

W05201

REPORT COVER PAGE	1
CASE NARRATIVE	3
SAMPLE RESULTS SUMMARY	9
DATA REVIEW CHECKLIST/NCM	50
CHAIN OF CUSTODY	78
SAMPLE PREP ANALYSIS SHEETS	107
ICOC	132
TOTAL # PAGES IN DOCUMENT	142

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Analytical Data Package Prepared For

Fluor Hanford

Radiochemical Analysis By

TAL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 36749

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05201	W07-007	B1NYM6	J7G110154-1	J2L8K1AA	9J2L8K10	7198344
		B1NYM6	J7G110154-1	J2L8K1AC	9J2L8K10	7198347
		B1NYM7	J7G110154-2	J2L861AA	9J2L8610	7198344
		B1NYM7	J7G110154-2	J2L861AC	9J2L8610	7198347
		B1NYN4	J7G110154-3	J2L9E1AA	9J2L9E10	7198344
		B1NYN4	J7G110154-3	J2L9E1AC	9J2L9E10	7198347
		B1NYB0	J7G110154-4	J2L9L1AA	9J2L9L10	7198341
		B1NY97	J7G110163-1	J2MAW1AA	9J2MAW10	7198341
		B1NY88	J7G110163-2	J2MA61AA	9J2MA610	7198341
		B1NY85	J7G110163-3	J2MA91AA	9J2MA910	7198341
		B1NY94	J7G110163-4	J2MCC1AA	9J2MCC10	7198341
		B1NY91	J7G110163-5	J2MCF1AA	9J2MCF10	7198341
		B1NL04	J7G120218-1	J2QKF1AA	9J2QKF10	7198344
		B1NL04	J7G120218-1	J2QKF1AC	9J2QKF10	7198347
		B1NL04	J7G120218-1	J2QKF1AD	9J2QKF10	7198341



S07-006

Comments:

Report Nbr: 36749

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05201	W07-007	B1NYB6	J7G120221-1	J2QKW1AA	9J2QKW10	7198341
		B1NYB6	J7G120221-1	J2QKW2AA	9J2QKW20	7198341
		B1NYB3	J7G120221-2	J2QK51AA	9J2QK510	7198341
	I07-056	B1NX07	J7G120242-1	J2QPF1AA	9J2QPF10	7198348
		B1NX07	J7G120242-1	J2QPF1AC	9J2QPF10	7198351
		B1NX08	J7G120242-2	J2QPL1AA	9J2QPL10	7198348
		B1NX08	J7G120242-2	J2QPL1AC	9J2QPL10	7198351
	S07-007	B1NXF9	J7G120296-1	J2Q691AA	9J2Q6910	7198356
		B1NXF5	J7G120296-2	J2Q7J1AA	9J2Q7J10	7198356
		B1NXF7	J7G120296-3	J2Q7L1AA	9J2Q7L10	7198356
	I07-044	B1N316	J7G130386-1	J2WR31AA	9J2WR310	7198348
		B1N316	J7G130386-1	J2WR31AC	9J2WR310	7198349
	I07-043	B1NHB9	J7G160105-1	J2X2J1AA	9J2X2J10	7198354
		B1NHB9	J7G160105-1	J2X2J1AC	9J2X2J10	7198358
		B1NHB9	J7G160105-1	J2X2J1AD	9J2X2J10	7198350
		B1NHB9	J7G160105-1	J2X2J1AE	9J2X2J10	7198348
		B1NHB9	J7G160105-1	J2X2J1AG	9J2X2J10	7198351
		B1NHB9	J7G160105-1	J2X2J3AF	9J2X2J30	7247319
	I07-053	B1NWT3	J7G170127-1	J21LF1AA	9J21LF10	7198358
		B1NWT3	J7G170127-1	J21LF1AC	9J21LF10	7198349

Comments:



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2800 George Washington Way
Richland, WA 99354

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Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

September 18, 2007

Attention: Steve Trent

SAF Number	:	W07-007, S07-006, I07-056, S07-007, I07-044, I07-043, I07-053
Date SDG Closed	:	July 16, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05201
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between July 10, 2007 and July 16, 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 Fluor Hanford specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>DATE OF RECEIPT</u>	<u>MATRIX</u>
B1NYM6	J2L8K	7/10/07	WATER
B1NYM7	J2L86	7/10/07	WATER
B1NYN4	J2L9E	7/10/07	WATER
B1NYB0	J2L9L	7/10/07	WATER
B1NY97	J2MAW	7/10/07	WATER
B1NY88	J2MA6	7/10/07	WATER
B1NY85	J2MA9	7/10/07	WATER
B1NY94	J2MCC	7/10/07	WATER
B1NY91	J2MCF	7/10/07	WATER
B1NL04	J2QKF	7/11/07	WATER
B1NYB6	J2QKW	7/11/07	WATER
B1NYB3	J2QK5	7/11/07	WATER
B1NX07	J2QPF	7/11/07	WATER

Fluor Hanford
September 18, 2007

B1NX08	J2QPL	7/11/07	WATER
B1NXP9	J2Q69	7/11/07	WATER
B1NXF5	J2Q7J	7/11/07	WATER
B1NXF7	J2Q7L	7/11/07	WATER
B1N316	J2WR3	7/12/07	WATER
B1NHB9	J2X2J	7/12/07	WATER
B1NWT3	J21LF	7/16/07	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:

Alpha Spectroscopy

Neptunium-237 by method RICH-RC-5009

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

Carbon-14 by method RICH-RC-5022

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

Fluor Hanford
September 18, 2007

V. Comments

Alpha Spectroscopy

Neptunium-237 by method RICH-RC-5009:

The LCS, batch blank, sample and sample duplicate (BINHB9) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (BINYM6) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

Sample BINYM6 did not meet CRDL due to sample matrix effects; reduced volumes were analyzed based on an elevated screen results. The detected activities exceed the achieved MDAs. Except as noted, the LCS, batch blank, samples and sample duplicate (BINYM7) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (BINX08) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

There was an obvious blank/LCS switch in the lab. The samples were verified in the count room and the results were corrected in RadCalc. Except as noted, the LCS, batch blank, samples and sample duplicate (BINHB9) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (BINX07) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (BIN316), and sample matrix spike (BINWT3) results are within contractual requirements.

Selenium-79 by method RICH-RC-5043:

The original analysis failed due to low tracer yields. A rerun also failed due to the unavailability of necessary reagents. The samples were analyzed a third time with acceptable results. Data is accepted. There is no LCS for selenium-79. Except as noted, the LCS, batch blank, samples and sample duplicate (BINHB9) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (BINXP9) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:

Fluor Hanford
September 18, 2007

The LCS, batch blank, samples and sample duplicate (BINWT3) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

In the original analysis the duplicate was out. It was reanalyzed with good results. Except as noted, the LCS, batch blank, samples, sample duplicate (BINYB6), and sample matrix spike (BINYB3) 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:



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 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

Uncertainty Estimation

Test America 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, $R = \text{constants} * f(x,y,z,\dots)$. 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/\sqrt{n}), 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 $(\text{Result}/\text{Expected}) - 1$ 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) <i>u_c Combined Uncertainty.</i>	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, <i>u_c the combined uncertainty</i> . 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%. $Lc = 1.645 * \sqrt{2 * (\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin}} * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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%. $MDC = (4.65 * \sqrt{(\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin}} + 2.71 / \text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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.

9/18/2007 10:51:44 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 30749 File Name: h:\Reportdb\edd\Fead\IV\Rad\W05201.Edd, h:\Reportdb\edd\Fead\IV\Rad\36749.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:				
9J21LF10	B1NWT3*		MW6-SBB-A1	I07-053	W05201					07/16/2007 13:16				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198358	C-14	14762-75-5	2.74E+02	pCi/L	8.9E+00	3.6E+01		8.35E+00	100.0	C14_LSC	2.00E-01	L	08/28/2007 11:32	I
7198349	TC-99	14133-76-7	-1.37E+00	pCi/L	3.9E+00	5.6E+00	U	9.69E+00	100.0	TC99_ETVDSK_LS	1.259E-01	L	08/22/2007 09:15	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:				
9J2L8610	B1NYM7		MW6-SBB-A1	W07-007	W05201					07/10/2007 07:30				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198344	ALPHA	12587-46-1	0.00E+00	pCi/L	3.1E-01	3.1E-01	U	9.73E-01	100.0	9310_ALPHABETA	1.982E-01	L	08/29/2007 13:31	I
7198347	BETA	12587-47-2	4.18E-01	pCi/L	1.1E+00	1.1E+00	U	2.44E+00	100.0	9310_ALPHABETA	2.001E-01	L	08/29/2007 11:54	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:				
9J2L8K10	B1NYM8		MW6-SBB-A1	W07-007	W05201					07/10/2007 08:27				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198344	ALPHA	12587-46-1	2.60E+00	pCi/L	1.7E+00	1.8E+00		2.40E+00	100.0	9310_ALPHABETA	1.10E-01	L	08/29/2007 11:58	I
7198347	BETA	12587-47-2	9.99E+00	pCi/L	2.7E+00	3.0E+00		4.48E+00	100.0	9310_ALPHABETA	1.285E-01	L	08/29/2007 11:54	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:				
9J2L9E10	B1NYN4		MW6-SBB-A1	W07-007	W05201					07/10/2007 09:05				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198344	ALPHA	12587-46-1	1.88E+00	pCi/L	1.4E+00	1.5E+00		1.73E+00	100.0	9310_ALPHABETA	1.922E-01	L	08/29/2007 13:31	I
7198347	BETA	12587-47-2	8.93E+00	pCi/L	1.9E+00	2.3E+00		2.90E+00	100.0	9310_ALPHABETA	1.993E-01	L	08/29/2007 11:54	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:				
9J2L9L10	B1NYB0		MW6-SBB-A1	W07-007	W05201					07/10/2007 13:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198341	Uranium	7440-61-1	0.00E+00	ug/L	0.0E+00	0.0E+00	U	8.35E-02		UTOT_KPA	2.51E-02	ML	08/27/2007 11:37	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9J2MA610	B1NY88		MW6-SBB-A1	W07-007	W05201					07/10/2007 09:35				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198341	Uranium	7440-61-1	6.67E-03	ug/L	1.0E-03	1.0E-03	U	8.06E-02		UTOT_KPA	2.60E-02	ML	08/27/2007 11:53	I

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.

9/18/2007 10:51:44 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36749 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.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:	Unit	Analy Date/Time	Act
9J2MA910	B1NY85		MW6-SBB-A1	W07-007	W05201					07/10/2007 10:22			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198341	Uranium	7440-61-1	4.92E+01	ug/L	5.8E+00	5.8E+00		8.06E-02		UTOT_KPA	2.60E-02	ML	08/27/2007 11:56
9J2MAW10	B1NY97		MW6-SBB-A1	W07-007	W05201					07/10/2007 13:13			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198341	Uranium	7440-61-1	1.35E+02	ug/L	1.6E+01	1.6E+01		8.06E-02		UTOT_KPA	2.60E-02	ML	08/27/2007 11:51
9J2MCC10	B1NY94		MW6-SBB-A1	W07-007	W05201					07/10/2007 11:50			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198341	Uranium	7440-61-1	9.57E+00	ug/L	1.1E+00	1.1E+00		8.19E-02		UTOT_KPA	2.56E-02	ML	08/27/2007 11:58
9J2MCF10	B1NY91		MW6-SBB-A1	W07-007	W05201					07/10/2007 12:32			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198341	Uranium	7440-61-1	5.66E+01	ug/L	6.7E+00	6.7E+00		7.82E-02		UTOT_KPA	2.68E-02	ML	08/27/2007 12:00
9J2Q6910	B1NXF9		MW6-SBB-A1	S07-007	W05201					07/11/2007 13:37			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MOA	TrcYield	Method	Alq Size		
7198356	H-3	10028-17-8	2.51E+03	pCi/L	2.0E+02	2.4E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/20/2007 03:10
9J2Q7J10	B1NXF5		MW6-SBB-A1	S07-007	W05201					07/11/2007 14:08			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198356	H-3	10028-17-8	1.04E+04	pCi/L	3.5E+02	5.5E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/20/2007 05:54
9J2Q7L10	B1NXF7		MW6-SBB-A1	S07-007	W05201					07/11/2007 13:53			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7198356	H-3	10028-17-8	2.54E+03	pCi/L	2.0E+02	2.5E+02		3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/20/2007 07:15

