

W05221

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EDMC

Analytical Data Package Prepared For

Fluor Hanford

Radiochemical Analysis By

TAL Richland TARL*2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.**Data Package Contains _____ Pages***Report Nbr: 37040**

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05221	W07-008	B1P9J8	J7H170249-1	J44QC1AA	9J44QC10	7240309
		B1P9J8	J7H170249-1	J44QC1AC	9J44QC10	7240314
		B1P9K3	J7H170249-2	J44QH1AA	9J44QH10	7240309
		B1P9K3	J7H170249-2	J44QH1AC	9J44QH10	7240314
		B1P8L1	J7H170249-3	J44QT1AC	9J44QT10	7240303
		B1P8L1	J7H170249-3	J44QT1AD	9J44QT10	7240314
		B1P8L1	J7H170249-3	J44QT2AA	9J44QT20	7240316
		B1P8L6	J7H170249-4	J44Q81AA	9J44Q810	7240303
		B1P8L6	J7H170249-4	J44Q81AC	9J44Q810	7240314
		B1P8N5	J7H170251-1	J44RK1AC	9J44RK10	7240303
		B1P8N5	J7H170251-1	J44RK1AD	9J44RK10	7240314
		B1P8N5	J7H170251-1	J44RK2AA	9J44RK20	7240316
		B1P8P0	J7H170251-2	J44RM1AA	9J44RM10	7240309
		B1P8P0	J7H170251-2	J44RM1AC	9J44RM10	7240314
		B1P8R0	J7H170251-3	J44RP1AA	9J44RP10	7240309

Comments:

Report Nbr: 37040

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05221	W07-008	B1P8R0	J7H170251-3	J44RP1AC	9J44RP10	7240314
		B1P8T4	J7H170251-4	J44RQ1AA	9J44RQ10	7240309
		B1P8T4	J7H170251-4	J44RQ1AC	9J44RQ10	7240314
		B1P9X3	J7H170253-1	J44TJ1AA	9J44TJ10	7240318
		B1P9X3	J7H170253-1	J44TJ1AC	9J44TJ10	7240313
		B1P9X3	J7H170253-1	J44TJ1AD	9J44TJ10	7240317
		B1P9X3	J7H170253-1	J44TJ1AE	9J44TJ10	7240303
		B1P9R9	J7H170253-2	J44T11AA	9J44T110	7240303
		B1P9R4	J7H170253-3	J44T61AA	9J44T610	7240303
		B1P9T4	J7H170253-4	J44VD1AA	9J44VD10	7240303
		B1P9W8	J7H170259-1	J44V61AA	9J44V610	7240318
		B1P9W8	J7H170259-1	J44V61AC	9J44V610	7240313
		B1P9W8	J7H170259-1	J44V61AD	9J44V610	7240317
		B1P9W8	J7H170259-1	J44V61AE	9J44V610	7240303
	I07-062	B1P651	J7H170328-1	J45GF1AA	9J45GF10	7240313
		B1P651	J7H170328-1	J45GF1AC	9J45GF10	7240303
		B1P651	J7H170328-1	J45GF1AD	9J45GF10	7240314
		B1P650	J7H170328-2	J45JL1AA	9J45JL10	7240313
		B1P650	J7H170328-2	J45JL1AC	9J45JL10	7240303
		B1P650	J7H170328-2	J45JL1AD	9J45JL10	7240314
		B1P645	J7H170328-3	J45JQ1AA	9J45JQ10	7240313
		B1P645	J7H170328-3	J45JQ1AC	9J45JQ10	7240303
		B1P663	J7H170328-4	J45J31AA	9J45J310	7240313
		B1P663	J7H170328-4	J45J31AC	9J45J310	7240315
		B1P663	J7H170328-4	J45J31AD	9J45J310	7240303
		B1P637	J7H170328-5	J45KA1AA	9J45KA10	7240313

Comments:

Report Nbr: 37040

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05221	I07-062	B1P637	J7H170328-5	J45KA1AC	9J45KA10	7240314
		B1P618	J7H210287-1	J5A1G1AA	9J5A1G10	7240313
	W07-008	B1P8Y3	J7H270155-1	J5NPA1AA	9J5NPA10	7240303

Comments:

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

October 17, 2007

Attention: Steve Trent

SAF Number : I07-062, W07-008
Date SDG Closed : August 24, 2007
Number of Samples : Twenty (20)
Sample Type : Water
SDG Number : W05221
Data Deliverable : 45-Day / Summary

CASE NARRATIVE

I. Introduction

Between August 15, 2007 and August 24, 2007 twenty water samples were received at TestAmerica Laboratories Richland (TALR) 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>
B1P9J8	J44QC	8/15/07	WATER
B1P9K3	J44QH	8/15/07	WATER
B1P8L1	J44QT	8/15/07	WATER
B1P8L6	J44Q8	8/15/07	WATER
B1P8N5	J44RK	8/15/07	WATER
B1P8P0	J44RM	8/15/07	WATER
B1P8R0	J44RP	8/15/07	WATER
B1P8T4	J44RQ	8/15/07	WATER
B1P9X3	J44TJ	8/16/07	WATER
B1P9R9	J44T1	8/16/07	WATER
B1P9R4	J44T6	8/16/07	WATER
B1P9T4	J44VD	8/16/07	WATER
B1P9W8	J44V6	8/16/07	WATER

Fluor Hanford
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B1P651	J45GF	8/16/07	WATER
B1P650	J45JL	8/16/07	WATER
B1P645	J45JQ	8/16/07	WATER
B1P663	J45J3	8/16/07	WATER
B1P637	J45KA	8/16/07	WATER
B1P618	J5A1G	8/20/07	WATER
B1P8Y3	J5NPA	8/24/07	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting

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

Nickle-63 by method 5016/5069

Technetium-99 by TEVA method RICH-RC-5065

Technetium-99 by method RICH-RC-5078

Tritium by method RICH-RC-5007

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
October 17, 2007

V. Comments

Gas Proportional Counting

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1P663) results are within contractual requirements.

Gamma Spectroscopy

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

In the original analysis samples B1P8L1, B1P8N5 and the LCS showed lines that weren't identified. The samples were recounted to confirm the results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1P8L1) results are within contractual requirements.

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

the LCS, batch blank, samples and sample duplicate (B1P618) results are within contractual requirements.

Liquid Scintillation Counting

Nickle-63 by method RICH-RC-5016/5069

The LCS, batch blank, samples and sample duplicate (B1P9W8) results are within contractual requirements.

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

The LCS, batch blank, samples, sample duplicate (B1P8Y3), and sample matrix spike (B1P663) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1P9X3) results are within contractual requirements.

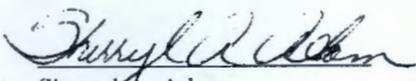
Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1P651), and sample matrix spike (B1P650) 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:



Sherry A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 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 (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <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 CRDL (RL)	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations. Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = 1.645 * \sqrt{2 * (BkgrndCnt / BkgrndCntMin) / SCntMin} * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{((BkgrndCnt / BkgrndCntMin) / SCntMin) + 2.71 / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D) / \sqrt{(TPUs^2 + TPUd^2)}$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

