AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments: JW5XJ-SAMP "No DUP. poured due to being out of sample. Please recount on diff. detector. JB 7/3/07"
JW551-SAMP ""

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

JW5XJ2AD-SAMP Constituent List:

Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
JW6CQ2AC-MS:					
JX52E2AA-BLK:					
Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
JX52E2AC-LCS:					
Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
JX52E2AD-IBLK:					
Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
JX52E2AE-IBLK:					
Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:

JW5XJ2AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JW6CQ2AC-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52E2AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52E2AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52E2AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52E2AE-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL RICHLAND

140

7/3/2007 9:00:02 AM

Sample Preparation/Analysis

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

AnalyDueDate: 06/28/2007

Batch: 7184182 **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:

Approved By _____ Date: _____

STL RICHLAND

141

7/11/2007 4:24:30 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/11/2006, 7/16/2007, Batch: '7184182', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7184182						
AC		**CalcC**	**HarveyK**	7/3/2007 10:39:46		
SC			HarveyK	Sep1C	7/3/2007 10:39:46 AM	RICH-RC-5065 REV 6
SC			BlackCL	InCnt1	7/3/2007 10:45:47 AM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	7/5/2007 8:20:13 AM	RICH-RD-0001 REVISION 4
AC			**BlackCL**	7/3/2007 10:45:47		
AC			**BlackCL**	7/5/2007 8:20:13 AM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 3

ICOCFractions v4.8.27

STL RICHLAND

6/20/2007 10:50:29 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: 06/28/2007 W05177

Sep1 DT/Tm Tech:

Batch: 7152461 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW5XV-1-AC J7E170168-2-SAMP 05/14/2007 12:57		124.60g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6	60		Scr:	Alpha: -7.59E-05 uCi/Sa	Beta: 3.64E-05 uCi/Sa
2 JW5XV-1-AF-X J7E170168-2-DUP 05/14/2007 12:57		125.20g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: -7.59E-05 uCi/Sa	Beta: 3.64E-05 uCi/Sa
3 JW5XV-1-AG-S J7E170168-2-MS 05/14/2007 12:57		125.20g,in AmtRec: 20ML,500ML,4XLP	TCSG1831 06/14/07,pd 01/10/06,r #Containers: 6			Scr:	Alpha: -7.59E-05 uCi/Sa	Beta: 3.64E-05 uCi/Sa
4 JX52G-1-AA-B J7F010000-461-BLK 05/14/2007 12:57		126.90g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JX52G-1-AC-C J7F010000-461-LCS 05/14/2007 12:57		127.40g,in AmtRec:	TCSE2123 06/14/07,pd 01/10/06,r #Containers: 1			Scr:	Alpha:	Beta:
6 JX52G-1-AD-BN J7F010000-461-IBLK 05/14/2007 12:57		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

143

STL RICHLAND

6/20/2007 10:50:36 AM

Sample Preparation/Analysis

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

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 06/28/2007

Batch: 7152461 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: PH<2.0 JB 6-20-07

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

JW5XV1AC-SAMP Constituent List:
Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20
JW5XV1AG-MS:

JX52G1AA-BLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:
JX52G1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JX52G1AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JW5XV1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JW5XV1AG-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52G1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52G1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52G1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/24/2007 4:18:43 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/24/2006, 7/29/2007, Batch: '7152461', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152461						
AC		CalcC	BockJ	6/20/2007 9:56:44		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/20/2007 9:56:44 AM	RICH-RC-5016 Revision 7
SC			BockJ	Prep1C	6/20/2007 10:50:33 AM	RICH-RC-5016 REVISION 7
SC			FABREM	InSep1	6/20/2007 10:55:04 AM	RICH-RC-5078 REVISION 4
SC			FABREM	Sep1C	6/25/2007 2:02:26 PM	RICH-RC-5078 REVISION 4
SC			DAWKINSO	InCnt1	6/25/2007 2:24:12 PM	RICH-RD-0001 REVISION 4
SC			DAWKINSO	CalcC	6/27/2007 8:29:24 PM	RICH-RD-0001 REVISION 4
AC			BockJ	6/20/2007 10:50:33		
AC			FABREM	6/20/2007 10:55:04		
AC			FABREM	6/25/2007 2:02:26 PM		
AC			DAWKINSO	6/25/2007 2:24:12 PM		
AC			DAWKINSO	6/27/2007 8:29:24 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.27