TAL Richland

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

2

rptFeadRadSummaryEdd v3.48

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

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36749 File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.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:				
9J2QK510	B1NYB3		MW6-SBB-A1	W07-007	W05201					07/11/2007 11:05				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198341	Uranium	7440-61-1	5.52E+00	ug/L	5.6E-01	5.6E-01		8.98E-02		UTOT_KPA	2.50E-02	ML	08/27/2007 12:20	I
9J2QKF10	B1NL04		MW6-SBB-A1	S07-006	W05201					07/11/2007 12:45				
7198344	ALPHA	12587-46-1	2.98E+01	pCi/L	4.5E+00	8.2E+00		1.60E+00	100.0	9310_ALPHABETA	2.003E-01	L	08/29/2007 13:31	I
7198347	BETA	12587-47-2	4.11E+01	pCi/L	3.2E+00	6.3E+00		2.79E+00	100.0	9310_ALPHABETA	1.983E-01	L	08/29/2007 11:54	I
7198341	Uranium	7440-61-1	1.30E+02	ug/L	1.5E+01	1.5E+01		7.94E-02		UTOT_KPA	2.64E-02	ML	08/27/2007 12:05	I
9J2QKW10	B1NYB6		MW6-SBB-A1	W07-007	W05201					07/11/2007 10:19				
7198341	Uranium	7440-61-1	4.99E-03	ug/L	6.8E-04	6.8E-04	U	7.51E-02		UTOT_KPA	2.79E-02	ML	08/27/2007 12:07	I
9J2QKW20	B1NYB6		MW6-SBB-A1	W07-007	W05201					07/11/2007 10:19				
7198341	Uranium	7440-61-1	-9.05E-03	ug/L	2.9E-03	2.9E-03	U	7.51E-02		UTOT_KPA	2.79E-02	ML	08/28/2007 15:19	I
9J2QPF10	B1NX07		MW6-SBB-A1	I07-056	W05201					07/11/2007 11:54				
7198348	I-129L	15046-84-1	-1.67E-02	pCi/L	1.2E-01	1.2E-01	U	2.19E-01	102.2	I129LL_SEP_LEPS	3.9581E+00	L	08/24/2007 05:40	I
7198351	SR-90	10098-97-2	1.72E-01	pCi/L	1.6E-01	1.8E-01	U	3.60E-01	78.7	SRISO_SEP_PHE	1.0105E+00	L	08/26/2007 09:14	I
9J2QPL10	B1NX08		MW6-SBB-A1	I07-056	W05201					07/11/2007 11:54				
7198348	I-129L	15046-84-1	6.77E-02	pCi/L	1.6E-01	1.6E-01	U	3.01E-01	95.4	I129LL_SEP_LEPS	3.9206E+00	L	08/24/2007 09:18	I
7198351	SR-90	10098-97-2	2.00E-01	pCi/L	1.6E-01	1.8E-01	U	3.45E-01	80.5	SRISO_SEP_PHE	1.0061E+00	L	08/26/2007 09:14	I

9/18/2007 10:51:44 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36749 File Name: h:\Reportdb\edd\Fead\VARad\W05201.Edd, h:\Reportdb\edd\Fead\VARad\36749.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:				
9J2WR310	B1N316		MW6-SBB-A1	I07-044	W05201					07/12/2007 09:23				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198348	I-129L	15046-84-1	6.45E-02	pCi/L	1.2E-01	1.2E-01	U	2.40E-01	94.9	I129LL_SEP_LEPS	3.9357E+00	L	08/24/2007 09:19	I
7198349	TC-99	14133-76-7	1.65E+00	pCi/L	4.1E+00	5.8E+00	U	9.71E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	08/22/2007 09:15	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:				
9J2X2J10	B1NHB9		MW6-SBB-A1	I07-043	W05201					07/12/2007 11:14				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7198358	C-14	14762-75-5	1.52E+00	pCi/L	3.5E+00	7.1E+00	U	8.35E+00	100.0	C14_LSC	2.00E-01	L	08/28/2007 10:50	I
7198350	BE-7	13966-02-4	1.39E+01	pCi/L	2.9E+01	2.9E+01	U	5.58E+01		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	CO-60	10198-40-0	2.20E+00	pCi/L	2.8E+00	2.6E+00	U	5.86E+00		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	CS-134	13967-70-9	2.29E+00	pCi/L	2.9E+00	2.9E+00	U	5.83E+00		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	CS-137	10045-97-3	-6.85E-01	pCi/L	2.2E+00	2.2E+00	U	3.93E+00		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	EU-152	14683-23-9	3.48E+00	pCi/L	5.5E+00	5.5E+00	U	1.08E+01		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	EU-154	15585-10-1	5.78E-01	pCi/L	7.5E+00	7.5E+00	U	1.46E+01		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	EU-155	14391-16-3	5.69E-01	pCi/L	5.3E+00	5.3E+00	U	9.60E+00		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	K-40	13966-00-2	-4.29E+01	pCi/L	5.8E+01	5.8E+01	U	1.23E+02		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	RU-106	13967-48-1	1.74E+01	pCi/L	2.2E+01	2.2E+01	U	4.42E+01		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198350	SB-125	14234-35-6	2.60E+00	pCi/L	5.7E+00	5.7E+00	U	1.08E+01		GAMMALL_GS	1.979E+00	L	08/23/2007 19:45	I
7198348	I-129L	15046-84-1	4.97E-01	pCi/L	3.0E-01	3.0E-01	U	4.24E-01	94.1	I129LL_SEP_LEPS	3.9209E+00	L	08/24/2007 11:05	I
7198354	NP-237	13994-20-2	0.00E+00	pCi/L	8.4E-02	8.4E-02	U	1.97E-01	99.1	NP237_LLE_PLAT	1.99E-01	L	08/23/2007 16:39	I
7198351	SR-90	10098-97-2	-2.07E-02	pCi/L	1.9E-01	1.9E-01	U	4.37E-01	77.4	SRISO_SEP_PRE	9.947E-01	L	08/26/2007 09:15	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:				
9J2X2J30	B1NHB9		MW6-SBB-A1	I07-043	W05201					07/12/2007 11:14				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7247319	Se-79	15758-45-9	-2.30E-01	pCi/L	2.6E+00	7.5E+00	U	6.25E+00	100.5	SE79_SEP_IE_LS	2.006E-01	L	09/13/2007 04:27	I

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.

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J217R1AB

Sdg/Rept Nbr: W05201

36749

Collection Date: 07/11/2007 10:19

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
	MW6-SBB-A19981								AW	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	ToVCnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RR/ UCL	LCS LCL/UCL	R Typ
7198341 BLK	Uranium 7440-61-1	0.00E+00	ug/L	0.0E+00 0.0E+00	U 8.28E-02			UTOT_KPA	2.53E-02 ML	08/27/2007 11:11				D

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.

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J21801AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/10/2007 07:30

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	F Suffix	R Typ					
	MW6-SBB-A19981								AZ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198347 BLK	BETA 12587-47-2	6.98E-01	pCi/L	1.4E+00 1.4E+00	U	2.93E+00	100.0		9310_ALPHAB	1.978E-01 L	08/29/2007 11:54				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Report\bledd\FeadIV\Rad\W05201.Edd, h:\Report\bledd\FeadIV\Rad\36749.Edd

Lab Sample Id: J21821AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 11:54

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BB	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198348	I-129L	5.38E-03	pCi/L	1.4E-01	U	2.56E-01	93.5		I129LL_SEP_L	3.9596E+00	08/24/2007				D
BLK	15046-84-1			1.4E-01						L	11:06				

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J21831AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 09:23

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BD	H					
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198349 BLK	TC-99 14133-76-7	6.56E+00	pCi/L	6.0E+00 4.2E+00	U	9.73E+00	100.0		TC99_ETVDSK	1.253E-01 L	08/22/2007 09:15				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J21841AB Sdg/Rept Nbr: W05201 36749 Collection Date: 07/12/2007 11:14
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 07/12/2007

Batch # / Qc Type	Analyt/CAS#	Result/Orig Rst	Unit	ToI/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198350	BE-7	1.22E+01	pCi/L	3.6E+01	U	6.66E+01			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 13966-02-4			3.6E+01						L	22:01				
7198350	CO-60	-6.22E-01	pCi/L	3.1E+00	U	5.70E+00			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 10198-40-0			3.1E+00						L	22:01				
7198350	CS-134	-7.77E-01	pCi/L	3.4E+00	U	6.08E+00			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 13967-70-9			3.4E+00						L	22:01				
7198350	CS-137	-1.31E+00	pCi/L	3.1E+00	U	5.22E+00			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 10045-97-3			3.1E+00						L	22:01				
7198350	EU-152	-5.03E+00	pCi/L	7.9E+00	U	1.31E+01			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 14683-23-9			7.9E+00						L	22:01				
7198350	EU-154	1.73E+00	pCi/L	6.9E+00	U	1.43E+01			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 15585-10-1			6.9E+00						L	22:01				
7198350	FU-155	1.94E-01	pCi/L	5.6E+00	U	9.82E+00			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 14391-16-3			5.6E+00						L	22:01				
7198350	K-40	-1.46E+01	pCi/L	6.4E+01	U	1.41E+02			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 13966-00-2			6.4E+01						L	22:01				
7198350	RU-106	-4.04E+00	pCi/L	2.1E+01	U	3.86E+01			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 13967-48-1			2.1E+01						L	22:01				
7198350	SB-125	5.79E+00	pCi/L	7.8E+00	U	1.48E+01			GAMMALL_GS	1.9987E+00	08/23/2007				D
	BLK 14234-35-6			7.8E+00						L	22:01				

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J21861AB Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 11:54
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 07/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198351	SR-90	1.69E-02	pCi/L	1.8E-01	U	4.06E-01	83.2		SRISO_SEP_P	1.0045E+00	08/26/2007				D
BLK	10098-97-2			8.9E-02						L	09:15				

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

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportd\eddd\FeadIV\Rad\W05201.Edd, h:\Reportd\eddd\FeadIV\Rad\36749.Edd

Lab Sample Id: J218V1AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/10/2007 08:27

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ Yield	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198344 BLK	ALPHA 12587-46-1	6.10E-01	pCi/L	4.5E-01 4.2E-01	U	6.33E-01	100.0		9310_ALPHAB	1.99E-01 L	08/29/2007 11:58				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J219D1AB Sdg/Rept Nbr: W05201 36749 Collection Date: 07/12/2007 11:14
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 07/12/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ Yield	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198354 BLK	NP-237 13994-20-2	0.00E+00	pCi/L	9.3E-02 9.3E-02	U	2.17E-01	95.5		NP237_LLE_P	1.989E-01 L	08/23/2007 16:40				D

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

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05201.Edd, h:\Reportdb\edd\Fead\W05201.Edd

Lab Sample Id: J219E1AB Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 13:37
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 07/11/2007

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/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198356 BLK	H-3 10028-17-8	-9.96E+01	pCi/L	1.3E+02 1.2E+02	U	2.99E+02	100.0		906.0_H3_LSC	5.00E-03	07/19/2007 21:43				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J219E1DX

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 13:37

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BP	H					
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198356 BLK	H-3 10028-17-8	-1.63E+02	pCi/L	1.3E+02 1.2E+02	U	3.05E+02	100.0		906.0_H3_LSC	5.00E-03 L	07/20/2007 00:27				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 06

File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J219H1AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/16/2007 13:16

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Molsture/Solids%*:

QC Type: BLK

Received Date: 07/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BR	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rat	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198358 BLK	C-14 14762-75-5	4.89E+01	pCi/L	1.2E+01 4.9E+00		8.35E+00	100.0		C14_LSC	2.00E-01 L	08/28/2007 09:25				D

Tuesday, September 18, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IVRad\W05201.Edd, h:\Reportdb\edd\Fead\IVRad\36749.Edd

Lab Sample Id: J5V5Q2AB

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 11:14

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 07/12/2007

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/ Yield	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7247319 BLK	Se-79 15758-45-9	8.45E-01	pCi/L	7.6E+00 2.6E+00	U	6.22E+00	100.6		SE79 SEP_IE	2.016E-01 L	09/13/2007 07:52				D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05201 Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J217R1CS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 10:19
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/11/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198341 BS	Uranium 7440-61-1	3.70E+01	ug/L	4.4E+00 4.4E+00		8.12E-02		3.52E+01 105.2	UTOT_KPA	2.58E-02 ML	08/27/2007 11:15			70 130	D

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

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749 Edd

Lab Sample Id: J217R1DS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 10:19
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/11/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198341 BS	Uranium 7440-61-1	3.63E+00	ug/L	3.7E-01 3.7E-01		8.32E-02		3.56E+00 102.0	UTOT_KPA	2.52E-02 ML	08/27/2007 11:17			70 130	D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\ledd\Fead\Rad\W05201.Edd, h:\Reportdb\ledd\Fead\Rad\36749.Edd

Lab Sample Id: J21801CS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/10/2007 07:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
	MW6-SBB-A19981								BA	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	REF/ UCL	LCS LCL/UCL	R Typ
7198347 BS	BETA 12587-47-2	2.10E+01	pCi/L	5.0E+00 2.3E+00	2.41E+00	100.0	2.29E+01 91.7	9310_ALPHAB	1.984E-01 L	08/29/2007 14:12			70 130	D

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

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J21821CS

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 11:54

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BC	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198348 BS	I-129L 15046-84-1	1.02E+01	pCi/L	1.3E+00 1.3E+00		4.04E-01	92.4	9.77E+00 104.7	I129LL_SEP_L	3.9007E+00 L	08/24/2007 11:07			70 130	D

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

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J21831CS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/12/2007 09:23
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	REP/ UCL	LCS LCL/UCL	R Typ
7198349 BS	TC-99 14133-76-7	4.78E+02	pCi/L	3.4E+01 1.2E+01		9.67E+00	100.0	5.34E+02 89.5	TC99_ETVDSK	1.259E-01 L	08/22/2007 09:15			75 125	D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\WRad\W05201.Edd, h:\Reportdb\edd\Fead\WRad\36749.Edd