10/17/2007 1:47:20 PM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37040 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.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:				
9J44Q810	B1P8L6		MW6-SBB-A1	W07-008	W05221					08/15/2007 11:29				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240303	TC-99	14133-76-7	1.44E+03	pCi/L	2.1E+01	9.0E+01		9.71E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	09/18/2007 15:10	I
7240314	Uranium	7440-61-1	4.02E+00	ug/L	4.1E-01	4.1E-01		7.82E-02		UTOT_KPA	2.68E-02	ML	09/26/2007 15:05	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:				
9J44QC10	B1P9J8		MW6-SBB-A1	W07-008	W05221					08/15/2007 09:42				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240309	TC-99	14133-76-7	3.08E+01	pCi/L	5.1E+00	7.6E+00		1.01E+01	100.0	TC99_SEP_LSC	1.274E-01	L	09/25/2007 03:13	I
7240314	Uranium	7440-61-1	4.19E+00	ug/L	4.3E-01	4.3E-01		7.85E-02		UTOT_KPA	2.67E-02	ML	09/26/2007 14:56	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44QH10	B1P9K3		MW6-SBB-A1	W07-008	W05221					08/15/2007 10:32				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240309	TC-99	14133-76-7	4.26E+02	pCi/L	1.2E+01	3.1E+01		1.03E+01	100.0	TC99_SEP_LSC	1.268E-01	L	09/25/2007 03:13	I
7240314	Uranium	7440-61-1	5.75E+00	ug/L	5.9E-01	5.9E-01		7.91E-02		UTOT_KPA	2.65E-02	ML	09/26/2007 14:57	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:				
9J44QT10	B1P8L1		MW6-SBB-A1	W07-008	W05221					08/15/2007 12:12				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240303	TC-99	14133-76-7	2.72E+04	pCi/L	8.8E+01	1.6E+03		9.62E+00	100.0	TC99_ETVDSK_LS	1.268E-01	L	09/18/2007 15:10	I
7240314	Uranium	7440-61-1	3.72E+02	ug/L	4.4E+01	4.4E+01		7.88E-02		UTOT_KPA	2.66E-02	ML	09/26/2007 15:03	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44QT20	B1P8L1		MW6-SBB-A1	W07-008	W05221					08/15/2007 12:12				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240316	BE-7	13966-02-4	-3.20E+00	pCi/L	2.6E+01	2.6E+01	U	4.45E+01		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I
7240316	CO-60	10198-40-0	7.48E+01	pCi/L	1.2E+01	1.2E+01		3.14E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I
7240316	CS-134	13967-70-9	1.67E+00	pCi/L	2.6E+00	2.6E+00	U	4.83E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I
7240316	CS-137	10045-97-3	-9.64E-02	pCi/L	2.1E+00	2.1E+00	U	3.67E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I
7240316	EU-152	14683-23-9	1.09E+00	pCi/L	5.1E+00	5.1E+00	U	9.10E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I
7240316	EU-154	15585-10-1	4.82E+00	pCi/L	5.9E+00	5.9E+00	U	1.19E+01		GAMMALL_GS	1.9083E+00	L	09/28/2007 05:10	I

TAL Richland

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

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.

10/17/2007 1:47:20 PM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37040 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

7240316	EU-155	14391-16-3	4.13E+00	pCi/L	4.0E+00	4.0E+00	U	7.23E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007	05:10	I
7240316	K-40	13966-00-2	3.63E+01	pCi/L	4.8E+01	4.8E+01	U	3.73E+01		GAMMALL_GS	1.9083E+00	L	09/28/2007	05:10	I
7240316	RU-106	13967-48-1	6.49E-01	pCi/L	2.0E+01	2.0E+01	U	3.58E+01		GAMMALL_GS	1.9083E+00	L	09/28/2007	05:10	I
7240316	SB-125	14234-35-6	-1.92E+00	pCi/L	5.2E+00	5.2E+00	U	8.83E+00		GAMMALL_GS	1.9083E+00	L	09/28/2007	05:10	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9J44RK10	B1P8N5		MW6-SBB-A1	W07-008	W05221					08/15/2007 09:17				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240303	TC-99	14133-76-7	3.87E+03	pCi/L	3.3E+01	2.3E+02		9.57E+00	100.0	TC99_ETVDSK_LS	1.273E-01	L	09/18/2007 15:10	I
7240314	Uranium	7440-61-1	6.45E+01	ug/L	7.6E+00	7.6E+00		8.00E-02		UTOT_KPA	2.62E-02	ML	09/26/2007 15:07	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:				
9J44RK20	B1P8N5		MW6-SBB-A1	W07-008	W05221					08/15/2007 09:17				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240316	BE-7	13966-02-4	-1.44E+00	pCi/L	2.0E+01	2.0E+01	U	3.59E+01		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	CO-60	10198-40-0	1.29E+00	pCi/L	2.0E+00	2.0E+00	U	3.92E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	CS-134	13967-70-9	-9.25E-02	pCi/L	2.0E+00	2.0E+00	U	3.51E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	CS-137	10045-97-3	2.05E+00	pCi/L	1.8E+00	1.8E+00	U	3.44E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	EU-152	14683-23-9	-5.54E-01	pCi/L	4.0E+00	4.0E+00	U	7.04E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	EU-154	15585-10-1	-2.89E+00	pCi/L	5.6E+00	5.6E+00	U	9.63E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	EU-155	14391-16-3	-8.82E-01	pCi/L	2.6E+00	2.6E+00	U	4.46E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	K-40	13966-00-2	4.15E+00	pCi/L	4.1E+01	4.1E+01	U	3.44E+01		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	RU-106	13967-48-1	4.92E+00	pCi/L	1.5E+01	1.5E+01	U	2.72E+01		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I
7240316	SB-125	14234-35-6	-7.35E-01	pCi/L	4.2E+00	4.2E+00	U	7.23E+00		GAMMALL_GS	2.0025E+00	L	09/28/2007 05:11	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9J44RM10	B1P8P0		MW6-SBB-A1	W07-008	W05221					08/15/2007 10:11				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240309	TC-99	14133-76-7	1.01E+03	pCi/L	1.8E+01	6.5E+01		1.04E+01	100.0	TC99_SEP_LSC	1.254E-01	L	09/25/2007 03:13	I
7240314	Uranium	7440-61-1	6.35E+00	ug/L	6.5E-01	6.5E-01		7.62E-02		UTOT_KPA	2.75E-02	ML	09/26/2007 15:09	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:
9J44RP10	B1P8R0		MW6-SBB-A1	W07-008	W05221					08/15/2007 11:59

TAL Richland

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

10/17/2007 1:47:20 PM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37040 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240309	TC-99	14133-76-7	3.33E+01	pCi/L	5.3E+00	7.9E+00		1.02E+01	100.0	TC99_SEP_LSC	1.253E-01	L	09/25/2007 03:13	I
7240314	Uranium	7440-61-1	3.04E+00	ug/L	3.1E-01	3.1E-01		7.76E-02		UTOT_KPA	2.70E-02	ML	09/26/2007 15:12	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:				
9J44RQ10	B1P8T4		MW6-SBB-A1	W07-008	W05221					08/15/2007 11:18				
7240309	TC-99	14133-76-7	3.64E+02	pCi/L	1.1E+01	2.7E+01		1.03E+01	100.0	TC99_SEP_LSC	1.254E-01	L	09/25/2007 03:13	I
7240314	Uranium	7440-61-1	6.66E+00	ug/L	7.8E-01	7.8E-01		7.97E-02		UTOT_KPA	2.63E-02	ML	09/26/2007 15:15	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44T110	B1P9R9		MW6-SBB-A1	W07-008	W05221					08/16/2007 09:17				
7240303	TC-99	14133-76-7	8.28E+03	pCi/L	4.9E+01	4.9E+02		9.62E+00	100.0	TC99_ETVDSK_LS	1.273E-01	L	09/18/2007 15:10	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44T610	B1P9R4		MW6-SBB-A1	W07-008	W05221					08/16/2007 10:17				
7240303	TC-99	14133-76-7	1.92E+03	pCi/L	2.4E+01	1.2E+02		9.74E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	09/18/2007 15:10	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44TJ10	B1P9X3		MW6-SBB-A1	W07-008	W05221					08/16/2007 13:11				
7240318	H-3	10028-17-8	1.63E+06	pCi/L	4.1E+03	6.1E+04		3.12E+02	100.0	906.0_H3_LSC	5.00E-03	L	09/22/2007 19:05	I
7240313	I-129L	15046-84-1	4.54E+01	pCi/L	4.8E+00	4.8E+00		4.79E-01	97.8	I129LL_SEP_LEPS	3.9371E+00	L	09/26/2007 11:42	I
7240317	NI-63	13981-37-8	4.20E+02	pCi/L	5.9E+00	3.0E+01		3.79E+00	91.7	NI63_LSC	4.0029E-01	L	09/27/2007 20:58	I
7240303	TC-99	14133-76-7	6.36E+03	pCi/L	4.3E+01	3.8E+02		9.69E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	09/18/2007 15:10	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9J44V610	B1P9W8		MW6-SBB-A1	W07-008	W05221					08/16/2007 13:17				
7240318	H-3	10028-17-8	2.44E+05	pCi/L	1.6E+03	9.2E+03		3.13E+02	100.0	906.0_H3_LSC	5.00E-03	L	09/22/2007 21:50	I
7240313	I-129L	15046-84-1	7.17E+00	pCi/L	1.0E+00	1.0E+00		3.67E-01	89.7	I129LL_SEP_LEPS	3.9314E+00	L	09/26/2007 11:42	I
7240317	NI-63	13981-37-8	6.34E+01	pCi/L	2.7E+00	6.7E+00		3.77E+00	92.3	NI63_LSC	4.0019E-01	L	09/27/2007 22:41	I

TAL Richland

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

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.