STL RICHLAND

6/20/2007 10:10:08 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AA Ni-63 PrpRC5016, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/29/2007 W05177

Sep1 DT/Tm Tech:

Batch: 7152465 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW551-1-AG J7E170202-1-SAMP 05/15/2007 08:27			400.10g,in	400.10g	NITA2438 06/19/07	100				
		AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8					Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa
2 JW551-1-AJ-X J7E170202-1-DUP 05/15/2007 08:27			398.60g,in	398.60g	NITA2439 06/19/07					
		AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8					Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa
3 JX52N-1-AA-B J7F010000-465-BLK 05/15/2007 08:27			399.80g,in	399.80g	NITA2437 06/19/07					
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
4 JX52N-1-AC-C J7F010000-465-LCS 05/15/2007 08:27			398.60g,in	398.60g	NISA0764 06/19/07					
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
5 JX52N-1-AD-BN J7F010000-465-IBLK 05/15/2007 08:27										
		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: PH <2.0 JB 6-20-07

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

JW5511AG-SAMP Constituent List:
Ni-63 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

6/20/2007 10:10:15 AM

Sample Preparation/Analysis

AA Ni-63 PrpRC5016, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 06/29/2007

Batch: 7152465 pCi/L
SEQ Batch, Test: None

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

```
JX52N1AA-BLK:
  Ni-63        RDL:15          pCi/L     LCL:        UCL:        RPD:
JX52N1AC-LCS:
  Ni-63        RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
JX52N1AD-IBLK:
  Ni-63        RDL:15          pCi/L     LCL:        UCL:        RPD:
JW5511AG-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JX52N1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JX52N1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
JX52N1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

7/10/2007 4:45:55 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/10/2006, 7/15/2007, Batch: '7152465', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152465						
AC		CalcC	BockJ	6/20/2007 10:03:34		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/20/2007 10:03:34 AM	RICH-RC-5016 Revision 7
SC			BockJ	Prep1C	6/20/2007 10:10:12 AM	RICH-RC-5016 REVISION 7
SC			FABREM	InSep1	6/20/2007 10:50:45 AM	RICH-RC-5069 REVISION 6
SC			FABREM	Sep1C	6/25/2007 6:32:39 PM	RICH-RC-5069 REVISION 6
SC			DAWKINSO	InCnt1	6/25/2007 6:42:43 PM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	7/5/2007 10:33:06 AM	RICH-RD-0001 REVISION 4
AC			BockJ	6/20/2007 10:10:12		
AC			FABREM	6/20/2007 10:50:45		
AC			FABREM	6/25/2007 6:32:39 PM		
AC			DAWKINSO	6/25/2007 6:42:43 PM		
AC			BlackCL	7/5/2007 10:33:06		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:6

ICOCFractions v4.8.27

6/1/2007 4:33:26 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 06/28/2007 W05177

Batch: 7152466 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-21-07 am
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW5XJ-1-AA J7E170168-1-SAMP 05/14/2007 12:13		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
2 JW5XV-1-AA J7E170168-2-SAMP 05/14/2007 12:57		AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha:	Beta:
3 JW5X0-1-AA J7E170168-3-SAMP 05/14/2007 10:27		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
4 JW5X6-1-AA J7E170168-4-SAMP 05/14/2007 11:20		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:
5 JW5X7-1-AA J7E170168-5-SAMP 05/14/2007 09:36		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha:	Beta:
6 JW50C-1-AA J7E170168-6-SAMP 05/14/2007 08:00		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha:	Beta:
7 JW517-1-AA J7E170190-1-SAMP 05/14/2007 10:00		AmtRec: 20ML,2XLP	#Containers: 3			Scr:	Alpha:	Beta:

STL RICHLAND
149

6/1/2007 4:33:28 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-21-07 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/28/2007

Batch: 7152466 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JW551-1-AA J7E170202-1-SAMP 05/15/2007 08:27		AmtRec: 20ML,500ML,3XLP,3X4LP	#Containers: 8			Scr:	Alpha:	Beta:
9 JW58N-1-AA J7E170202-2-SAMP 05/15/2007 09:19		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
10 JW58N-1-AE-X J7E170202-2-DUP 05/15/2007 09:19		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
11 JW586-1-AA J7E170202-3-SAMP 05/15/2007 10:10		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha:	Beta:
12 JW59C-1-AA J7E170202-4-SAMP 05/15/2007 11:02		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
13 JW595-1-AA J7E170202-5-SAMP 05/15/2007 11:51		AmtRec: 20ML,500ML,LP	#Containers: 3			Scr:	Alpha:	Beta:
14 JX52Q-1-AA-B J7F010000-466-BLK 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

150

6/1/2007 4:33:30 PM

Sample Preparation/Analysis

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

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 6-21-07 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/28/2007