Lab Sample Id: J21841CS

Sdg/Rept Nbr: W05201

36749

Collection Date: 07/12/2007 11:14

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 07/12/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rat	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198350	CO-60	4.35E+01	pCi/L	9.7E+00		5.52E+00		3.81E+01	GAMMALL_GS	1.9988E+00	08/23/2007			75	D
BS	10198-40-0			9.7E+00				114.2		L	22:00			125	
7198350	CS-137	5.69E+01	pCi/L	1.1E+01		5.66E+00		4.98E+01	GAMMALL_GS	1.9988E+00	08/23/2007			70	D
BS	10045-97-3			1.1E+01				114.3		L	22:00			130	
7198350	EU-152	8.58E+01	pCi/L	2.0E+01		1.40E+01		7.57E+01	GAMMALL_GS	1.9988E+00	08/23/2007			70	D
BS	14683-23-9			2.0E+01				113.4		L	22:00			130	

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FarmNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201 Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J21861CS

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 11:54

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BI	H					
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	To/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
7198351 BS	SR-90 10098-97-2	1.44E+01	pCi/L	2.3E+00 8.3E-01		4.53E-01	76.8	1.36E+01 106.1	SRISO_SEP_P	9.989E-01 L	08/26/2007 09:15			70 130	D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J218V1CS

Sdg/Rept Nbr: W05201

36749

Collection Date: 07/10/2007 08:27

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BK	H					
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198344 BS	ALPHA 12587-46-1	1.98E+01	pCi/L	5.0E+00 2.0E+00		5.44E-01	100.0	2.23E+01 88.8	9310_ALPHAB	2.011E-01 L	08/29/2007 11:58			70 130	D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J219D1CS

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 11:14

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198354 BS	NP-237 13994-20-2	8.41E+00	pCi/L	6.9E+00 1.2E+00		1.96E-01	93.9	9.08E+00 92.7	NP237_LLE_P	1.994E-01 L	08/23/2007 16:40				D

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd,

Lab Sample Id: J219E1CS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 13:37
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BO	H					
Batch # / Qc Type	Analyt CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198356	H-3	2.63E+03	pCi/L	2.5E+02		3.00E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	07/19/2007			75	D
BS	10028-17-8			2.1E+02				97.1		L	23:05			125	

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

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd. h:\Reportdb\edd\FeadIV\Rad\36748.Edd

Lab Sample Id: J219E1EM Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 13:37
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
	MW6-SBB-A19981								BQ	H				
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198356 BS	H-3 1002B-17-8	2.75E+03	pCi/L	2.5E+02 2.1E+02	2.98E+02	100.0	2.71E+03 101.7	906.0_H3_LSC	5.00E-03 L	07/20/2007 01:48			75 125	D

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

Tuesday, September 18, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J219H1CS Sdg/Rept Nbr: W05201 36749 Collection Date: 07/16/2007 13:16
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/16/2007

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	Toi/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198358 BS	C-14 14762-75-5	4.19E+01	pCi/L	1.1E+01 4.7E+00	8.35E+00	100.0	4.61E+01 91.0	C14_LSC	2.00E-01 L	08/28/2007 10:08			70 130	D

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\erd\Fead\VRad\36749.Edd

Lab Sample Id: J21LF1ER Sdg/Rept Nbr: W05201 36749 Collection Date: 07/16/2007 13:16
 Client Id: B1NWT3 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
107-053	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198358	C-14	2.34E+02	pCi/L	3.2E+01		8.35E+00	100.0		C14_LSC	2.00E-01	08/28/2007	16.0	1.8		D
DUP	14762-75-5	2.74E+02		8.3E+00						L	12:15	20.0	3		

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J2L861DR Sdg/Rept Nbr: W05201 36749 Collection Date: 07/10/2007 07:30
 Client Id: B1NYM7 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-007	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198347	BETA	1.53E+00	pCi/L	1.2E+00	U	2.35E+00	100.0		9310_ALPHAB	1.984E-01	08/29/2007	114.0	1.3		D
DUP	12587-47-2	4.18E-01		1.2E+00						L	11:54	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.

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J2L8K1DR Sdg/Rept Nbr: W05201 36749 Collection Date: 07/10/2007 08:27
 Client Id: B1NYM6 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/10/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-007	MW6-SBB-A19981								BW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198344	ALPHA	3.11E+00	pCi/L	1.9E+00		1.93E+00	100.0		9310_ALPHAB	1.087E-01	08/29/2007	18.0	0.4		D
DUP	12587-46-1	2.60E+00		1.7E+00						L	11:58	20.0	3		

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

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J2Q691CR Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 13:37
 Client Id: B1NXF9 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-007	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198356	H-3	2.35E+03	pCi/L	2.4E+02		2.98E+02	100.0		906.0_H3_LSC	5.00E-03	07/20/2007	6.9	1.		D
DUP	10028-17-8	2.51E+03		2.0E+02						L	04:32	20.0	3		

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

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J2QPF1DR

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 11:54

Client Id: B1NX07

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
107-056	MW6-SBB-A19981								CA	H

Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Alq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198348 DUP	I-129L 15046-84-1	3.15E-02 -1.67E-02	pCi/L	1.4E-01 1.4E-01	U	2.64E-01	104.6		I129LL_SEP_L	3.9336E+00 L	08/24/2007 09:17	648.9 20.0	0.5 3		D

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J2QPL1DR

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/11/2007 11:54

Client Id: B1NX08

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
107-056	MW6-SBB-A19981								CB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198351	SR-90	9.61E-02	pCi/L	2.0E-01	U	4.35E-01	79.6		SRISO_SEP_P	1.0081E+00	08/26/2007	70.1	0.7		D
DUP	10098-97-2	2.00E-01		2.0E-01						L	09:15	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.

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05201.Edd, h:\Reportdb\edd\Fead\VRad\36749.Edd

Lab Sample Id: J2WR31DR

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 09:23

Client Id: B1N316

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
107-044	MW6-SBB-A19981								CC	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/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
7198349 DUP	TC-99 14133-76-7	9.69E-01 1.65E+00	pCi/L	5.7E+00 4.0E+00	U	9.73E+00	100.0		TC99_ETVDSK	1.252E-01 L	08/22/2007 09:15	52.1 20.0	0.2 3		D

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J2X2J1HR

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 11:14

Client Id: B1NHB9

Matrix: WATER WATER

Sample On Date:

Molsture/Solids%*:

QC Type: DUP

Received Date: 07/12/2007

Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198350	BE-7	8.86E+00	pCi/L	2.7E+01	U	5.10E+01			GAMMALL_GS	1.9901E+00	08/23/2007	44.1	0.3		D
	DUP 13966-02-4	1.39E+01		2.7E+01						L	19:45	20.0	3		
7198350	CO-60	2.74E+00	pCi/L	2.6E+00	U	5.95E+00			GAMMALL_GS	1.9901E+00	08/23/2007	22.1	0.3		D
	DUP 10198-40-0	2.20E+00		2.6E+00						L	19:45	20.0	3		
7198350	CS-134	5.12E-02	pCi/L	2.8E+00	U	5.29E+00			GAMMALL_GS	1.9901E+00	08/23/2007	191.3	1.1		D
	DUP 13967-70-9	2.29E+00		2.8E+00						L	19:45	20.0	3		
7198350	CS-137	-8.94E-01	pCi/L	2.3E+00	U	4.03E+00			GAMMALL_GS	1.9901E+00	08/23/2007	0.0	0.1		D
	DUP 10045-97-3	-6.85E-01		2.3E+00						L	19:45	20.0	3		
7198350	EU-152	-2.52E+00	pCi/L	6.1E+00	U	1.06E+01			GAMMALL_GS	1.9901E+00	08/23/2007	1254.7	1.4		D
	DUP 14683-23-9	3.48E+00		6.1E+00						L	19:45	20.0	3		
7198350	EU-154	4.23E+00	pCi/L	6.5E+00	U	1.44E+01			GAMMALL_GS	1.9901E+00	08/23/2007	152.0	0.8		D
	DUP 15585-10-1	5.78E-01		6.5E+00						L	19:45	20.0	3		
7198350	EU-155	3.84E+00	pCi/L	4.8E+00	U	8.84E+00			GAMMALL_GS	1.9901E+00	08/23/2007	148.4	1.		D
	DUP 14391-16-3	5.69E-01		4.8E+00						L	19:45	20.0	3		
7198350	K-40	-6.81E+01	pCi/L	4.9E+01	U	1.04E+02			GAMMALL_GS	1.9901E+00	08/23/2007	0.0	0.7		D
	DUP 13966-00-2	-4.29E+01		4.9E+01						L	19:45	20.0	3		
7198350	RU-106	-1.58E+00	pCi/L	1.9E+01	U	3.64E+01			GAMMALL_GS	1.9901E+00	08/23/2007	239.9	1.4		D
	DUP 13967-48-1	1.74E+01		1.9E+01						L	19:45	20.0	3		
7198350	SB-125	3.97E+00	pCi/L	5.3E+00	U	1.06E+01			GAMMALL_GS	1.9901E+00	08/23/2007	41.8	0.4		D
	DUP 14234-35-6	2.60E+00		5.3E+00						L	19:45	20.0	3		

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05201.Edd, h:\Reportdb\edd\Fead\Rad\36749.Edd

Lab Sample Id: J2X2J1KR

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/12/2007 11:14

Client Id: B1NHB9

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
107-043	MW6-SBB-A19981								CE	H					
Batch # / Qc Type	Analy/ CAS#	Result/ Orig Rst	Unit	Toi/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RR/ UCL	LCS LCL/UCL	R Typ
7198354	NP-237	0.00E+00	pCi/L	8.6E-02	U	2.01E-01	107.1		NP237_LLE_P	1.985E-01	08/23/2007	0.0	0.		D
DUP	13994-20-2	0.00E+00		8.6E-02						L	16:40	20.0	3		

Tuesday, September 18, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\ledd\FeadIV\Rad\W05201.Edd, h:\Reportdb\ledd\FeadIV\Rad\36749.Edd

Lab Sample Id: J2X2J3JR Sdg/Rept Nbr: W05201 36749 Collection Date: 07/12/2007 11:14
 Client Id: B1NHB9 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
107-043	MW6-SBB-A19981								CF	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7247319	Se-79	-5.53E-01	pCi/L	7.3E+00	U	6.17E+00	101.0		SE79_SEP_IE	2.034E-01	09/13/2007	0.0	0.1		D
DUP	15758-45-9	-2.30E-01		2.6E+00						L	06:10	20.0	3		

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

Tuesday, September 18, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J21LF1DW

Sdg/Rept Nbr: W05201 36749

Collection Date: 07/16/2007 13:16

Client Id: B1NWT3

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 07/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
107-053	MW6-SBB-A19981								BT	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198349 MS	TC-99 14133-76-7	3.28E+03	pCi/L	2.0E+02 3.1E+01		9.77E+00	100.0	3.65E+03 89.9	TC99_ETVDSK	1.248E-01 L	08/22/2007 09:15			80 140	D

TAL Richland

rptf\eadRadEdd 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.

36

Tuesday, September 18, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormalType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05201.Edd, h:\Reportdb\edd\FeadIV\Rad\36749.Edd

Lab Sample Id: J2QK51CW Sdg/Rept Nbr: W05201 36749 Collection Date: 07/11/2007 11:05
 Client Id: B1NYB3 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: MS Received Date: 07/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-007	MW6-SBB-A19981								BY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7198341 MS	Uranium 7440-61-1	3.48E+01	ug/L	4.8E+00 4.8E+00	8.22E-02		3.53E+01 98.5	UTOT_KPA	2.55E-02 ML	08/27/2007 12:22			60 140	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.