3

10/17/2007 1:47:20 PM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37040 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.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:				
7240303	TC-99	14133-76-7	2.93E+03	pCi/L	2.9E+01	1.8E+02	9.69E+00	100.0	TC99_ETVDSK_LS	1.261E-01	L	09/18/2007 15:10	I	
9J44VD10	B1P9T4		MW6-SBB-A1	W07-008	W05221					08/16/2007 11:21				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240303	TC-99	14133-76-7	1.58E+03	pCi/L	2.2E+01	9.8E+01		9.72E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	09/18/2007 15:10	I
9J45GF10	B1P651		MW6-SBB-A1	I07-062	W05221								08/16/2007 11:19	
7240313	I-129L	15046-84-1	3.27E-01	pCi/L	1.8E-01	1.8E-01	U	3.77E-01	89.7	I129LL_SEP_LEPS	3.8796E+00	L	09/26/2007 11:43	I
7240303	TC-99	14133-76-7	4.82E+03	pCi/L	3.7E+01	2.9E+02		9.75E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	09/18/2007 15:11	I
7240314	Uranium	7440-61-1	2.48E+00	ug/L	2.5E-01	2.5E-01		8.06E-02		UTOT_KPA	2.60E-02	ML	09/26/2007 15:17	I
9J45J310	B1P663		MW6-SBB-A1	I07-062	W05221								08/16/2007 09:12	
7240313	I-129L	15046-84-1	4.48E-02	pCi/L	1.2E-01	1.2E-01	U	2.41E-01	98.9	I129LL_SEP_LEPS	3.9049E+00	L	09/26/2007 13:35	I
7240315	SR-90	10098-97-2	3.29E-01	pCi/L	2.7E-01	2.7E-01	U	5.34E-01	77.8	SRISO_SEP_PRE	1.0024E+00	L	09/30/2007 07:26	I
7240303	TC-99	14133-76-7	1.31E+01	pCi/L	4.4E+00	6.1E+00		9.64E+00	100.0	TC99_ETVDSK_LS	1.268E-01	L	09/18/2007 15:11	I
9J45JL10	B1P650		MW6-SBB-A1	I07-062	W05221								08/16/2007 11:19	
7240313	I-129L	15046-84-1	2.06E-01	pCi/L	1.9E-01	1.9E-01	U	3.67E-01	92.2	I129LL_SEP_LEPS	3.9198E+00	L	09/26/2007 13:30	I
7240303	TC-99	14133-76-7	4.42E+03	pCi/L	3.6E+01	2.7E+02		9.74E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	09/18/2007 15:11	I
7240314	Uranium	7440-61-1	2.46E+00	ug/L	2.5E-01	2.5E-01		8.06E-02		UTOT_KPA	2.60E-02	ML	09/26/2007 15:20	I
9J45JQ10	B1P645		MW6-SBB-A1	I07-062	W05221								08/16/2007 09:54	
7240313	I-129L	15046-84-1	3.30E+00	pCi/L	5.8E-01	5.8E-01		3.14E-01	97.3	I129LL_SEP_LEPS	3.8901E+00	L	09/26/2007 13:32	I
7240303	TC-99	14133-76-7	1.91E+04	pCi/L	7.4E+01	1.1E+03		9.71E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	09/18/2007 15:11	I

10/17/2007 1:47:20 PM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37040 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.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:				
9J45KA10	B1P637		MW6-SBB-A1	I07-062	W05221					08/16/2007 12:36				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240313	I-129L	15046-84-1	2.36E-01	pCi/L	2.2E-01	2.2E-01	U	4.40E-01	74.9	I129LL_SEP_LEPS	3.9449E+00	L	09/26/2007 15:20	I
7240314	Uranium	7440-61-1	2.61E+00	ug/L	2.7E-01	2.7E-01		8.06E-02		UTOT_KPA	2.60E-02	ML	09/26/2007 15:24	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:				
9J5A1G10	B1P618		MW6-SBB-A1	I07-062	W05221					08/20/2007 10:28				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240313	I-129L	15046-84-1	1.71E-01	pCi/L	1.7E-01	1.7E-01	U	3.32E-01	95.9	I129LL_SEP_LEPS	3.8821E+00	L	09/26/2007 15:21	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:				
9J5NPA10	B1P8Y3		MW6-SBB-A1	W07-008	W05221					08/24/2007 09:56				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7240303	TC-99	14133-76-7	2.67E+01	pCi/L	4.9E+00	6.9E+00		9.68E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	09/18/2007 15:11	I

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKJ1AB

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/24/2007 09:56

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/24/2007

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	Analy/ CAS#	Result/ Orig Rst	Unit	Tot/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
7240303 BLK	TC-99 14133-76-7	-7.62E-01	pCi/L	5.4E+00 4.0E+00	U	9.76E+00	100.0		TC99_ETVDSK	1.255E-01 L	09/18/2007 15:11				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.

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKK1AB Sdg/Rept Nbr: W05221 37040 Collection Date: 08/15/2007 10:11
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240309 BLK	TC-99 14133-76-7	5.60E-01	pCi/L	6.0E+00 4.2E+00	U	1.01E+01	100.0		TC99_SEP_LS	1.262E-01 L	09/25/2007 03:13				D

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

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKN1AB Sdg/Rept Nbr: W05221 37040 Collection Date: 08/20/2007 10:28
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/20/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BK	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240313	I-129L	-9.17E-02	pCi/L	1.5E-01	U	2.49E-01	90.3		I129LL_SEP_L	4.0014E+00	09/26/2007				D
BLK	15046-84-1			1.5E-01						L	17:25				

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

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKQ1AB

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 11:19

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240314 BLK	Uranium 7440-61-1	-6.16E-03	ug/L	1.1E-03 1.1E-03	U	7.82E-02			UTOT_KPA	2.68E-02 ML	09/26/2007 14:46				D

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKT2AB

Sdg/Rept Nbr: W05221

37040

Collection Date: 08/15/2007 12:12

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BS	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240316 BLK	BE-7 13966-02-4	-1.21E+01	pCi/L	1.8E+01 1.8E+01	U	3.04E+01			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	CO-60 10198-40-0	3.28E-01	pCi/L	1.4E+00 1.4E+00	U	2.74E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	CS-134 13967-70-9	1.05E-01	pCi/L	1.4E+00 1.4E+00	U	2.61E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	CS-137 10045-97-3	-1.19E+00	pCi/L	1.4E+00 1.4E+00	U	2.19E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	EU-152 14683-23-9	2.13E+00	pCi/L	3.7E+00 3.7E+00	U	6.79E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	EU-154 15585-10-1	1.32E+00	pCi/L	4.1E+00 4.1E+00	U	8.27E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	EU-155 14391-16-3	-6.58E-01	pCi/L	2.6E+00 2.6E+00	U	4.44E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	K-40 13966-00-2	3.84E+00	pCi/L	2.3E+01 2.3E+01	U	4.61E+01			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	RU-106 13967-48-1	1.40E+00	pCi/L	1.2E+01 1.2E+01	U	2.25E+01			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D
7240316 BLK	SB-125 14234-35-6	4.49E-01	pCi/L	3.5E+00 3.5E+00	U	6.35E+00			GAMMALL_GS	2.0012E+00 L	09/28/2007 05:11				D

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05221.Edd, h:\Reportdb\edd\Fead\VRad\37040.Edd

Lab Sample Id: J5QKV1AB

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 13:17

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BT	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240317 BLK	NI-63 13981-37-8	-6.45E-02	pCi/L	2.6E+00 1.5E+00	U	3.54E+00	98.2		NI63_LSC	4.0027E-01 L	09/28/2007 02:06				D

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05221.Edd, h:\Reportdb\edd\Fead\VRad\37040.Edd