Batch: 7152466 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JX52Q-1-AC-C J7F010000-466-LCS 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16 JX52Q-1-AD-BX J7F010000-466-MBLK 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
17 JX52Q-1-AE-CM J7F010000-466-MLCS 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
18 JX52Q-1-AF-BN J7F010000-466-IBLK 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
19 JX52Q-1-AG-BN J7F010000-466-IBLK 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
20 JX52Q-1-AH-BN J7F010000-466-IBLK 05/15/2007 09:19		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

151

6/1/2007 4:33:37 PM

Sample Preparation/Analysis

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

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 6-21-07am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/28/2007

Batch: 7152466 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

JW5XJ1AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JX52Q1AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JX52Q1AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JX52Q1AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JX52Q1AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JX52Q1AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JX52Q1AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JX52Q1AH-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

JW5XJ1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JX52Q1AH-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL RICHLAND

152

STL RICHLAND

6/1/2007 4:33:38 PM

Sample Preparation/Analysis

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

AnalyDueDate: 06/28/2007

Batch: 7152466 pCi/L
SEQ Batch, Test: None

Balance Id: 13445
Pipet #:
Sep1 DT/Tm Tech: 6-21-07 Tem
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: _____

153

6/25/2007 1:59:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/25/2006, 6/30/2007, Batch: '7152466', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152466						
AC		CalcC	McDowellD	6/21/2007 9:20:35		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	6/21/2007 9:20:35 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	6/21/2007 3:01:48 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	6/21/2007 3:13:34 PM	RICH-RD-0001 REVISION 4
SC			StringerR	CalcC	6/25/2007 7:29:30 AM	RICH-RD-0001 REVISION 4
AC			McDowellD	6/21/2007 3:01:48 PM		
AC			DAWKINSO	6/21/2007 3:13:34 PM		
AC			StringerR	6/25/2007 7:29:30		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.27

STL RICHLAND

6/21/2007 4:10:21 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/28/2007 WO5177

Sep1 DT/Tm Tech:

Batch: 7152452 WATER ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JW5XJ-1-AE J7E170168-1-SAMP 05/14/2007 12:13		24.80g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 8.20E-04 uCi/Sa	Beta: -4.04E-04 uCi/Sa
2 JW5XJ-1-AF-X J7E170168-1-DUP 05/14/2007 12:13		24.90g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 8.20E-04 uCi/Sa	Beta: -4.04E-04 uCi/Sa
3 JW5XV-1-AD J7E170168-2-SAMP 05/14/2007 12:57		25.50g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: -7.59E-05 uCi/Sa	Beta: 3.64E-05 uCi/Sa
4 JW5XV-1-AE-S J7E170168-2-MS 05/14/2007 12:57		26.40g,in AmtRec: 20ML,500ML,4XLP	UNSF3783 06/14/07,pd 01/23/07,r #Containers: 6			Scr:	Alpha: -7.59E-05 uCi/Sa	Beta: 3.64E-05 uCi/Sa
5 JW5X0-1-AE J7E170168-3-SAMP 05/14/2007 10:27		25.50g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 2.82E-03 uCi/Sa	Beta: -4.04E-04 uCi/Sa
6 JW5X6-1-AE J7E170168-4-SAMP 05/14/2007 11:20		26.00g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 2.89E-03 uCi/Sa	Beta: -9.23E-04 uCi/Sa
7 JW5X7-1-AD J7E170168-5-SAMP 05/14/2007 09:36		25.80g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 3.49E-04 uCi/Sa	Beta: -4.37E-04 uCi/Sa

155

6/21/2007 4:10:25 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 06/28/2007

Sep1 DT/Tm Tech:

Batch: 7152452 WATER ug/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JW50C-1-AD J7E170168-6-SAMP 05/14/2007 08:00		26.10g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 2.08E-04 uCi/Sa	Beta: -2.21E-04 uCi/Sa
9 JW50V-1-AE J7E170177-1-SAMP 05/14/2007 12:36		26.80g,in AmtRec: 20ML,2X500ML,3X4LP	#Containers: 6			Scr:	Alpha: 1.92E-03 uCi/Sa	Beta: -2.00E-03 uCi/Sa
10 JX517-1-AA-B J7F010000-452-BLK 05/14/2007 12:13		25.50g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JX517-1-AC-C J7F010000-452-LCS 05/14/2007 12:13		25.70g,in AmtRec:	UNSF3784 06/14/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
12 JX517-1-AD-C J7F010000-452-LCS 05/14/2007 12:13		24.90g,in AmtRec:	UNSC1752 06/14/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: ~~JW5XJ SAMP~~ -- pH<2.0 JB 6-21-07

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

JW5XJ1AE-SAMP Constituent List:

STL RICHLAND

159

Sample Preparation/Analysis

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

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

AnalyDueDate: 06/28/2007

Batch: 7152452 ug/L
SEQ Batch, Test: None

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