Lot No., Due Date: J7G160105; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198354; RNP237 Np-237 w/tracer
SDG, Matrix: W05201; WATER

1.0 COC

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

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review *John Horton*

Date *8-28-7*



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7198354
W05201

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. Adams

Date:

7-28-07

Lot No., Due Date: J7G110154.J7G120218; 08/30/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7198344; RALPHA-A Alpha by GPC-Am
 SDG, Matrix: W05201; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => J2L8K1AA 110.00<200.00 O:VB	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIks) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Mamx Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	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. Batch Positive Result => J2L8K1AA ALPHA 2.6E+00 L:2.4E+00 J2L9E1AA ALPHA 1.9E+00 L:1.7E+00 J2OKF1AA ALPHA 3.0E+01 L:1.6E+00	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	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 Lee Antonson

Date 8/30/07

**SEVERN
TRENT**

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198344

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

Comments on any "No" response: _____

Second Level Review: Erika Jordan Date: 7/21/17

Lot No., Due Date: J7G110154, J7G120218; 08/30/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7198347; RBETA-SR Beta by GPC-Sr/Y
 SDG, Matrix: W05201; WATER

1.0 COC

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

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

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

Yes No N/A

5.4 Was transcription checked? Yes No N/A

Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

Yes No N/A

6.0 Comments on any No response:
Please see NCM#10-10733

First Level Review

John Hoster

Date

8-30-7

SEVERN

TRENT

STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198347

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

Comments on any "No" response: See NCM

Second Level Review:

[Signature]

Date:

8/30/07

Clouseau Nonconformance Memo



NCM #: 10-10733 NCM Initiated By: John Norton Date Opened: 08/30/2007 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: None Lot #'s (Sample #'s): J7G110154 (1), QC Batches: None.,
Nonconformance: MDA not met Subcategory: Sample size reduced due to high residue mass	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
John Norton	08/30/2007	The sample did not meet the RDL due to reduced aliquot sizes caused by high residual weights.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
John Norton	08/30/2007	The activity detected in the sample is greater than the IDC, the data can be accepted.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>

Lot No., Due Date: J7G120242, J7G160105; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198351; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05201; WATER

1.0 COC

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

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review *John North*

Date 8-27-07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198351
W05201

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. [Signature] Date: 8-28-07



STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

8/30/2007 1:25:46 PM

Lot No., Due Date: J7G160105; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198350; RGAMMA Gamma by GER
SDG, Matrix: W05201; 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 10-10739

First Level Review

Liza Antonson

Date

8/30/07



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198350
W05201

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?	/		5/20-07
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 NCR

Second Level Review: Sheryl A. Adams Date: 8-30-07

Clouseau Nonconformance Memo



NCM #: 10-10739 NCM Initiated By: Lisa Antonson Date Opened: 08/30/2007 Date Closed:	Classification: Deficiency Status: GLREVIEW Production Area: Environmental - Prep Tests: Gamma by GER Lot #'s (Sample #'s): J7G160105 (1), J7G170000 (350), QC Batches: 7198350,
Nonconformance: Other (describe in detail) Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Lisa Antonson	08/30/2007	In this Gamma batch, there was an obvious blank/LCS switch in the lab. The samples were verified in the count room when removed from the detectors. The data was switched.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Lisa Antonson	08/30/2007	The technicians involved were reminded to use caution and double check labels.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

8/27/2007 2:04:56 PM

Lot No., Due Date: J7G120242, J7G130386, J7G160105; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198348; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05201; WATER

1.0 COC

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

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review

Shirley Antonson

Date

8/27/07



STL

Data Review Checklist RADIOCHEMISTRY Second Level Review

QC Batch Number: _____

7198348
W09201

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 Reviewer: _____

Sheryl A. Adams

Date: *8-28-07*



STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

8/29/2007 9:56:08 AM

Lot No., Due Date: J7G170127, J7G130386; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198349; RTC99 Tc-99 by LSC
SDG, Matrix: W05201; WATER

1.0 COC

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

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review *John Horts*

Date 8-29-7



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number: 7198349
W05201

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 Adams Date: 8-29-07

Lot No., Due Date: J7G160105; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7247319; RSE79 Se-79 by LSC
SDG, Matrix: W05201; 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:
Please see NCM#10-10848

First Level Review *John Horte*

Date 9-17-07



Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7247319
W05201

Review Item	Yes (✓)	No (✓)	NA (✓)
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 within contract acceptance criteria?	/		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
7. Do the MS/MSD results and yields meet acceptance criteria?			/
8. Do the duplicate sample results and yields meet acceptance criteria?			/
C. Other			
1. Are all Non-conformances 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. Allen Date: 9-18-07

LS-038B, Rev. 10, 9/07

Clouseau Nonconformance Memo



NCM #: 10-10848 NCM Initiated By: John Norton Date Opened: 09/17/2007 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: Se-79 by LSC Lot #'s (Sample #'s): J7G160105 (1), J7H290000 (544), QC Batches: 7247319,
Nonconformance: QC Result Out of Limits Subcategory: Tracer/carrier recovery outside acceptance limits	

Problem Description / Root Cause

Name	Date	Description
John Norton	09/17/2007	Originally analyzed as batch # 7198352, the batch failed with low tracer yields.

Corrective Action

Name	Date	Corrective Action
John Norton	09/17/2007	The samples were re-analyzed as batch # 7241544, however that batch also failed because certain reagents crucial to the analysis were not available. The final analysis was performed as batch # 7247319.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position



STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

7/20/2007 10:22:21 AM

Lot No., Due Date: J7G120296; 08/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7198356; RTRITIUM H-3 by LSC
SDG, Matrix: W05201; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.02 Final Results Are in the Appropriate Activity Units OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.03 Batch Contains the Required QC Appropriate for the Method OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => J2Q691AA 5.00<10.00 J2Q7J1AA 5.00<10.00 J2Q7L1AA 5.00<10.00 Q:VB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.07 The Correct Count Geometry was Used. Count Geometry => J219E1AF SVP15/5<=>SVP10/10 J219E1AG SVP15/5<=>SVP10/10 J219E1AA SVP15/5<=>SVP10/10 J219E1AC SVP15/5<=>SVP10/10 J219E1AD SVP15/5<=>SVP10/10 J219E1AE SVP15/5<=>SVP10/10 J2Q691AA SVP15/5<=>SVP10/10 J2Q691AC SVP15/5<=>SVP10/10 J2Q7J1AA SVP15/5<=>SVP10/10 J2Q7L1AA SVP15/5<=>SVP10/10 Q:VC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.09 Method Blank is within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.14 LCS within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.15 MLCS within Control Limits. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.17 Tracer within Control Limits. No Tracers found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.19 Sample Specific MDC <= CRDL. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK AL 7/20/07

OK AL 7/20/07

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

First Level Review

Angela Tong

Date

7/20/07

STL Richland

OAS_RADCALCv4.8.27

Page 2



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198356
W05201

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. Adams Date: 7-20-07

Lot No., Due Date: **J7G170127, J7G160105; 08/30/2007**
 Client, Site: **384868; PGW 615HANFORD HANFORD**
 QC Batch No., Method Test: **7198358; RC14 C-14 by LSC**
 SDG, Matrix: **W05201; WATER**

1.0 COC

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

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

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes No N/A

Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A

Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

Yes No N/A

5.4 Was transcription checked? Yes No N/A

Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

Yes No N/A

6.0 Comments on any No response:

First Level Review

Thomas E. Michael

Date

8/29/07

SEVERN
TRENT

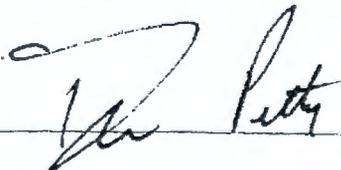
STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198358

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:  Date: 4/30/07

Lot No., Due Date: J7G110154,J7G110163,J7G120221,J7G120218; 08/30/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7198341; RUNAT UNat by KPA

SDG, Matrix: W05201; 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:
Please see NCM#10-10717

First Level Review *John Horte*

Date 8-28-7



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7198341
W05201

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 Adams Date: 8-28-07

Clouseau Nonconformance Memo

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-10717 NCM Initiated By: John Norton Date Opened: 08/28/2007 Date Closed:	Classification: Anomaly Status: CHREVIEW Production Area: Counting Tests: None Lot #'s (Sample #'s): J7G120221 (1), QC Batches: None.,
Nonconformance: Dups not within acceptance limits Subcategory: Other (explanation required)	

Problem Description / Root Cause

Name	Date	Description
John Norton	08/28/2007	The first analysis of the samples produced unreliable data for the duplicate sample.

Corrective Action

Name	Date	Corrective Action
John Norton	08/28/2007	The duplicate was re-analyzed.

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
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TAL RICHLIAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # W07-007-46
		<i>JTG 110154 W05201 Ave 08-24-07</i>			Page 1 of 1
Collector R. T. SICKLE		Contact/Requester Steve Trent	Telephone No. 509-373-5869		MSIN FAX
SAF No. W07-007		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, JULY 2007		Logbook: HNF-N-506-6		Ice Chest No. SML-125	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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
B1NYM7		W	7-10-07	0730	1x20-mL P	Activity Scan	None
B1NYM7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
<i>J2L86</i>							

Relinquished By R. T. SICKLE <i>[Signature]</i>	Date/Time JUL 10 2007 <i>1340</i>	Received By <i>[Signature]</i> LARRY SLANE	Date/Time JUL 10 2007 <i>1340</i>	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DT = Drum Liquid SO = Solid T = Titration SL = Sludge W1 = Wine W = Water L = Liquid O = Oil V = Volatilization A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By	Date/Time

TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. #	W07-007-53
		J76110154		W05201		Due 08-24-07	
Collector R. T. SICKLE		Contact/Requester Steve Trent		Telephone No. 509-373-5869		MSIN FAX	
SAF No. W07-007		Sampling Origin Hanford Site		Purchase Order/Charge Code			
Project Title RCRA JULY 2007		Logbook: HNF-N-506-6		Ice Chest No. SML-125 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
B1NYN4		W	7/10/07	0905	1x20-mL P	Activity Scan	None
B1NYN4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
<div style="position: relative; height: 100px;"> J2L9E <div style="position: absolute; left: 20%; top: 50%; transform: translate(-50%, -50%); font-size: 2em;"> P. Wall 7/10/07 </div> </div>							

Relinquished By R. T. SICKLE <i>[Signature]</i>	Date/Time JUL 10 2007 340	Received By LARON LANE <i>[Signature]</i>	Date/Time JUL 10 2007 340	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge Wt = Wine W = Water L = Liquid O = Oil V = Vapour A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By	Date/Time

TAL RICHARD

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # W07-007-137
		<i>JTG 110154 W05201 Due 08-24-07</i>			Page 1 of 1
Collector R. T. SICKLE		Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX
SAF No. W07-007		Sample Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA, JULY 2007		Method of Shipment Govt. Vehicle	Ice Chest No. <i>SML-125</i>	Temp.	
Shipped To (Lab) Steve Trent Incorporated, Richland		Priority: 45 Days	Bill of Lading/Air Bill No.		
Protocol RCRA		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 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.	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Lab ID	•	Date	Time	No/Type Container	Sample Analysis	Preservative
B1NYB0		W	7/10/07	1318	1x20-mL P	Activity Scan	None
B1NYB0		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J2L9L</i>							
<i>R. W. SICKLE 7/10/07</i>							
<i>[Large diagonal scribble]</i>							

Relinquished By R. T. SICKLE <i>[Signature]</i>	Date/Time JUL 10 2007 <i>1740</i>	Received By LARRY J LANE <i>[Signature]</i>	Date/Time JUL 10 2007 <i>1740</i>		
Relinquished By	Date/Time	Received By	Date/Time	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum 1 inch SO = Solid T = Tissue SL = Sludge W = Wine W = Water I = I kind O = Oil V = Vegetation A = Air X = Other	
Relinquished By	Date/Time	Received By	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)		Disposed By	Date/Time	



STL

Sample Check-in List

Date/Time Received: 071007 1340

Client: PGW SDG #: W05201 NA [] SAF #: W07-007 NA []

Work Order Number: J76110154 Chain of Custody # W07-007-45,-46,-53,-137

Shipping Container ID: Air Bill #

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

Sample Custodian: [Signature] Date: 071007

Table with 4 columns: 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

Sample Check-in List

Date/Time Received: 071007 1340

Client: PGW SDG #: W05201 NA [] SAF #: W07-007 NA []

Work Order Number: J76110163 Chain of Custody # W07-007-131, 113, 107, 125, 119

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 hazard labels
 - custody seals appropriate samples labels
- 9. Samples are:
 - in good condition leaking
 - broken 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: 071007

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

TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # S07-006-228	
Collector Fluor Hanford D. R. BREWINGTON		Contact/Requester Steve Trent		Telephone No. 509-373-5869		MSIN FAX
SAF No. S07-006		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title SURV. JUNE 2007		Logbook: HNF-N-506-6		Ice Chest No. SMC-125		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 <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1NL04		W	7/11/07	1245	1x20-mL P	Activity Scan	None
B1NL04		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1NL04		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J2QKF</i>							
<i>L. Wall 7/11/07</i>							

Relinquished By Fluor Hanford D. R. BREWINGTON	Print <i>D. R. Brewington</i>	Sign <i>D. R. Brewington</i>	Date/Time JUL 11 2007	Received By <i>LARRY LANE</i>	Print <i>LARRY LANE</i>	Sign <i>LARRY LANE</i>	Date/Time JUL 11 2007	Matrix * S = Soil SF = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air SS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time		



STL

Sample Check-in List

Date/Time Received: 07/10/07 1449

Client: PGW SDG #: W05201 NA [] SAF #: S07-006 NA []

Work Order Number: J76120218 Chain of Custody # S07-006-228

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 hazard labels
 - custody seals appropriate samples labels
- 9. Samples are:
 - in good condition leaking
 - broken 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: 07/10/07

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

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# W07-007-149	
		J76120221 W05201 Aug 08-24-07		Page 1 of 1	
Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX	
SAF No. W07-007	Sampling Origin Hanford Site	Purchase Order/Charge Code		Ice Chest No. SML-125 Temp.	
Project Title RCRA, JULY 2007	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		Offsite Property No.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Priority: 45 Days				
Protocol RCRA	SPECIAL INSTRUCTIONS		Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
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)		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
B1NYB6		W	7/11/07	1019	1x20-mL P	Activity Scan	None
B1NYB6		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J2QKW</i>							
<i>R. Wall 7/11/07</i>							