Lab Sample Id: J5QKW1AB

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 13:11

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BV	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240318 BLK	H-3 10028-17-8	-1.01E+02	pCi/L	1.4E+02 1.2E+02	U	3.13E+02	100.0		906.0_H3_LSC	5.00E-03	09/22/2007 13:37				D

Wednesday, October 17, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKW1DX

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 13:11

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 08/16/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240318	H-3	-5.91E-01	pCi/L	1.5E+02	U	3.19E+02	100.0		906.0_H3_LSC	5.00E-03	09/22/2007				D
BLK	10028-17-8			1.3E+02						L	16:21				

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKJ1CS Sdg/Rept Nbr: W05221 37040 Collection Date: 08/24/2007 09:56

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

Moisture/Solids%*: QC Type: BS Received Date: 08/24/2007

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	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
7240303 BS	TC-99 14133-76-7	4.75E+02	pCi/L	3.3E+01 1.2E+01		9.70E+00	100.0	5.39E+02 88.2	TC99_ETVDSK	1.257E-01 L	09/18/2007 15:11			70 130	D

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKN1CS

Sdg/Rept Nbr: W05221

37040

Collection Date: 08/20/2007 10:28

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 08/20/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BL	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	REF/ UCL	LCS LCL/UCL	R Typ
7240313 BS	I-129L 15046-84-1	1.02E+01	pCi/L	1.3E+00 1.3E+00		3.25E-01	94.2	9.63E+00 106.0	I129LL_SEP_L	3.9722E+00 L	09/26/2007 17:26			70 130	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.

//

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKQ1CS Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 11:19
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BN	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240314 BS	Uranium 7440-61-1	3.76E+01	ug/L	4.4E+00 4.4E+00		8.28E-02		3.54E+01 106.1	UTOT_KPA	2.53E-02	09/26/2007 14:51			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.

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05221.Edd, h:\Reportdb\edd\Fead\VRad\37040.Edd

Lab Sample Id: J5QKQ1DS **Sdg/Rept Nbr:** W05221 37040 **Collection Date:** 08/16/2007 11:19
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/16/2007

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	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240314 BS	Uranium 7440-61-1	3.65E+00	ug/L	3.7E-01 3.7E-01	8.09E-02		3.51E+00 104.0	UTOT_KPA	2.59E-02 ML	09/26/2007 14:53			70 130	D

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\eddd\FeadIV\Rad\W05221.Edd, h:\Reportdb\eddd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKR1CS Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 09:12
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BQ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240315 BS	SR-90 10098-97-2	1.34E+01	pCi/L	2.0E+00 7.1E-01		4.88E-01	84.6	1.36E+01 98.4	SRISO_SEP_P	1.0011E+00 L	09/30/2007 07:26			70 130	D

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5QKT1CS

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/15/2007 12:12

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 08/15/2007

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	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
7240316 BS	CO-60 10198-40-0	4.16E+01	pCi/L	6.7E+00 6.7E+00	1.87E+00		3.76E+01 110.8	GAMMALL_GS	2.0003E+00 L	09/24/2007 12:15			70 130	D
7240316 BS	CS-137 10045-97-3	5.14E+01	pCi/L	7.7E+00 7.7E+00	3.05E+00		4.96E+01 103.5	GAMMALL_GS	2.0003E+00 L	09/24/2007 12:15			70 130	D
7240316 BS	EU-152 14683-23-9	7.65E+01	pCi/L	1.3E+01 1.3E+01	7.76E+00		7.64E+01 100.1	GAMMALL_GS	2.0003E+00 L	09/24/2007 12:15			70 130	D

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKV1CS

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 13:17

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BU	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240317 BS	NI-63 13981-37-8	3.23E+02	pCi/L	2.4E+01 5.3E+00		3.81E+00	91.3	3.85E+02 83.9	NI63_LSC	4.0003E-01 L	09/28/2007 03:48			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.

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J5QKW1CS Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 13:11
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/16/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240318	H-3	2.66E+03	pCi/L	2.6E+02	-	3.12E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	09/22/2007			70	D
BS	10028-17-8			2.1E+02				97.6		L	14:59			130	

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

Wednesday, October 17, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IVRad\W05221.Edd, h:\Reportdb\edd\Fead\IVRad\37040.Edd

Lab Sample Id: J5QKW1EM

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 13:11

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	F Suffix	R Typ					
	MW6-SBB-A19981								BY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tol/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
7240318 BS	H-3 10028-17-8	2.40E+03	pCi/L	2.5E+02 2.0E+02		3.12E+02	100.0	2.72E+03 88.2	906.0_H3_LSC	5.00E-03 L	09/22/2007 17:42			70 130	D

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J44QT1ER

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/15/2007 12:12

Client Id: B1P8L1

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 08/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W07-008	MW6-SBB-A19981								AW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240316 DUP	BE-7 13966-02-4	3.48E-01	pCi/L	1.6E+01 1.6E+01	U	2.85E+01			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	CO-60 10198-40-0	7.81E+01	pCi/L	1.2E+01 1.2E+01		2.24E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	CS-134 13967-70-9	-3.59E-01	pCi/L	1.6E+00 1.6E+00	U	2.80E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	CS-137 10045-97-3	9.72E-01	pCi/L	1.4E+00 1.4E+00	U	2.53E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	EU-152 14683-23-9	5.25E-01	pCi/L	3.3E+00 3.3E+00	U	5.72E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	EU-154 15585-10-1	-2.67E+00	pCi/L	4.1E+00 4.1E+00	U	6.75E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	EU-155 14391-16-3	-1.89E+00	pCi/L	2.8E+00 2.8E+00	U	4.76E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	K-40 13966-00-2	1.83E+01	pCi/L	3.0E+01 3.0E+01	U	1.56E+01			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	RU-106 13967-48-1	2.58E+00	pCi/L	1.3E+01 1.3E+01	U	2.28E+01			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D
7240316 DUP	SB-125 14234-35-6	-1.61E+00	pCi/L	3.3E+00 3.3E+00	U	5.62E+00			GAMMALL_GS	1.9083E+00 L	09/24/2007 09:51				D

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J44RM1DR Sdg/Rept Nbr: W05221 37040 Collection Date: 08/15/2007 10:11
 Client Id: B1P8P0 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-008	MW6-SBB-A19981								AX	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
7240309	TC-99	1.10E+03	pCi/L	7.0E+01		1.02E+01	100.0		TC99_SEP_LS	1.257E-01	09/25/2007	8.4	1.8		D
DUP	14133-76-7	1.01E+03		1.8E+01						L	03:13	20.0	3		

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J44TJ1FR Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 13:11
 Client Id: B1P9X3 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-008	MW6-SBB-A19981								AZ	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
7240318	H-3	1.65E+06	pCi/L	6.1E+04		3.12E+02	100.0		906.0_H3_LSC	5.00E-03	09/22/2007	.8	0.3		D
DUP	10028-17-8	1.63E+06		4.2E+03						L	20:28	20.0	3		

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J44V61FR Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 13:17
 Client Id: B1P9W8 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-008	MW6-SBB-A19981								BA	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
7240317	NI-63	6.41E+01	pCi/L	6.7E+00		3.63E+00	95.9		NI63_LSC	4.0048E-01	09/28/2007	1.1	0.1		D
DUP	13981-37-8	6.34E+01		2.7E+00						L	00:23	20.0	3		

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

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\WRad\W05221.Edd, h:\Reportdb\edd\Fead\WRad\37040.Edd

Lab Sample Id: J45GF1ER

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/16/2007 11:19

Client Id: B1P651

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
107-062	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analy/ 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
7240314 DUP	Uranium 7440-61-1	2.44E+00 2.48E+00	ug/L	2.5E-01 2.5E-01		7.62E-02			UTOT_KPA	2.75E-02 ML	09/26/2007 15:18	1.8 20.0	0.3 3		D

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J45J31FR

Sdg/Rept Nbr: W05221

37040

Collection Date: 08/16/2007 09:12

Client Id: B1P663

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
107-062	MW6-SBB-A19981								BD	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
7240315	SR-90	4.86E-01	pCi/L	3.7E-01	U	7.15E-01	58.9		SRISO_SEP_P	1.0017E+00	09/30/2007	38.5	0.6		D
DUP	10098-97-2	3.29E-01		3.6E-01						L	07:26	20.0	3		