```
 Uranium      RDL:1.44E-01    ug/L     LCL:       UCL:       RPD:
JW5XV1AE-MS:

JX5171AA-BLK:
 Uranium      RDL:1.44E-01    ug/L     LCL:       UCL:       RPD:
JX5171AC-LCS:
 Uranium      RDL:0.144343    ug/L     LCL:70     UCL:130    RPD:20
JX5171AD-LCS:
 Uranium      RDL:0.144343    ug/L     LCL:70     UCL:130    RPD:20
JW5XJ1AE-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JW5XV1AE-MS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5171AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5171AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JX5171AD-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

STL RICHLAND
157

7/11/2007 3:47:51 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/11/2006, 7/16/2007, Batch: '7152452', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7152452						
AC		Cnt1C	BockJ	6/21/2007 3:56:39 PM		
SC			wagarr	IsBatched	6/1/2007 4:35:59 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/21/2007 3:56:39 PM	RICH-RC-5014 Revision 7
SC			BockJ	Prep1C	6/21/2007 4:10:25 PM	RICH-RC-5015 REVISION 6
SC			AshworthA	InPrep2	7/10/2007 9:11:56 AM	RICH-RC-5015 REVISION 6
SC			AshworthA	Prep2C	7/11/2007 1:12:54 PM	RICH-RC-5015 REVISION 6
SC			NelsonT	Cnt1C	7/11/2007 2:59:15 PM	RICH-RC-5058 REV 7
AC			BockJ	6/21/2007 4:10:25 PM		
AC			AshworthA	7/10/2007 9:11:56		
AC			AshworthA	7/11/2007 1:12:54 PM		
AC			NelsonT	7/11/2007 2:59:15 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.27