Relinquished By Fluor Hanford D. R. BREWINGTON	Print <i>D.R. Brewington</i>	Sign <i>D.R. Brewington</i>	Date/Time 1449 JUL 11 2007	Received By <i>RJR</i>	Print LARRY LANE	Sign <i>Larry Lane</i>	Date/Time 1449 JUL 11 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine LI = Liquid VE = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. # W07-007-143
		<i>J7G120221 W05201 DW 08-24-07</i>				Page 1 of 1
Collector: Fluor Hanford D. R. BREWINGTON		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869		
SAF No. W07-007		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title RCRA, JULY 2007		Logbook: HNF-N-506-6		Ice Chest No. SML-125 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
B1NYB3		W	7/11/07	1105	1x20-mL P	Activity Scan	None
B1NYB3		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J2QK5</i>							
<i>Di. Used 7/11/07</i>							
 							

Relinquished By Fluor Hanford D. R. BREWINGTON	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 11 2007	Received By <i>[Signature]</i>	Print LARRY LANE	Sign <i>[Signature]</i>	Date/Time JUL 11 2007	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	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 = Vapour A = Air X = Other
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 071107 1449

Client: PGW SDG #: W05207 NA SAF #: W07-007 NA

Work Order Number: J76120221 Chain of Custody # W07-007-143,-149

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA Yes No
8. Samples have:

<input type="checkbox"/> tape	<input checked="" type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> appropriate samples labels
9. Samples are:

<input checked="" type="checkbox"/> in good condition	<input type="checkbox"/> leaking
<input type="checkbox"/> broken	<input type="checkbox"/> 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:  Date: 071107

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # S07-007-94	
		<i>J76120296 W05201 Due 08-24-07</i>			Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford D. R. BREWINGTON		Contact/Requester Steve Trent		Telephone No. 509-373-5869		
SAF No. S07-007		Sampling Origin Hanford Site		MSIN FAX		
Project Title SURV JULY 2007		Purchase Order/Charge Code		Ice Chest No. <i>SML-125</i> 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
B1NXF9		W	7/11/07	1337	1x250-mL G	908.0_H3_LSC: Tritium (1)	None
B1NXF9		W	↓	↓	1x20-mL P	Activity Scan	None
<div style="position: absolute; top: 0; right: 0;">J2069</div> <div style="position: absolute; bottom: 0; left: 0; opacity: 0.5;"> <i>R. Wall 7/11/07</i> </div>							

Relinquished By Fluor Hanford D. R. BREWINGTON	Sign <i>[Signature]</i>	Date/Time JUL 11 2007	Received By <i>[Signature]</i>	Print LARRY HANE	Sign	Date/Time JUL 11 2007	Matrix *
Relinquished By		Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SI = Sludge WI = Wire W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By		Date/Time	Received By			Date/Time	
Relinquished By		Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # S07-007-86	
Collector Fluor Hanford D. R. BREWINGTON		Contact/Requester Steve Trent		Telephone No. 509-373-5869		MSIN FAX
SAF No. S07-007		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title SURV JULY 2007		Method of Shipment Govt. Vehicle		Ice Chest No. SML-125 Temp.		
Shipped To (Lab) Severn Trent Incorporated, Richland		Priority: 45 Days		Bill of Lading/Air Bill No.		
Protocol SURV		SPECIAL INSTRUCTIONS		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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)		All Labs except WSCP: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCP: Batch all GW samples submitted into one SDG, daily closure.				

J76120296 W05201 Due 08-24-07

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1NXF5		W	7/11/07	1408	1x250-mL G	906.0_H3_LSC: Tritium (1)	None
B1NXF5		W	↓	↓	1x20-mL P	Activity Scan	None
<i>J297J</i>							
<i>of. Wall</i>							
<i>7/11/07</i>							
 							

Relinquished By Fluor Hanford D. R. BREWINGTON	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 11 2007	Received By <i>[Signature]</i>	Print LARRY JLANE	Sign <i>[Signature]</i>	Date/Time JUL 11 2007	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SF = Sediment DF = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

TAL RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S07-007-90
<i>J76-120296 W05201 Due 08-24-07</i>		
Page 1 of 1		

Collector Fluor Hanford D. B. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S07-007	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV. JULY 2007	Logbook HNF-N-S06-6	Ice Chest No. SMC-125 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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.
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1NXF7		W	7/11/07	1353	1x250-mL G	906.0_H3_LSC: Trillium (1)	None
B1NXF7		W	↓	↓	1x20-mL P	Activity Scan	None
<i>J297L</i>							
<i>R. Wall 7/11/07</i>							
 							

Relinquished By Fluor Hanford D. B. BREWINGTON	Date/Time JUL 11 2007	Received By LARRY J LANE	Date/Time JUL 11 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Dross Solid SE = Sediment DI = Dross Limb SO = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By	



STL

Sample Check-in List

Date/Time Received: 071107 1449

Client: PGW SDG #: W05201 NA SAF #: S07-007 NA

Work Order Number: J76120296 Chain of Custody # S07-007-86,-90,-94

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA Yes No
8. Samples have:

<input type="checkbox"/> tape <input checked="" type="checkbox"/> custody seals	<input type="checkbox"/> hazard labels <input checked="" type="checkbox"/> appropriate samples labels
--	--
9. Samples are:

<input checked="" type="checkbox"/> in good condition <input type="checkbox"/> broken	<input type="checkbox"/> leaking <input type="checkbox"/> 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: 071107

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

TALL RICHLAND

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 107-044-58
	<i>J7G130386</i> <i>W05201</i> <i>Due 08-27-07</i>	Page <u>1</u> of <u>1</u>
Collector HUF of Hanford D. R. BREWINGTON	Contact/Requester Dot Stewart	Telephone No. 509-376-5056
SAF No. 107-044	Sampling Origin Hanford Site	MSIN FAX
Project Title 27PL-LOJ MAY 2007	<i>Logbook: HNF-N-506-6</i>	Purchase Order/Charge Code
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Ice Chest No. <i>SML-125</i> Temp.
Protocol CERCLA	Priority: 45 Days	Bill of Lading/Air Bill 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> 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
B1N316		W 7/12/07	0923	1x20-mL P	Activity Scan	None
B1N316		↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N316		↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<i>J2WR3</i>						
<i>D. Wall</i>						
<i>7/12/07</i>						

Relinquished By HUF of Hanford D. R. BREWINGTON	Print <i>D.R. Brewington</i>	Signature <i>[Signature]</i>	Date/Time <i>11/12 2007</i>	Received By <i>[Signature]</i>	Print <i>L. Lane</i>	Signature <i>[Signature]</i>	Date/Time <i>JUL 12 2007</i>	Matrix *
Relinquished By			Date/Time	Received By			Date/Time	S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SD = Solid T = Tissue SI = Sludge WI = Wine W = Water L = Limid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

101



STL

Sample Check-in List

Date/Time Received: 071207 1440

Client: PGW SDG #: W05201 NA SAF #: I07-044 NA

Work Order Number: J7G130386 Chain of Custody # I07-044-58

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 _____ hazard labels
 - custody seals appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - _____ broken _____ have air bubbles
 - (Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9 HAD TO ADJUST PH
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: 071207

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

TAL RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 107-043-79
	<i>J76-160105 W05201 Due 08-27-07</i>	Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. 107-043	Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title 2UPL-LOI MAY 2007	Logbook: <i>HWF-N-506-6</i>	Ice Chest No. SML-125	Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.	
Protocol SIURV	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
B1NHB9		7/12/07	1114	1x20-mL P	Activity Scan	None
B1NHB9				2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1NHB9				2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1NHB9				1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1NHB9				1x1000-mL G/P	NP237_LLE_PLATE_AEA:Np-237(1)	HNO3 to pH <2
B1NHB9				3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1NHB9				2x1000-mL G/P	Selenium-79	HNO3 to pH <2
<i>J2X25</i>						
<i>R. Wall 7/12/07</i>						

Relinquished By Fluor Hanford D. R. BREWINGTON	Print <i>D.R. Brewington</i>	Sign <i>[Signature]</i>	Date/Time JUL 12 2007 1440	Received By <i>[Signature]</i>	Print LILANE	Sign <i>[Signature]</i>	Date/Time JUL 12 2007 1440	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	S = Soil SE = Sediment SO = Solid SI = Sludge W = Water O = Oil A = Air
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time			

103



STL

Sample Check-in List

Date/Time Received: 07/20/07 1440

Client: PGW SDG #: W05201 NA SAF #: I07-043 NA

Work Order Number: J76160105 Chain of Custody # I07-043-79

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 _____ hazard labels
 - custody seals appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9 HAD TO ADJUST PH
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: 07/20/07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 07/6/07 1520

Client: PGW SDG #: W05201 NA SAF #: I07-053 NA

Work Order Number: J76170127 Chain of Custody #: I07-053-52

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: [Signature] Date: 07/6/07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

TAL RICHLAND

8/21/2007 12:31:06 PM **Sample Preparation/Analysis** Balance Id:1120482733
 384868, Pacific Northwest National Laboratory, Pacific Northwest National Lab KO Np-237 PrpRC5086, SepRC5064(5003) Pipet #:
 AnalyDueDate: 08/27/2007 *W05201* XW Neptunium-237 with tracer by alpha spec 5I CLIENT: HANFORD Sep1 DT/Tm Tech: *8-22-07 5:58 PM*
 Batch: 7198354 WATER pCi/L PM, Quote: SA, 57671 Sep2 DT/Tm Tech:
 SEQ Batch, Test: None Prep Tech: ,BockJ



Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	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 J2X2J-1-AA J7G160105-1-SAMP <i>37</i>			199.00g,in	199.00g	npta6758 08/01/07,pd 06/01/01,r			<i>200</i>				
07/12/2007 11:14			AmtRec: 20ML,8XLP,3X4LP	#Containers: 12					Scr:	Alpha: 8.25E-05 uCi/Sa	Beta: -1.83E-03 uCi/Sa	
2 J2X2J-1-AK-X J7G160105-1-DUP <i>40</i>			198.50g,in	198.50g	npta6759 08/01/07,pd 06/01/01,r							
07/12/2007 11:14			AmtRec: 20ML,8XLP,3X4LP	#Containers: 12					Scr:	Alpha: 8.25E-05 uCi/Sa	Beta: -1.83E-03 uCi/Sa	
3 J219D-1-AA-B J7G170000-354-BLK <i>22</i>			198.90g,in	198.90g	npta6760 08/01/07,pd 06/01/01,r							
07/12/2007 11:14			AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
4 J219D-1-AC-C J7G170000-354-LCS <i>44</i>			199.40g,in	199.40g	npse0432 07/24/07,pd 06/01/01,r							
07/12/2007 11:14			AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments: *PH < 2.0 J 8-21-07*

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

J2X2J1AA-SAMP Constituent List:
 Np-237 RDL: 0.6 pCi/L LCL: UCL: RPD:
 J219D1AA-BLK:
 Np-237 RDL: 0.6 pCi/L LCL: UCL: RPD:
 J219D1AC-LCS:
 J2X2J1AA-SAMP Calc Info:

STL Richland Key: In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 4
 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktialled Added Prep_SamplePrep v4.8.26

107

TAL RICHLAND

8/22/2007 3:14:41 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
SI CLIENT: HANFORD

Pipet #: 246

AnalyDueDate: 08/24/2007 WDS201

Sep1 DT/Tm Tech:

Batch: 7198344 WATER pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ/APA

Work Order, Lot, Sample Date/Time	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 J2L8K-1-AA J7G110154-1-SAMP 07/10/2007 08:27	110.00g,in			1.5	52.5	100	10A	1249		8/29/07 K
<p>AmtRec: 20ML,LP #Containers: 2 Scr: Alpha: -1.44E-04 uCi/Sa Beta: 6.55E-05 uCi/Sa</p>										
2 J2L8K-1-AD-X J7G110154-1-DUP 07/10/2007 08:27	108.70g,in			52.1			10B			
<p>AmtRec: 20ML,LP #Containers: 2 Scr: Alpha: -1.44E-04 uCi/Sa Beta: 6.55E-05 uCi/Sa</p>										
3 J2L86-1-AA J7G110154-2-SAMP 07/10/2007 07:30	198.20g,in			0.5	50		10A	1357		8/29/07 K
<p>AmtRec: 20ML,LP #Containers: 2 Scr: Alpha: 4.40E-05 uCi/Sa Beta: 5.46E-05 uCi/Sa</p>										
4 J2L9E-1-AA J7G110154-3-SAMP 07/10/2007 09:05	192.20g,in			52.4			10B			
<p>AmtRec: 20ML,LP #Containers: 2 Scr: Alpha: 6.32E-05 uCi/Sa Beta: 8.71E-05 uCi/Sa</p>										
5 J2QKF-1-AA J7G120218-1-SAMP 07/11/2007 12:45	200.30g,in			33.5			10C			
<p>AmtRec: 20ML,500MLP,LP #Containers: 3 Scr: Alpha: 2.95E-04 uCi/Sa Beta: 8.10E-05 uCi/Sa</p>										
6 J218V-1-AA-B J7G170000-344-BLK 07/10/2007 08:27	199.00g,in			1.5	100		10C	1249		8/29/07 K
<p>AmtRec: #Containers: 1 Scr: Alpha: Beta:</p>										
7 J218V-1-AC-C J7G170000-344-LCS 07/10/2007 08:27	201.10g,in		ASD4262 07/23/07_pd 08/01/01_r	1.5			10D			
<p>AmtRec: #Containers: 1 Scr: Alpha: Beta:</p>										

801

TAL RICHLAND

8/22/2007 3:14:44 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech: _____