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5A1G1CR

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/20/2007 10:28

Client Id: B1P618

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 08/20/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-062	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analy/ 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
7240313 DUP	I-129L 15046-84-1	3.20E-02 1.71E-01	pCi/L	1.3E-01 1.3E-01	U	2.43E-01	97.8		I129LL_SEP_L	3.8877E+00 L	09/26/2007 15:22	136.9 20.0	1.6 3		D

Wednesday, October 17, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05221.Edd, h:\Reportdb\edd\Fead\Rad\37040.Edd

Lab Sample Id: J5NPA1CR

Sdg/Rept Nbr: W05221 37040

Collection Date: 08/24/2007 09:56

Client Id: B1P8Y3

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 08/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-008	MW6-SBB-A19981								BG	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240303 DUP	TC-99 14133-76-7	3.10E+01 2.67E+01	pCi/L	7.2E+00 5.0E+00		9.71E+00	100.0		TC99_ETVDSK	1.258E-01	09/18/2007 15:11	14.8 20.0	0.8 3		D

Wednesday, October 17, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\I\Rad\W05221.Edd, h:\Reportdb\edd\Fead\I\Rad\37040.Edd

Lab Sample Id: J44RP1DW **Sdg/Rept Nbr:** W05221 37040 **Collection Date:** 08/15/2007 11:59
Client Id: B1P8R0 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 08/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-008	MW6-SBB-A19981								AY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240309 MS	TC-99 14133-76-7	3.06E+03	pCi/L	1.9E+02 3.1E+01		1.04E+01	100.0	3.58E+03 85.6	TC99_SEP_LS	1.257E-01 L	09/25/2007 03:13			60 140	D

Wednesday, October 17, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05221.Edd, h:\Reportdb\edd\FeadIV\Rad\37040.Edd

Lab Sample Id: J45J31EW **Sdg/Rept Nbr:** W05221 37040 **Collection Date:** 08/16/2007 09:12
Client Id: B1P663 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-062	MW6-SBB-A19981								BC	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
7240303 MS	TC-99 14133-76-7	3.13E+03	pCi/L	1.9E+02 3.0E+01		9.64E+00	100.0	3.55E+03 88.3	TC99_ETVDSK	1.265E-01 L	09/18/2007 15:11			60 140	D

Wednesday, October 17, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\I\Rad\W05221.Edd, h:\Reportdb\edd\Fead\I\Rad\37040.Edd

Lab Sample Id: J45JL1EW Sdg/Rept Nbr: W05221 37040 Collection Date: 08/16/2007 11:19
 Client Id: B1P650 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: MS Received Date: 08/16/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
I07-062	MW6-SBB-A19981								BE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7240314	Uranium	3.55E+01	ug/L	4.5E+00		8.03E-02		3.42E+01	UTOT_KPA	2.61E-02	09/26/2007			60	D
MS	7440-61-1			4.5E+00				103.6		ML	15:22			140	

Lot No., Due Date: J7H170328; 10/08/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7240315; RSR85907 Sr-85/90 by GPC-7
 SDG, Matrix: W05221; 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 10-1-7



Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 7240315
W05221

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: _____

Second Level Review: *Doreen A. Adams* Date: 10-2-07

Lot No., Due Date: J7H170249,J7H170251; 10/08/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7240316; RGAMMA Gamma by GER
 SDG, Matrix: W05221; 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/MCD 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 10-10965

First Level Review

[Handwritten Signature]

Date

10/1/07

Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7240316
W05221

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 NCR

Second Level Review: Sheryl A. Adams Date: 10-2-07

Clouseau Nonconformance Memo

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-10965	Classification: Anomaly
NCM Initiated By: Lisa Antonson	Status: QAREVIEW
Date Opened: 10/01/2007	Production Area: Environmental - Prep
Date Closed:	Tests: Gamma by GER
	Lot #'s (Sample #'s): J7H170249 (3), J7H170251 (1), J7H280000 (316),
	QC Batches: 7240316,
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	10/01/2007	Samples J44QT1AA, J44RK and J5QKT showed lines that weren't identified. A recount was done to confirm the results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	10/01/2007	Samples were recounted.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
Pacific Northwest National Laboratory	ADAMS	10/01/2007	10/01/2007	by narrative	
		Response	Response Note		
		No response saved			

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position
---------------	-------------	----------

Lot No., Due Date: J7H170253,J7H170259,J7H170328,J7H210287; 10/08/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7240313; RGAMLEPS Gamma by LEPS
 SDG, Matrix: W05221; 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

Matt Lardy

Date

10-4-07

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 7240313
W05221

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: _____

Second Level Review: Sheryl A. Allen Date: 10-5-07

Lot No., Due Date: J7H170253, J7H170259; 10/08/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7240317; RNI63 Ni-63 by LSC
 SDG, Matrix: W05221; 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 OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.07 The Correct Count Geometry was Used. OK	<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. No Matrix Blanks (MBiKs) found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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. No Matrix Spikes (MLCS) found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.17 Tracer within Control Limits. No Tracers found in Batch!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" 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"/>
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => NI-63 OK; No Callin Level Found => NI-63	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.24 Result + 3s >= 0, Not Too Negative. OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 Trisa Custonson Date 10/19/07

Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7240317
W05221

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: _____

Second Level Review: *Sheryl A. Allen* Date: 10-10-07

Lot No., Due Date: J7H170249,J7H170251,J7H170253,J7H170259,J7H170328,J7H270155; 10/08/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7240303; RTC99 Tc-99 by LSC

SDG, Matrix: W05221; 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 OK	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 (MBlks) 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. OK	Yes	No	N/A
8.17	Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	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 <input checked="" type="checkbox"/>
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 <input checked="" type="checkbox"/>	No	N/A

First Level Review Lisa Antonson Date 9/19/07



Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 7240303
W05221

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: _____

Second Level Review: Sheryl A. Allen Date: 9-10-07

Lot No., Due Date: J7H170253, J7H170259; 10/08/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7240318; RTRITIUM H-3 by LSC
 SDG, Matrix: W05221; 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 *John White*

Date 10-1-7



Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7240318
W05221

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: _____

Second Level Review: Sheryl A. Wilson Date: 10-2-07

Lot No., Due Date: J7H170249,J7H170251,J7H170328; 10/08/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7240314; RUNAT UNat by KPA
SDG, Matrix: W05221; 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 Hart*

Date 9-28-7

Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 7240314
W05221

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: _____

Second Level Review: *Sheryl A. Allen* Date: 9-28-07

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W07-008-129	
		<i>J7H170249 W05221 Due 09.28.07</i>		Page <u>1</u> of <u>1</u>	
Collector Fluor Hanford F. M. HALL		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. W07-008		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title RCRA, AUGUST 2007		<i>Logbook: HNF-N-506-8</i>		Ice Chest No. <i>GRP-03-019</i> Temp.	
Shipped To (Lab) Steve 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. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9J8		W	<i>8/15/07</i>	<i>0942</i>	1x20-mL P	Activity Scan	None
B1P9J8		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P9J8		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
<i>J44QC</i>							
<i>J. Wall</i>							
<i>8/15/07</i>							

Relinquished By Fluor Hanford F. M. HALL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <i>1300</i> AUG 15 2007	Received By <i>[Signature]</i>	Print L. LAWE TAR	Sign <i>[Signature]</i>	Date/Time <i>1300</i> AUG 15 2007	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge W1 = 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	

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W07-008-137
	J7H170249 W05221 Due 09-28-07	Page 1 of 1

Collector Fluor Hanford F.M. HALL	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	Method of Shipment Govt. Vehicle	Ice Chest No. Temp. GRP-03-09
Shipped To (Lab) Severn 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 **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.
 All SDG's are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9K3		W	8/15/07	1032	1x20-mL P	Activity Scan	None
B1P9K3		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P9K3		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
<div style="position: relative; height: 100px;"> J44QH </div>							
<div style="position: relative; height: 100px;"> J. W. Wells 8/15/07 </div>							

Relinquished By Fluor Hanford F.M. HALL	Print 	Sign 	Date/Time AUG 15 2007	Date/Time ¹³⁰⁰	Received By 	Print L. LANE	Sign 	Date/Time AUG 15 2007	Date/Time ¹³⁰⁰	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Date/Time	Received By	Date/Time	Date/Time	Date/Time		S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge W1 = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	Date/Time	Received By	Date/Time	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Date/Time	Received By	Date/Time	Date/Time	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.# W07-008-145
		<i>J7H170249 W05221 Due 092807</i>				Page 1 of 1
Collector Fluor Hanford F.M. HALL		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869		
SAF No. W07-008		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title RCRA, AUGUST 2007		<i>Logbook: HNF-N-506-B</i>		Ice Chest No. <i>GRP-0309</i> 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. All SDG's are to be sent to Steve Trent, FH			

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L1		W	8/15/07	1212	1x20-mL P	Activity Scan	None
B1P8L1		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8L1		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1P8L1		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<i>J44QT</i>							
<i>off wall 8/15/07</i>							

Relinquished By Fluor Hanford F.M. HALL	Date/Time AUG 15 2007	Received By <i>[Signature]</i>	Date/Time AUG 15 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DI = 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. # W07-008-153
	<i>J7H170249 W05221 DUE 09-28-07</i>	Page 1 of 1

Collector Fluor Hanford F. M. HALL	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA AUGUST 2007	Method of Shipment Govt. Vehicle	Ice Chest No. GRP-03-019 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 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. All SDG's are to be sent to Steve Trent, FH
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L6		W	8/15/07	1129	1x20-mL P	Activity Scan	None
B1P8L6		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8L6		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<div style="position: relative; width: 100%; height: 100%;"> J44Q8 </div>							
<div style="position: relative; width: 100%; height: 100%;"> Dr. Wall 8/15/07 </div>							

Relinquished By Fluor Hanford F. M. HALL	Print Sign	Date/Time AUG 15 2007	1300	Received By LILANE TAL	Print Sign	Date/Time AUG 15 2007	1300
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	

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

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

Sample Check-in List

Date/Time Received: 8-15-07 1300

Client: PGW SDG #: W05221 NA SAF #: W07-008 NA

Work Order Number: J7H170249 Chain of Custody # W07-008-129,-137,-145,-153

Shipping Container ID: _____ Air Bill # _____

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

<u>hazard labels</u>	<u>appropriate samples labels</u>
<u>tape</u>	
<u>custody seals</u>	
9. Samples are:

<u>in good condition</u>	<u>leaking</u>
<u>broken</u>	<u>have air bubbles</u>

 (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: 8-15-07

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

TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. #	W07-008-177
		<i>J7H170251 W05221 Due 09-28-07</i>			Page 1 of 1	
Collector Roy Shepard Fluor Hanford		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869		
SAF No. W07-008		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title RCRA, AUGUST 2007		HNF-N-506 9		Ice Chest No. 057 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 SAF's into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all GW samples submitted into one SDG, daily closure. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8N5		W	<i>8-15-07</i>	<i>0917</i>	1x20-mL P	Activity Scan	None
B1P8N5		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8N5		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1P8N5		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<i>J44RK</i>							

Relinquished By Roy Shepard Fluor Hanford	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time AUG 15 2007	Received By LWLANE TAR	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time AUG 15 2007			Matrix *													
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	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										S = Soil DS = Drum Solid SF = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other													

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# W07-008-185
		<i>J7H170251</i>		<i>W05221</i>		<i>Du 092807</i>
Collector <i>Roy Shepard</i> Fluor Hanford		Contact/Requester Steve Trent		Telephone No. 509-373-5869		MSIN FAX
SAF No. W07-008		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title RCRA AUGUST 2007		<i>HNF-N-506 9</i>		Ice Chest No. <i>057</i>		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. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8P0		W	<i>B-15-07</i>	<i>1011</i>	1x20-mL P	Activity Scan	None
B1P8P0		W	<i>↓</i>	<i>↓</i>	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8P0		W	<i>↓</i>	<i>↓</i>	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
<i>J44RM</i>							

Relinquished By <i>Roy Shepard</i> Fluor Hanford	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <i>1300</i> AUG 15 2007	Received By <i>[Signature]</i>	Print <i>WILAVE TAK</i>	Sign <i>[Signature]</i>	Date/Time <i>1300</i> AUG 15 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DI = 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	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. # W07-008-201	
Collector Roy Shepard Fluor Hanford		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869		
SAF No. W07-008		Sampling Origin Hanford Site		Purchase Order/Charge Code		
Project Title RCRA, AUGUST 2007		Method of Shipment Govt. Vehicle		Ice Chest No. Temp. 057		
Shipped To (Lab) Severn 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 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. All SDG's are to be sent to Steve Trent, FH			

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8R0		W	8-15-07	1159	1x20-mL P	Activity Scan	None
B1P8R0		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8R0		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						<i>J44RP</i>	

Relinquished By Roy Shepard Fluor Hanford	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time AUG 15 2007	Received By <i>[Signature]</i>	Print L. LANE	Sign TAL	Date/Time AUG 15 2007	Matrix * S = Soil DS = Drum Solid SF = Sediment DL = 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	Received By	Date/Time			
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time			
Relinquished By	Date/Time	Received 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. # W07-008-217
	<i>J7H170251 W05221 Due 08.28.07</i>	Page 1 of 1

Collector Roy Shepard <i>Fluor Hanford</i>	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA AUGUST 2007	<i>HNF-N-506 9</i>	Ice Chest No. <i>057</i> Temp.
Shipped To (Lab) <i>Severn Trent Incorporated, Richland</i>	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. All SDG's are to be sent to Steve Trent, FH
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8T4		W	<i>8-15-07</i>	<i>1118</i>	1x20-mL P	Activity Scan	None
B1P8T4		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1P8T4		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
<i>J44RQ</i>							

Relinquished By Roy Shepard <i>Fluor Hanford</i>	Print	Sign <i>[Signature]</i>	Date/Time AUG 15 2007 <i>1300</i>	Received By <i>[Signature]</i>	Print LILANE TAYLOR	Sign	Date/Time AUG 15 2007 <i>1300</i>		Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time				
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time				
Relinquished By	Date/Time	Received 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		

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



STL

Sample Check-in List

Date/Time Received: 8-15-07 1300

Client: PGW SDG #: W05221 NA SAF #: W07-008 NA

Work Order Number: J774170251 Chain of Custody # W07-008-177,-185,-201,-217

Shipping Container ID: _____ Air Bill # _____

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

<input checked="" type="checkbox"/> tape	<input checked="" type="checkbox"/> hazard labels
<input checked="" type="checkbox"/> custody seals	<input checked="" 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: [Signature] Date: 8-15-07

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

TAL RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W07-008-323
<i>J7H170253</i> <i>W05221</i> <i>Due 10-01-07</i>		Page 1 of 1

Collector Josh Herrick Fluor Hanford	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	<i>HNF-N-5065</i>	Ice Chest No. Temp. <i>ECL-99-057</i>
Shipped To (Lab) Steve 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. All SDG's are to be sent to Steve Trent. FH
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9R4		W	<i>8/16/07</i>	<i>1017</i>	1x20-mL P	Activity Scan	None
B1P9R4		W	<i>↓</i>	<i>↓</i>	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
J44T6							

Relinquished By Josh Herrick Fluor Hanford	Print Sign <i>Josh Herrick</i>	Date/Time AUG 16 2007 <i>1455</i>	Received By <i>S. Smith</i>	Print Sign <i>S. Smith</i>	Date/Time AUG 16 2007 <i>1455</i>	Matrix * S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge W = Wine W = Water I = 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. # W07-008-339
		<i>J7H170253 W05221 Due 10-01-07</i>			Page <u>1</u> of <u>1</u>
Collector Josh Herrick <i>Fluor Hanford</i>		Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869		
SAF No. W07-008		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title RCRA AUGUST 2007		<i>HNF-N-504 5</i>	Ice Chest No. <i>ERC-99-057</i>		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. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9T4		W	<i>8/16/07</i>	<i>1121</i>	1x20-mL P	Activity Scan	None
B1P9T4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<i>J44VD</i>							

Relinquished By Josh Herrick <i>Fluor Hanford</i>	Print Sign <i>Josh Herrick</i>	Date/Time AUG 16 2007 <i>1455</i>	Received By <i>S. Sm. U</i>	Print Sign <i>S. Sm. U</i>	Date/Time AUG 16 2007 <i>1455</i>	Matrix * S = Soil DS = Drum Solid SF = Sediment DI = 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		