Batch: 7198344
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	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, Inft/Date	Comments:
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Comments: PH < 2.0, reduced aliquots are due to weight screens. Jg 8.22.07

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA, 57671

J2L8K1AA-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
J218V1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
J218V1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

J2L8K1AA-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J218V1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J218V1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

TAL RICHLAND

8/22/2007 3:08:28 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 #: 246

AnalyDate: 08/24/2007 W05201

Sep1 DT/Tm Tech:

Batch: 7198347 WATER pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ / APA

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Allquot 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 J2L8K-1-AC J7G110154-1-SAMP 07/10/2007 08:27	128.50g,in									
				1.5	105.4	100	31c	1251		8/29/07 K
AmtRec: 20ML,LP #Containers: 2							Scr:	Alpha: -1.44E-04 uCi/Sa	Beta: 3.55E-05 uCi/Sa	
2 J2L86-1-AC J7G110154-2-SAMP 07/10/2007 07:30	200.10g,in									
				0.3			31d			
AmtRec: 20ML,LP #Containers: 2							Scr:	Alpha: 4.40E-05 uCi/Sa	Beta: -3.46E-05 uCi/Sa	
3 J2L86-1-AD-X J7G110154-2-DUP 07/10/2007 07:30	198.40g,in									
				0.1			32a			
AmtRec: 20ML,LP #Containers: 2							Scr:	Alpha: 4.40E-05 uCi/Sa	Beta: -3.46E-05 uCi/Sa	
4 J2L9E-1-AC J7G110154-3-SAMP 07/10/2007 09:05	199.30g,in									
				89.8			32b			
AmtRec: 20ML,LP #Containers: 2							Scr:	Alpha: 6.32E-05 uCi/Sa	Beta: -8.71E-05 uCi/Sa	
5 J2QKF-1-AC J7G120218-1-SAMP 07/11/2007 12:45	198.30g,in									
				86.9			32c			
AmtRec: 20ML,500MLP,LP #Containers: 3							Scr:	Alpha: 2.95E-04 uCi/Sa	Beta: -8.19E-05 uCi/Sa	
6 J2180-1-AA-B J7G170000-347-BLK 07/10/2007 07:30	197.80g,in									
				1.3			32d			
AmtRec: #Containers: 1							Scr:	Alpha:	Beta:	
7 J2180-1-AC-C J7G170000-347-LCS 07/10/2007 07:30	198.40g,in		BESB3108 07/23/07.pd 10/11/08.r							
				1.4			28A	1456		8/29/07 M
AmtRec: #Containers: 1							Scr:	Alpha:	Beta:	

10

TAL RICHLAND

8/22/2007 3:08:30 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: 08/24/2007

Sep1 DT/Tm Tech:

Batch: 7198347
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Allquot 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:
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Comments: Sample #1J2L8K redid due to weight screen. PH 22.0 JB 8-22-07.

All clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA, 57671

J21801AC-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
J21801AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
J21801AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

J21801AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21801AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21801AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

11

TAL RICHLAND

8/14/2007 2:25:52 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

Sep1 DT/Tm Tech: 8/17/07 1:55:36 PM *ORM*
Sep2 DT/Tm Tech: 8-24-07 2:50 PM

AnalyDueDate: 08/24/2007 *WDS201*

Batch: 7198351 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	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, Inlt/Date	Comments:
1 J2QPF-1-AC J7G120242-1-SAMP 		1010.50g,ln	SRTB15128 08/08/07,pd 05/22/07,t	1.623 <u>2.0053</u> 0.8094			100	3" 3C 3C	1634 1113 1005	8/17/07 <i>ORM</i> 8/25/07 <i>n</i> 8/26/07 <i>n</i>	
<p>07/11/2007 11:54 AmtRec: 20ML,3XLP,2X4LP #Containers: 6 Scr: Alpha: 3.03E-03 uCIVSa Beta: -2.40E-04 uCIVSa</p>											
2 J2QPL-1-AC J7G120242-2-SAMP 		1006.10g,ln	SRTB15129 08/08/07,pd 05/22/07,t	1.633 <u>1.9888</u> 0.8214				3" 3D 3D	1727 1113 1005	8/17/07 <i>ORM</i> 8/25/07 <i>n</i> 8/26/07 <i>n</i>	
<p>07/11/2007 11:54 AmtRec: 20ML,3XLP,2X4LP #Containers: 6 Scr: Alpha: 2.42E-03 uCIVSa Beta: -2.04E-03 uCIVSa</p>											
3 J2QPL-1-AD-X J7G120242-2-DUP 		1008.10g,ln	SRTB15130 08/08/07,pd 05/22/07,t	1.636 <u>2.0380</u> 0.8027				3" 4A 4A	1801 1113 1005	8/17/07 <i>ORM</i> 8/25/07 <i>n</i> 8/26/07 <i>n</i>	
<p>07/11/2007 11:54 AmtRec: 20ML,3XLP,2X4LP #Containers: 6 Scr: Alpha: 2.42E-03 uCIVSa Beta: -2.04E-03 uCIVSa</p>											
4 J2X2J-1-AG J7G160105-1-SAMP 		994.70g,ln	SRTB15131 08/08/07,pd 05/22/07,t	1.574 <u>2.0092</u> 0.7834				3" 4b 4b	1836 1113 1005	8/17/07 <i>ORM</i> 8/25/07 <i>n</i> 8/26/07 <i>n</i>	
<p>07/12/2007 11:14 AmtRec: 20ML,8XLP,3X4LP #Containers: 12 Scr: Alpha: 8.25E-05 uCIVSa Beta: -1.83E-03 uCIVSa</p>											

112

TAL RICHLAND

8/14/2007 2:25:54 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech:

Batch: 7198351 pCi/L
 SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 J2186-1-AA-B J7G170000-351-BLK		1004.50g,in	SRTB15132 08/08/07, pd 06/22/07, r	1.643 1.9746 0.8321			100	3" 4C 4C	1907 1113 1005	8/17/07 OAO 8/25/07 R 8/26/07 R	
		Ex: 8/10/2006				25.4					
07/11/2007 11:54		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
6 J2186-1-AC-C J7G170000-351-LCS		998.90g,in	SRSG1368 07/17/07, pd 05/22/07, r	1.655 2.0119 0.8226				3" 4D 4D	1452 1113 1005	8/17/07 OAO 8/25/07 R 8/26/07 R	
		Ex: 8/10/2006				23.7					
07/11/2007 11:54		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments: PACZ.C 98-14-07

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

J2QPF1AC-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
J21861AA-BLK: Sr-85	RDL:	pCi/L	LCL: 20	UCL: 105	RPD: 20	Sr-90	RDL: 2	pCi/L	LCL:	UCL:	RPD:
J21861AC-LCS: Sr-85	RDL:	pCi/L	LCL: 20	UCL: 105	RPD: 20	Sr-90	RDL: 2	pCi/L	LCL: 70	UCL: 130	RPD: 20

J2QPF1AC-SAMP Calc Info:
 Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci. Not.: Y ODRs: B
 J21861AA-BLK:

113

TAL RICHLAND

8/14/2007 2:25:54 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech:

Batch: 7198351
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: BockJ



Work Order, Lot, Sample Date/Time	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:
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Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B							
21861AC-LCS:											
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B							

Approved By _____ Date: _____

PGW WATER

TAL RICHLAND

8/22/2007 12:17:20 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AW Gamma PrpRC5017

Pipet #:

AnalyDueDate: 08/27/2007 *W05201*

TA Gamma by HPGE

Sep1 DT/Tm Tech:

Batch: 7198350 WATER pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ/APA

Work Order, Lot, Sample Date/Time	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 J2X2J-1-AD J7G160105-1-SAMP 07/12/2007 11:14		1979.00g,in				100	G4	2125		8/23/07 OP
AmtRec: 20ML,8XLP,3X4LP #Containers: 12								Alpha: 8.25E-05 uCi/Sa	Beta: -1.83E-03 uCi/Sa	
2 J2X2J-1-AH-X J7G160105-1-DUP 07/12/2007 11:14		1990.10g,in				100	G5	2125		
AmtRec: 20ML,8XLP,3X4LP #Containers: 12								Alpha: 8.25E-05 uCi/Sa	Beta: -1.83E-03 uCi/Sa	
3 J2184-1-AA-B J7G170000-350-BLK 07/12/2007 11:14		1998.70g,in					G15	2340		
AmtRec: #Containers: 1								Alpha:	Beta:	
4 J2184-1-AC-C J7G170000-350-LCS 07/12/2007 11:14		1998.80g,in	QCAG1395 08/01/07,pd 08/01/02,r				G14	2342		
AmtRec: #Containers: 1								Alpha:	Beta:	

Comments: *JH < 2.0 JB 8-22-07*

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

J2X2J1AD-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
Ba-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Ba-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:
J21841AA-BLK:											
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

115

TAL RICHLAND

8/22/2007 12:17:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 08/27/2007

Sep1 DT/Tm Tech:

Batch: 7198350

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
Cs-137	RDL: 6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL: 6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL: 0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL: .00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL: 0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL: 0.00E+00	pCi/L	LCL:	UCL:	RPD:
J21841AC-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						
J2X2J1AD-SAMP Calc Info:											
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B											
J21841AA-BLK:											
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B											
J21841AC-LCS:											
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B											

Approved By _____ Date: _____

116

TAL RICHLAND

8/21/2007 1:55:59 PM

Sample Preparation/Analysis

Balance Id:11

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 08/24/2007 *W05201*

Sep1 DT/Tm Tech:

Batch: 7198348 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech: ManisD, BockJ

Work Order, Lot, Sample Date/Time	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 J2QPF-1-AA J7G120242-1-SAMP  07/11/2007 11:54	3958.10g,in		ITA8539 07/25/07							
				37.8	100		L5	07W		<i>104%</i>
		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr: Alpha: 3.03E-03 uCi/Sa	Beta: -2.40E-04 uCi/Sa	
2 J2QPF-1-AD-X J7G120242-1-DUP  07/11/2007 11:54	3933.60g,in		ITA6540 07/25/07							
				38.7			L2	1057		8/24/07 n
		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr: Alpha: 3.03E-03 uCi/Sa	Beta: -2.40E-04 uCi/Sa	
3 J2QPL-1-AA J7G120242-2-SAMP  07/11/2007 11:54	3920.60g,in		ITA6541 07/25/07							
				35.3			L4	1058		8/24/07 n
		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr: Alpha: 2.42E-03 uCi/Sa	Beta: -2.04E-03 uCi/Sa	
4 J2WR3-1-AA J7G130386-1-SAMP  07/12/2007 09:23	3935.70g,in		ITA6542 07/25/07							
				35.1			L5	1059		8/24/07 n
		AmtRec: 20ML,500ML,2X4LP	#Containers: 4					Scr: Alpha: -7.96E-05 uCi/Sa	Beta: 4.12E-04 uCi/Sa	
5 J2X2J-1-AE J7G160105-1-SAMP  07/12/2007 11:14	3920.90g,in		ITA6543 07/25/07							
				34.8			L2	1245		8/24/07 n
		AmtRec: 20ML,8XLP,3X4LP	#Containers: 12					Scr: Alpha: 8.25E-05 uCi/Sa	Beta: -1.83E-03 uCi/Sa	
6 J2182-1-AA-B J7G170000-348-BLK  07/11/2007 11:54	3959.60g,in		ITA6544 07/25/07							
				34.6			L4	1246		8/24/07 n
		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
7 J2182-1-AC-C J7G170000-348-LCS  07/11/2007 11:54	3900.70g,in		ISD0772 07/25/07							
				35.0			L5	1247		8/24/07 n
		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	

STL Richland Key: in - Initial Amt, f - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
Richland Wa. pd - Prep Dt, r - Reference Dt, ec - Enrichment Cell, ct - Cocktalled Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

117

TAL RICHLAND

8/21/2007 1:56:02 PM

Sample Preparation/Analysis

Balance Id:11

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech:

Batch: 7198348
 SEO Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: BockJ



Work Order, Lot, Sample Date/Time	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:
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Comments: PA neutral 8.21.07

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

J2QPF1AA-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
J21821AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
J21821AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

J2QPF1AA-SAMP Calc Info:

Uncert Level (#s):	Decay to SaDt:	Blk Subt.:	Sci.Not.:	ODRs:
J21821AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21821AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

18

TAL RICHLAND

8/21/2007 12:26:18 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 08/27/2007 *W05201*

Sep1 DT/Tm Tech:

Batch: 7198349 WATER pCi/L
SEO Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech: BockJ