STL

Sample Check-in List

Date/Time Received: 8-16-07 1455

Client: PGW SDG #: W05221 NA SAF #: W07-008 NA

Work Order Number: J7H170253 Chain of Custody # W07-008-371,-331,-323,-339,-363

Shipping Container ID: _____ Air Bill # _____

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

<u> </u> tape	<u> </u> hazard labels
<u> </u> custody seals	<u> </u> appropriate samples labels
9. Samples are:

<u> </u> in good condition	<u> </u> leaking
<u> </u> broken	<u> </u> 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: 8-16-07

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

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W07-008-363
<i>J7H170259 W05221 Due 10-01-07</i>		
Page 1 of 1		

Collector Fluor Hanford R. T. SICKLE	Contact/Requester Steve Trent	Telephone No. 509-373-5869
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	<i>Logbook: HNF-N-506-8</i>	Ice Chest No. <i>GRP-03-019</i> 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. All SDG's are to be sent to Steve Trent, FH
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9W8		W	<i>8/16/07</i>	<i>1317</i>	1x20-mL P	Activity Scan	None
B1P9W8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1P9W8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P9W8		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1P9W8		W	↓	↓	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	HNO3 to pH <2
<i>J44V6-55</i> <i>J44V6</i>							
<i>J. Wall</i> <i>8/16/07</i>							

Relinquished By Fluor Hanford R. T. SICKLE	Print	Date/Time AUG 16 2007	145	Received By <i>S. Sickle</i>	Print	Date/Time AUG 16 2007	1455	Matrix *
Relinquished By		Date/Time		Received By		Date/Time		S = Soil DS = Drum Solid SF = Sediment DI = 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	

Sample Check-in List

Date/Time Received: 08.16.07 1455

Client: P6W SDG#: W05221 NA SAF#: W07-008 NA

Work Order Number: J774170259 Chain of Custody # W07-008-363

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: A. Smith Date: 08.16.07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

Collector: **Fluor Hanford R. T. SICKLE** Contact/Requester: **Steve Trent** Telephone No.: **509-373-5869** MSIN: **MSIN** FAX: **FAX**
 SAF No.: **107-062** Sampling Origin: **Hanford Site** Purchase Order/Charge Code:
 Project Title: **2ZPI-LOI AUGUST 2007** *Logbook, HNF-N-Sub-8* Ice Chest No.: **ERP-03-019** Temp.:
 Shipped To (Lab): **Severn Trent Incorporated, Richland** Method of Shipment: **Govt. Vehicle** Bill of Lading/Air Bill No.:
 Protocol: **CERCLA** Priority: **45 Days** Offsite Property No.:

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

SPECIAL INSTRUCTIONS Hold Time: Total Activity Exemption: Yes No
 All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
 WSCF: Batch all GW samples submitted into one SDG, daily closure.
 All SDG's are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P651		W	8/16/07	1119	1x20-mL P	Activity Scan	None
B1P651		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P651		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1P651		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J45GF</i>							
<i>J. W. Wood 8/16/07</i>							

Relinquished By: **Fluor Hanford R. T. SICKLE** Print Sign Date/Time: **AUG 16 2007 1455** Received By: **J. Sm. V. S. Sm. V.** Print Sign Date/Time: **AUG 16 2007 1455** Matrix *
 S = Soil DS = Drum Solid
 SF = Sediment DI = 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. # 107-062-62
Fluor Hanford R. T. SICKLE	<i>J7H170328 W05221 Due 10-01-07</i>	Page 1 of 1
Collector	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. 107-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 22P1-LOI AUGUST 2007	<i>Logbook: HNF-N-506-8</i>	Ice Chest No. <i>GRP-03-019</i> Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <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. All SDG's are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P650		W	8/16/07	1119	1x20-mL P	Activity Scan	None
B1P650		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P650		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1P650		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J45 JL</i>							
<i>R. Wall 8/16/07</i>							

Relinquished By Fluor Hanford R. T. SICKLE	Date/Time AUG 16 2007	Received By <i>S. Smith</i>	Date/Time AUG 16 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DI = 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. # 107-062-54
	<i>J7H170328 W05221 Due 10-01-07</i>	Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. 107-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1-LOI AUGUST 2007	<i>Logbook: HNF-N-506-8</i>	Ice Chest No. <i>GRP-03-019</i> Temp.
Shipped To (Lab) <i>Severn Trent Incorporated, Richland</i>	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes No
 All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
 WSCF: Batch all GW samples submitted into one SDG, daily closure.
 All SDG's are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P645		W	<i>8/16/07</i>	<i>0954</i>	1x20-mL P	Activity Scan	None
B1P645		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P645		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><i>J4530</i></p> </div> <div style="text-align: center;"> <p><i>J. Wood</i> <i>8/16/07</i></p> </div> </div>							

Relinquished By Fluor Hanford R. T. SICKLE	Date/Time <i>1455</i>	Received By <i>J. Smith</i>	Date/Time <i>1455</i>	Matrix *
<i>[Signature]</i>	AUG 16 2007	<i>[Signature]</i>	AUG 16 2007	S = Soil DS = Drum Solid SF = Sediment DI = Drum Liner 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

TRAIL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # 107-062-76
		<i>J7H170328 W05221 Due 10.01.07</i>			Page 1 of 1
Collector Fluor Hanford R. T. SICKLE		Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN FAX	
SAF No. 107-062		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title 2ZP1-LOL AUGUST 2007		Method of Shipment Govt. Vehicle	Ice Chest No. GRP-03-019	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland		Bill of Lading/Air Bill No.	Offsite Property No.		
Protocol CERCLA		Priority: 45 Days			
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. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P663		W	8/16/07	0912	1x20-mL P	Activity Scan	None
B1P663		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P663		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1P663		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
<i>J4553</i>							
<i>R. Wood</i>							
<i>8/16/07</i>							

Relinquished By <i>Print</i> Fluor Hanford <i>Sign</i> R. T. SICKLE	Date/Time AUG 16 2007 1455	Received By <i>Print</i> S. Sm. Vh <i>Sign</i> S. Sm. Vh	Date/Time AUG 16 2007 1455	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DI = Drum I Inni SO = Solid T = Tissue SI = Sludge WI = Wine W = Water I = 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. # 107-062-46
	<i>J7H170328 W05221 Due 10-01-07</i>	Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	Contact/Requester Steve Trent	Telephone No. MSIN FAX 509-373-5869
SAF No. 107-062	Sample Origin Hanford Site	Purchase Order/Charge Code
Project Title 22P1-LOI AUGUST 2007	<i>Logbook: HNF-N-5068</i>	Ice Chest No. <i>GRP-03-019</i> Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <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. All SDG's are to be sent to Steve Trent, FH
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P637		W	<i>8/16/07</i>	<i>1236</i>	1x20-mL P	Activity Scan	None
B1P637		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1P637		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
<i>J45KA</i>							
<i>Steve Trent</i> <i>8/16/07</i>							

Relinquished By Fluor Hanford R. T. SICKLE	<i>[Signature]</i>	Date/Time AUG 16 2007	<i>1455</i>	Received By <i>[Signature]</i>	<i>[Signature]</i>	Date/Time AUG 16 2007	<i>1454</i>	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 = 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



STL

Sample Check-in List

Date/Time Received: 8-16-07 1455

Client: PGW SDG #: W05221 NA SAF #: I07-062 NA

Work Order Number: J7H170328 Chain of Custody #: I07-062-63,-62,-54,-76,-46

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: 8-16-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

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TAL RICHLAND

FLUOR HANFORD	<h2 style="margin: 0;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2> <p style="font-size: 1.2em; margin: 5px 0;">J7H210287 W05221 Ave 10-04-07</p>	C.O.C. # <h1 style="margin: 0;">107-062-8</h1>
		Page 1 of 1

Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN FAX
SAF No. 107-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZPL-LOI AUGUST 2007	Method of Shipment Govt. Vehicle	Ice Chest No. SLICK-1 Temp.
Shipped To (Lab) (Severn Trent Incorporated, Richland)	Priority: 45 Days	Bill of Lading/Air Bill No.
Protocol CERCLA	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.
 All SDG's are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P618		W	8-20-07	1028	1x20-mL P	Activity Scan	None
B1P618		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
<i>JSAIG</i>							