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 J2WR3-1-AC J7G130386-1-SAMP 			125.40g.in	125.40g		60				
07/12/2007 09:23			AmtRec: 20ML,500ML,2X4LP	#Containers: 4				Scr: Alpha: -7.96E-05 uCi/Sa	Beta: 4.12E-04 uCi/Sa	
2 J2WR3-1-AD-X J7G130386-1-DUP 			125.20g.in	125.20g						
07/12/2007 09:23			AmtRec: 20ML,500ML,2X4LP	#Containers: 4				Scr: Alpha: -7.96E-05 uCi/Sa	Beta: 4.12E-04 uCi/Sa	
3 J21LF-1-AC J7G170127-1-SAMP 			125.90g.in	125.90g						
07/16/2007 13:16			AmtRec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: -1.55E-04 uCi/Sa	Beta: 4.04E-05 uCi/Sa	
4 J21LF-1-AD-S J7G170127-1-MS 			124.80g.in	124.80g	tcsg1873 08/15/07,pd 01/10/08,r					
07/16/2007 13:16			AmtRec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: -1.55E-04 uCi/Sa	Beta: 4.04E-05 uCi/Sa	
5 J2183-1-AA-B J7G170000-349-BLK 			125.30g.in	125.30g						
07/12/2007 09:23			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
6 J2183-1-AC-C J7G170000-349-LCS 			125.90g.in	125.90g	lcse2148 07/17/07,pd 01/10/08,r					
07/12/2007 09:23			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
7 J2183-1-AD-BN J7G170000-349-IBLK 										
07/12/2007 09:23			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	

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

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.26

STL 19

TAL RICHLAND

8/21/2007 12:26:20 PM

Sample Preparation/Analysis

Balance Id: _____

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

Pipet #: _____

AnalyDueDate: 08/27/2007

Sep1 DT/Tm Tech: _____

Batch: 7198349
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: _____



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Allq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: PH <20 98-21-07

All Clients for Batch:
 384858, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

J2WR31AC-SAMP Constituent List:					
Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
J21LF1AD-MS:					
J21831AA-BLK:					
Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
J21831AC-LCS:					
Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
J21831AD-IBLK:					
Tc-99	RDL:15	pCi/L	LCL:	UCL:	RPD:
J2WR31AC-SAMP Calc Info:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21LF1AD-MS:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21831AA-BLK:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21831AC-LCS:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J21831AD-IBLK:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

20

TAL RICHLAND

9/4/2007 11:18:46 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

CY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 08/27/2007

Sep1 DT/Tm Tech:

Batch: 7247319 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 J2X2J-3-AF J7G160105-1-SAMP 07/12/2007 11:14	200.60g,in	200.60g,in	SETA0218 08/22/07		50				
AmtRec: 20ML,8XLP,3X4LP		#Containers: 12		Scr:		Alpha: 8.25E-05 uCi/Sa		Beta: -1.83E-03 uCi/Sa	
2 J2X2J-3-AJ-X J7G160105-1-DUP 07/12/2007 11:14	203.40g,in	203.40g,in	SETA0219 08/22/07						
AmtRec: 20ML,8XLP,3X4LP		#Containers: 12		Scr:		Alpha: 8.25E-05 uCi/Sa		Beta: -1.83E-03 uCi/Sa	
3 J5V5Q-2-AA-B J7H290000-544-BLK 07/12/2007 11:14	201.60g,in	201.60g,in	SETA0220 08/22/07						
AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:	
4 J5V5Q-2-AC-BN J7H290000-544-IBLK 07/12/2007 11:14									
AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:	

Comments: pH < 2.0 RC 07/04/07

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

J2X2J3AF-SAMP Constituent List:
Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:
J5V5Q2AA-BLK:
Se-79 RDL:30 pCi/L LCL: UCL: RPD:
J5V5Q2AC-IBLK:
Se-79 RDL:30 pCi/L LCL: UCL: RPD:
J2X2J3AF-SAMP Calc Info:

TAL RICHLAND

9/4/2007 11:18:48 AM

Sample Preparation/Analysis

Balance Id:

CY Se-79 PrpRC5016, SepRC5043
 TM Selenium-79 by Liquid Scint
 SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 08/27/2007

Sep1 DT/Tm Tech:

Batch: 7247319
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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J5V5Q2AA-BLK:	Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J5V5Q2AC-IBLK:	Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
	Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				

Approved By _____ Date: _____

122

TAL RICHLAND

7/17/2007 10:16:35 AM

Sample Preparation/Analysis

Balance Id: 12485

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 08/24/2007 **W05201**

Sep1 DT/Tm Tech: 7:15 07 AM

Batch: 7198356 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Inlt/Date	Comments:
1 J2Q69-1-AA J7G120296-1-SAMP 07/11/2007 13:37		AmtRec: 20ML,250G	#Containers: 2				Scr: Alpha: Beta:	
2 J2Q69-1-AC-X J7G120296-1-DUP 07/11/2007 13:37		AmtRec: 20ML,250G	#Containers: 2				Scr: Alpha: Beta:	
3 J2Q7J-1-AA J7G120296-2-SAMP 07/11/2007 14:08		AmtRec: 20ML,250G	#Containers: 2				Scr: Alpha: Beta:	
4 J2Q7L-1-AA J7G120296-3-SAMP 07/11/2007 13:53		AmtRec: 20ML,250G	#Containers: 2				Scr: Alpha: Beta:	
5 J219E-1-AA-B J7G170000-356-BLK 07/11/2007 13:37		AmtRec:	#Containers: 1				Scr: Alpha: Beta:	
6 J219E-1-AC-C J7G170000-356-LCS 07/11/2007 13:37		AmtRec:	#Containers: 1				Scr: Alpha: Beta:	
7 J219E-1-AD-BX J7G170000-356-MBLK 07/11/2007 13:37		AmtRec:	#Containers: 1				Scr: Alpha: Beta:	

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

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.26

TALL RICHLAND

7/17/2007 10:16:36 AM

Sample Preparation/Analysis

Balance Id: 12445

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech: 7-18-07 sm

Batch: 7198356
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	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 J219E-1-AE-CM								
J7G170000-356-MLCS								
07/11/2007 13:37		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 J219E-1-AF-BN								
J7G170000-356-IBLK								
07/11/2007 13:37		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 J219E-1-AG-BN								
J7G170000-356-IBLK								
07/11/2007 13:37		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

J2Q691AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
J219E1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
J219E1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
J219E1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
J219E1AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
J219E1AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
J219E1AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL Richland Key. In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added

iSV - Insufficient Volume for Analysis

WO Cnt: 10
ICOC v4.8.26

TAL RICHLAND

7/17/2007 10:16:37 AM

Sample Preparation/Analysis

Balance Id: 12445

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech: 7-18-07 *aw*

Batch: 7198356
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	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:
J2Q691AA-SAMP Calc Info:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AA-BLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AC-LCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AD-MBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AE-MLCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AF-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
J219E1AG-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				

Approved By _____ Date: _____

TALL RICHLAND

7/17/2007 10:16:37 AM

Sample Preparation/Analysis

Balance Id: UMA

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 08/27/2007 W05200

Sep1 DT/Tm Tech: 8-24-07 am

Batch: 7198358 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	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 J2X2J-1-AC J7G160105-1-SAMP 07/12/2007 11:14								
		Amt/Rec: 20ML,8XLP,3X4LP	#Containers: 12				Scr: Alpha: Beta:	
2 J21LF-1-AA J7G170127-1-SAMP 07/16/2007 13:16								
		Amt/Rec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: Beta:	
3 J21LF-1-AE-X J7G170127-1-DUP 07/16/2007 13:16								
		Amt/Rec: 20ML,500ML,2XLP	#Containers: 4				Scr: Alpha: Beta:	
4 J219H-1-AA-B J7G170000-358-BLK 07/18/2007 13:16								
		Amt/Rec:	#Containers: 1				Scr: Alpha: Beta:	
5 J219H-1-AC-C J7G170000-358-LCS 07/18/2007 13:16								
		Amt/Rec:	#Containers: 1				Scr: Alpha: Beta:	
6 J219H-1-AD-BN J7G170000-358-IBLK 07/16/2007 13:16								
		Amt/Rec:	#Containers: 1				Scr: Alpha: Beta:	

TAL RICHLAND

7/17/2007 10:16:38 AM

Sample Preparation/Analysis

Balance Id: N/A

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

Pipet #:

AnalyDueDate: 08/27/2007

Sep1 DT/Tm Tech: 8-Jdo 7am

Batch: 7198358
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	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:
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Comments:

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

J2X2J1AC-SAMP Constituent List:						
C-14	RDL:2.00E+02	pCi/L	LCL:70	UCL:130	RPD:20	
J219H1AA-BLK:						
C-14	RDL:2.00E+02	pCi/L	LCL:	UCL:	RPD:	
J219H1AC-LCS:						
C-14	RDL:200	pCi/L	LCL:70	UCL:130	RPD:20	
J219H1AD-IBLK:						
C-14	RDL:2.00E+02	pCi/L	LCL:	UCL:	RPD:	
J2X2J1AC-SAMP Calc Info:						
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.: Y ODRs: B
J219H1AA-BLK:						
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.: Y ODRs: B
J219H1AC-LCS:						
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.: Y ODRs: B
J219H1AD-IBLK:						
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

127

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8/28/2007 9:36:33 AM **Sample Preparation/Analysis** Balance Id:1120482733
 384868, Pacific Northwest National Laboratory DH UNat_Laser PrpRC5015 Pipet #: _____
 Pacific Northwest National Lab SS Total Uranium by KPA
 AnalyDueDate: 08/24/2007 SI CLIENT: HANFORD Sep1 DT/Tm Tech: _____
 Batch: 7198341 WATER ug/L PM, Quote: SA , 57671 Sep2 DT/Tm Tech: _____
 SEQ Batch, Test: None Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	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 J2QKW-1-AA J7G120221-1-SAMP 07/11/2007 10:19	27.90g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 7.74E-05 uCi/Sa	Beta: -8.72E-05 uCi/Sa	
9 J2QKW-1-AC-X J7G120221-1-DUP 07/11/2007 10:19	25.30g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 7.74E-05 uCi/Sa	Beta: -8.72E-05 uCi/Sa	
J7G120221-1-SAMP 07/11/2007 10:19	27.9							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 7.74E-05 uCi/Sa	Beta: -8.72E-05 uCi/Sa	
J7G120221-1-DUP 07/11/2007 10:19	25.3							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 7.74E-05 uCi/Sa	Beta: -8.72E-05 uCi/Sa	
12 J2QK5-1-AA J7G120221-2-SAMP 07/11/2007 11:05	25.00g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 8.05E-06 uCi/Sa	Beta: 5.48E-06 uCi/Sa	
13 J2QK5-1-AC-S J7G120221-2-MS 07/11/2007 11:05	25.50g,in		uns/3885 08/15/07.pd 01/23/07.f					
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 8.05E-06 uCi/Sa	Beta: 5.48E-06 uCi/Sa	
14 J217R-1-AA-B J7G170000-341-BLK 07/11/2007 10:19	25.30g,in							
		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

8
0

8/28/2007 9:36:34 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech:

Batch: 7198341
 SEQ Batch. Test: None

ug/L

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	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:
15J217R-1-AC-C J7G170000-341-LCS 07/11/2007 10:19		25.80g,in	unsl3886 08/15/07.pd 01/23/07.r					
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16J217R-1-AD-C J7G170000-341-LCS 07/11/2007 10:19		25.20g,in	unsc1821 08/01/07.pd 04/28/06.r					
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

J219L1AA-SAMP Constituent List:	Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
J2QK51AC-MS:						
J217R1AA-BLK:	Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
J217R1AC-LCS:	Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
J217R1AD-LCS:	Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
J219L1AA-SAMP Calc Info:	Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J2QK51AC-MS:	Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J217R1AA-BLK:	Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J217R1AC-LCS:	Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J217R1AD-LCS:	Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3
 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 16
 ICOC v4.8.26

STL RICHLAND

STL RICHLAND

8/28/2007 9:36:35 AM

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 08/24/2007

Sep1 DT/Tm Tech: _____

Batch: 7198341
SEQ Batch, Test: None

ug/L

Sep2 DT/Tm Tech: _____

Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	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: _____

TAL RICHLAND

8/28/2007 9:36:32 AM **Sample Preparation/Analysis** Balance Id:1120482733
 384868, Pacific Northwest National Laboratory , DH UNat_Laser PrpRC5015 Pipet #:
 Pacific Northwest National Lab SS Total Uranium by KPA
 AnalyDueDate: 08/24/2007 SI CLIENT: HANFORD Sep1 DT/Tm Tech:
 Batch: 7198341 WATER ug/L PM, Quote: SA , 57671 Sep2 DT/Tm Tech:
 SEQ Batch, Test: None Prep Tech: ,BockJ



Work Order, Lot, Sample Date/Time	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 J2L9L-1-AA J7G110154-4-SAMP 07/10/2007 13:18	25.10g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 5.93E-05 uCi/Sa	Beta: -3.82E-05 uCi/Sa	
2 J2MAW-1-AA J7G110163-1-SAMP 07/10/2007 13:13	26.00g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 5.43E-06 uCi/Sa	Beta: 4.37E-05 uCi/Sa	
3 J2MA6-1-AA J7G110163-2-SAMP 07/10/2007 09:35	26.00g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: -2.40E-05 uCi/Sa	Beta: 8.73E-05 uCi/Sa	
4 J2MA9-1-AA J7G110163-3-SAMP 07/10/2007 10:22	26.00g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 7.85E-05 uCi/Sa	Beta: 3.68E-10 uCi/Sa	
5 J2MCC-1-AA J7G110163-4-SAMP 07/10/2007 11:50	25.60g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 3.92E-05 uCi/Sa	Beta: -1.84E-05 uCi/Sa	
6 J2MCF-1-AA J7G110163-5-SAMP 07/10/2007 12:32	26.80g,in							
		AmtRec: 20ML,500MLP	#Containers: 2			Scr: Alpha: 9.06E-05 uCi/Sa	Beta: 1.63E-05 uCi/Sa	
7 J2QKF-1-AD J7G120218-1-SAMP 07/11/2007 12:45	26.40g,in							
		AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr: Alpha: 2.95E-04 uCi/Sa	Beta: -8.19E-05 uCi/Sa	

31

8/28/2007 12:33:31 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/28/2006, 9/2/2007, Batch: '7198354', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198354				
AC	CalcC	BockJ	8/21/2007 12:27:55	
SC		wagarr	IsBatched	7/17/2007 10:17:44 AM
SC		BockJ	InPrep	8/21/2007 12:27:55 PM
SC		BockJ	Prep1C	8/21/2007 12:31:10 PM
SC		FABREM	Sep1C	8/22/2007 7:17:31 PM
SC		FABREM	Sep2C	8/23/2007 1:36:56 PM
SC		StringerR	InCnt1	8/23/2007 1:52:45 PM
SC		DAWKINSO	CalcC	8/23/2007 9:52:14 PM
AC		BockJ	8/21/2007 12:31:10	ICOC_RADCALC v4.8.26
AC		FABREM	8/22/2007 7:17:31 PM	rich-rc-5015 rEVISION 6
AC		FABREM	8/23/2007 1:36:56 PM	RICH-RC-5016 REVISION 7
AC		StringerR	8/23/2007 1:52:45 PM	RICH-RC-5064 REVISION 5
AC		DAWKINSO	8/23/2007 9:52:14 PM	RICH-RC-5003 REVISION 7
				RICH-RD-0008 REVISION 4
				RICH-RD-0008 REVISION 4

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

8/30/2007 3:58:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/30/2006, 9/4/2007, Batch: '7198344', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198344				
AC	CalcC	BockJ	8/22/2007 3:08:45 PM	
SC		wagarr	IsBatched 7/17/2007 10:17:44 AM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 8/22/2007 3:08:45 PM	RICH-RC-5016 Revision 7
SC		BockJ	Prep1C 8/22/2007 3:14:46 PM	RICH-RC-5014 REVISION 7
SC		AshworthA	InPrep2 8/28/2007 2:36:35 PM	RICH-RC-5014 REVISION 7
SC		AshworthA	Prep2C 8/29/2007 10:31:26 AM	RICH-RC-5014 REVISION 7
SC		StringerR	InCnt1 8/29/2007 10:48:04 AM	RICH-RD-0003 REVISION 5
SC		StringerR	CaicC 8/29/2007 2:16:46 PM	RICH-RD-0003 REVISION 5
AC		BockJ	8/22/2007 3:14:46 PM	
AC		AshworthA	8/28/2007 2:36:35 PM	
AC		AshworthA	8/29/2007 10:31:26	
AC		StringerR	8/29/2007 10:48:04	
AC		StringerR	8/29/2007 2:16:46 PM	

AC: Accepting Entry, SC: Status Change

STL Richland
Richland Wa.

8/30/2007 8:55:29 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/30/2006, 9/4/2007, Batch: 7198347, User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198347				
AC	CalcC	BockJ	8/22/2007 3:00:18 PM	
SC		wagarr	IsBatched	7/17/2007 10:17:44 AM
SC		BockJ	InPrep	8/22/2007 3:00:18 PM
SC		BockJ	Prep1C	8/22/2007 3:08:32 PM
SC		AshworthA	InPrep2	8/28/2007 2:36:42 PM
SC		AshworthA	Prep2C	8/29/2007 10:32:04 AM
SC		StringerR	InCnt1	8/29/2007 10:48:34 AM
SC		DAWKINSO	CalcC	8/29/2007 4:16:52 PM
AC		BockJ	8/22/2007 3:08:32 PM	ICOC_RADCALC v4.8.26
AC		AshworthA	8/28/2007 2:36:42 PM	RICH-RC-5016 Revision 7
AC		AshworthA	8/29/2007 10:32:04	RICH-RC-5014 REVISION 7
AC		StringerR	8/29/2007 10:48:34	RICH-RC-5014 REVISION 7
AC		DAWKINSO	8/29/2007 4:16:52 PM	RICH-RD-0003 REVISION 5
AC		DAWKINSO	8/29/2007 4:16:52 PM	RICH-RD-0003 REVISION 5

AC: Accepting Entry, SC: Status Change

STL Richland
Richland Wa.

8/27/2007 9:49:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/27/2006, 9/1/2007, Batch: '7198351', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198351				
AC	CalcC	BockJ	8/14/2007 2:18:04 PM	
SC		wagarr	IsBatched	7/17/2007 10:17:44 AM
SC		BockJ	InPrep	8/14/2007 2:18:04 PM
SC		BockJ	Prep1C	8/14/2007 2:26:35 PM
SC		ManisD	InSep1	8/14/2007 2:30:00 PM
SC		ManisD	Sep1C	8/17/2007 2:09:10 PM
SC		DAWKINSO	InCnt1	8/17/2007 2:14:30 PM
SC		DAWKINSO	Cnt1C	8/17/2007 7:59:50 PM
SC		FABREM	Sep2C	8/24/2007 6:24:54 PM
SC		DAWKINSO	InCnt2	8/24/2007 7:11:27 PM
SC		StringerR	CalcC	8/26/2007 10:40:10 AM
AC		BockJ	8/14/2007 2:26:35 PM	ICOC_RADCALC v4.8.26
AC		ManisD	8/14/2007 2:30:00 PM	RICH-RC-5016 Revision 7
AC		ManisD	8/17/2007 2:09:10 PM	RICH-RC-5016 REVISION 7
AC		DAWKINSO	8/17/2007 2:14:30 PM	RICH-RC-5006 REVISION 7
AC		DAWKINSO	8/17/2007 7:59:50 PM	RICH-RC-5006 REVISION 7
AC		FABREM	8/24/2007 6:24:54 PM	RICH-RD-0007 REVISION 6
AC		DAWKINSO	8/24/2007 7:11:27 PM	RICH-RD-0907 REVISION 6
AC		StringerR	8/26/2007 10:40:10	RICH-RC-5071 REVISION 5
				RICH-RD-0003 REVISION 5
				RICH-RD-0003 REVISION 5

AC: Accepting Entry, SC: Status Change

STL Richland
Richland Wa.

8/30/2007 1:22:00 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/30/2006, 9/4/2007. Batch: '7198350', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198350				
AC	CalcC	BockJ	8/22/2007 12:11:04	
SC		wagarr	IsBatched	7/17/2007 10:17:44 AM
SC		BockJ	InPrep	8/22/2007 12:11:04 PM
SC		BockJ	Prep1C	8/22/2007 12:17:25 PM
SC		AshworthA	InPrep2	8/23/2007 8:15:36 AM
SC		AshworthA	Prep2C	8/23/2007 6:15:33 PM
SC		StringerR	CalcC	8/24/2007 8:53:33 AM
AC		BockJ	8/22/2007 12:17:25	ICOC_RADCALC v4.8.26
AC		AshworthA	8/23/2007 8:15:36	RICH-RC-5017 Revision 6
AC		AshworthA	8/23/2007 6:15:33 PM	RICH-RC-5017 REVISION 6
AC		StringerR	8/24/2007 8:53:33	RICH-RC-5017 REVISION 6
				RICH-RD-0007 REVISION 6

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

8/27/2007 2:04:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/27/2006, 9/1/2007, Batch: '7198348', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
7198348					
AC		CalcC	BockJ	8/21/2007 1:09:17 PM	
SC			wagarr	IsBatched 7/17/2007 10:17:44 AM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep 8/21/2007 1:09:17 PM	rich-ro-5015 rREVISION 6
SC			BockJ	Prep1C 8/21/2007 1:56:02 PM	RICH-RC-5017 REVISION 6
SC			BostedD	InPrep2 8/22/2007 8:04:43 AM	RICHRC5025 REVISION 4
SC			BostedD	Prep2C 8/23/2007 1:04:31 PM	RICHRC5025 REVISION 4
SC			StringerR	InCnt1 8/23/2007 1:12:35 PM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	CalcC 8/24/2007 1:40:56 PM	RICH-RD-0007 REVISION 6
SC			StringerR	CalcC 8/24/2007 1:45:51 PM	RICH-RD-0007 REVISION 6
AC			BockJ	8/21/2007 1:56:02 PM	
AC			BostedD	8/22/2007 8:04:43	
AC			BostedD	8/23/2007 1:04:31 PM	
AC			StringerR	8/23/2007 1:12:35 PM	
AC			DAWKINSO	8/24/2007 1:40:56 PM	
AC			StringerR	8/24/2007 1:45:51 PM	

AC: Accepting Entry, SC: Status Change

STL Richland

Richland Wa.

8/29/2007 9:55:08 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/29/2006, 9/3/2007, Batch: '7198349', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198349				
AC	CalcC	BockJ	8/21/2007 12:21:30	
SC		wagar	IsBatched	7/17/2007 10:17:44 AM
SC		BockJ	InPrep	8/21/2007 12:21:30 PM
SC		BockJ	Prep1C	8/21/2007 12:26:23 PM
SC		FABREM	Sep1C	8/21/2007 6:52:39 PM
SC		DAWKINSO	InCnt1	8/21/2007 8:07:09 PM
SC		StringerR	CalcC	8/22/2007 11:55:22 AM
AC		BockJ	8/21/2007 12:26:23	ICOC_RADCALC v4.8.26
AC		FABREM	8/21/2007 6:52:39 PM	rich-rc-5015 rEVISION 6
AC		DAWKINSO	8/21/2007 8:07:09 PM	RICH-RC-5016 REVISION 7
AC		StringerR	8/22/2007 11:55:22	RICH-RC-5065 REVISION 6

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

9/17/2007 10:37:43 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/17/2006, 9/22/2007, Batch: '7247319', User: *ALL, Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7247319				
AC	CalcC	BockJ	9/4/2007 11:12:49	
SC		antonsonl	IsBatched 9/4/2007 10:48:13 AM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 9/4/2007 11:12:49 AM	RICH-RC-5014 Revision 7
SC		BockJ	Prep1C 9/4/2007 11:18:54 AM	RICH-RC-5016 REVISION 7
SC		FABREM	Sep1C 9/12/2007 8:08:45 PM	RICH-RC-5043 REVISION 3
SC		DAWKINSO	InCnt1 9/12/2007 8:26:30 PM	RICH-RD-0001 REVISION 4
SC		BlackCL	CalcC 9/14/2007 9:24:53 AM	RICH-RD-0001 REVISION 4
AC		BockJ	9/4/2007 11:18:54	
AC		FABREM	9/12/2007 8:08:45 PM	
AC		DAWKINSO	9/12/2007 8:26:30 PM	
AC		BlackCL	9/14/2007 9:24:53	

AC: Accepting Entry, SC: Status Change

STL Richland
Richland Wa.

7/20/2007 10:21:53 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/20/2006, 7/25/2007, Batch: '7198356', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198356				
AC	CalcC	McDowellID	7/18/2007 9:59:10	
SC		wagar	IsBatched	7/17/2007 10:17:44 AM
SC		McDowellID	InSep1	7/18/2007 9:59:10 AM
SC		McDowellID	Sep1C	7/19/2007 11:21:25 AM
SC		BlackCL	InCnt1	7/19/2007 11:42:54 AM
SC		BlackCL	CalcC	7/20/2007 7:58:18 AM
AC		McDowellID		7/19/2007 11:21:25
AC		BlackCL		7/19/2007 11:42:54
AC		BlackCL		7/20/2007 7:58:18

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

8/29/2007 3:31:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/29/2006, 9/3/2007, Batch: '7198358', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198358				
AC	CalcC	McDowellID	8/24/2007 3:51:35 PM	
SC		wagarr	IsBatched 7/17/2007 10:17:44 AM	ICOC_RADCALC v4.8.26
SC		McDowellID	InSep1 8/24/2007 3:51:35 PM	RICH-RC-5022 REVISION 3
SC		McDowellID	Sep1C 8/27/2007 11:23:29 AM	RICH-RC-5022 REVISION 3
SC		BlackCL	InCnt1 8/27/2007 12:01:38 PM	RICH-RD-0001 REVISION 4
SC		BlackCL	CalcC 8/28/2007 2:15:08 PM	RICH-RD-0001 REVISION 4
AC		McDowellID	8/27/2007 11:23:29	
AC		BlackCL	8/27/2007 12:01:38	
AC		BlackCL	8/28/2007 2:15:08 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

8/28/2007 4:21:20 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/28/2006, 9/2/2007, Batch: '7198341', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7198341				
AC		Cnt1C	BockJ	8/21/2007 11:34:51
SC			wagarr	IsBatched 7/17/2007 10:17:44 AM
SC			BockJ	InPrep 8/21/2007 11:34:51 AM
SC			BockJ	Prep1C 8/21/2007 11:44:16 AM
SC			AshworthA	InPrep2 8/23/2007 9:02:47 AM
SC			AshworthA	Prep2C 8/24/2007 2:32:11 PM
SC			NelsonT	Cnt1C 8/27/2007 1:13:36 PM
AC			BockJ	8/21/2007 11:44:16
AC			AshworthA	8/23/2007 9:02:47
AC			AshworthA	8/24/2007 2:32:11 PM
AC			NelsonT	8/27/2007 1:13:36 PM

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.