Relinquished By Josh Henrick <i>Josh Henrick</i>	Date/Time AUG 20 2007	Received By S. Smith <i>S. Smith</i>	Date/Time AUG 20 2007	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solid SF = Sediment DL = 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	
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: 8-20-07 1530

Client: PGW SDG #: W05221 NA SAF #: I07-062 NA

Work Order Number: J7H210287 Chain of Custody # I07-062-8

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA Yes No
2. Custody Seals dated and signed? NA Yes No
3. Chain of Custody record present? Yes No
4. Cooler temperature: _____ NA 5. Vermiculite/packing materials is NA Wet Dry
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape _____ 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:  Date: 8-20-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____

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TAL RICHLAND

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			C.O.C. # W07-008-465
		<i>J7H270155</i> <i>W05221</i> <i>Due 10.08.07</i>			Page 1 of 1
Collector Steve Overdahl Fluor Hanford	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX	
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title RCRA AUGUST 2007	<i>HNF-N-506 9</i>	Ice Chest No. <i>057</i>	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. All SDG's are to be sent to Steve Trent, FH		

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8Y3		W	<i>8-24-07</i>	<i>0956</i>	1x20-mL P	Activity Scan	None
B1P8Y3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
<i>J5NPA</i>							

Relinquished By Steve Overdahl Fluor Hanford	Print 	Sign 	Date/Time <i>1508</i> AUG 24 2007	Received By 	Print WLANE TAL-R	Sign 	Date/Time <i>1508</i> AUG 24 2007	Matrix * S = Soil DS = Drum Solid SF = Sediment DL = 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	



STL

Sample Check-in List

Date/Time Received: 8-24-07 1508

Client: PGW SDG #: W05221 NA [] SAF #: W07-008 NA []

Work Order Number: J7H270155 Chain of Custody # W07-008-465

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: 8-24-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

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TAL RICHLAND

9/28/2007 11:24:58 AM

Sample Preparation/Analysis

Balance Id:1120482733,1120373922,1120

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech: 09/20/2007 16:17,ManisD

Batch: 7240315 WATER pCi/L PM, Quote: SA, 57671
SEQ Batch, Test: None All Tests: 7240303 FPS5, 7240313 BNTB, 7240314 DHSS, 7240315 CLTL,

Sep2 DT/Tm Tech:

Prep Tech: ManisD

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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1 J45J3-1-AC J7H170328-4-SAMP	1002.40g,in		SRTB15225 09/06/07,pd 05/22/07,r		1.5	25.9	100	59	1005	9/29/07 u	
09/20/2007-16:17:s1											
08/16/2007 09:12 AmtRec: 20ML,500MLP,3XLP,2X4LP #Containers: 7 Scr: Alpha: 9.26E-04 uCi/Sa Beta: 2.29E-03 uCi/Sa											
SA 0885 9/30/07											

2 J45J3-1-AF-X J7H170328-4-DUP	1001.70g,in		SRTB15226 09/06/07,pd 05/22/07,r		1.5	21.6	100	5b	1005	9/29/07 u	
09/20/2007-16:17:s1											
08/16/2007 09:12 AmtRec: 20ML,500MLP,3XLP,2X4LP #Containers: 7 Scr: Alpha: 9.26E-04 uCi/Sa Beta: 2.29E-03 uCi/Sa											
53 0885 9/30/07											

3 J5QKR-1-AA-B J7H280000-315-BLK	1000.10g,in		SRTB15227 09/06/07,pd 05/22/07,r		1.5	23.8	100	5c	1005	9/29/07 u	
09/20/2007-16:17:s1											
08/16/2007 09:12 AmtRec: #Containers: 1 Scr: Alpha: Beta:											
5c 0885 9/30/07											

4 J5QKR-1-AC-C J7H280000-315-LCS	1001.10g,in		SMSG1378 08/15/07,pd 05/22/07,r		1.5	24.7	100	5d	1005	9/29/07 u	
09/20/2007-16:17:s1											
08/16/2007 09:12 AmtRec: #Containers: 1 Scr: Alpha: Beta:											
5d 0885 9/30/07											

08/16/2007 09:12 AmtRec: #Containers: 1 Scr: Alpha: Beta:

TAL RICHLAND

9/28/2007 11:24:59 AM

Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

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

Pipet #:

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech: 09/20/2007 16:17,ManisD

Batch: 7240315
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: ManisD



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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Comments:

All Clients for Batch:

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

J45J31AC-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
J5QKR1AA-BLK: Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
J5QKR1AC-LCS: Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

J45J31AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J5QKR1AA-BLK: Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
J5QKR1AC-LCS: Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4
 Prep SamplePrep v4.8.26

TAL RICHLAND

9/20/2007 1:34:30 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240316 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech: ClarkR/BeckJ



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 J44QT-1-AA J7H170249-3-SAMP 08/15/2007 12:12	2001.90g,in				100ml 200		G11	1311	9/24/07	
AmtRec: 20ML,2X500MLP,4LP			#Containers: 4			Scr:	Alpha: 5.79E-06 uCi/Sa		Beta: -9.14E-07 uCi/Sa	
2 J44QT-1-AE-X J7H170249-3-DUP 08/15/2007 12:12	1908.30g,in						G12	1311		
AmtRec: 20ML,2X500MLP,4LP			#Containers: 4			Scr:	Alpha: 5.79E-06 uCi/Sa		Beta: -9.14E-07 uCi/Sa	
3 J44RK-1-AA J7H170251-1-SAMP 08/15/2007 09:17	2002.50g,in						G13	1535	9/24/07	
AmtRec: 20ML,2X500ML,4LP			#Containers: 4			Scr:	Alpha: 9.12E-07 uCi/Sa		Beta: 3.95E-07 uCi/Sa	
4 J5QKT-1-AA-B J7H280000-316-BLK 08/15/2007 12:12	2001.20g,in						G15	1312	9/24/07	
AmtRec:			#Containers: 1			Scr:	Alpha:		Beta:	
5 J5QKT-1-AC-C J7H280000-316-LCS 08/15/2007 12:12	2000.30g,in		QCAG1403 08/15/07,pd 03/07/05,r				G14	1535		
AmtRec:			#Containers: 1			Scr:	Alpha:		Beta:	

Comments: pH < 2.0 RC 09/20/07
J44QT - Dup. reduced due to insuff. sample amount. 9/21/07

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

J44QT1AA-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:

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

WO Cnt: 5
Prep_SamplePrep v4 8.26

TAL RICHLAND

9/20/2007 1:34:33 PM

Sample Preparation/Analysis

Balance Id: _____

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

Pipet #: _____

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech: _____

Batch: 7240316

pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,ClarkR



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, Ini/Date	Comments:	
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
J5QKT1AA-BLK:											
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
J5QKT1AC-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						
J44QT1AA-SAMP Calc Info:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			
J5QKT1AA-BLK:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			
J5QKT1AC-LCS:											
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B			

Approved By _____

Date: _____

STL RICHLAND

9/27/2007 4:50:13 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240316 WATER pCi/L

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEO Batch, Test: None

Prep Tech: ,ClarkR



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 J44QT-1-AA J7H170249-3-SAMP 08/15/2007 12:12	2001.90g.in							Alpha: 5.79E-06 uCi/Sa	Beta: -9.14E-07 uCi/Sa	
2 J44QT-1-AE-X J7H170249-3-DUP 08/15/2007 12:12	1908.30g.in							Alpha: 5.79E-06 uCi/Sa	Beta: -9.14E-07 uCi/Sa	
J7H170249-3-SAMP 08/15/2007 12:12	1908.30g				100 ml	200 min		Alpha: 5.79E-06 uCi/Sa	Beta: -9.14E-07 uCi/Sa	65 0830 9/28/07
4 J44RK-1-AA J7H170251-1-SAMP 08/15/2007 09:17	2002.50g.in							Alpha: 9.12E-07 uCi/Sa	Beta: 3.95E-07 uCi/Sa	
J7H170251-1-SAMP 08/15/2007 09:17	2002.50g							Alpha: 9.12E-07 uCi/Sa	Beta: 3.95E-07 uCi/Sa	66 0831
6 J5QKT-1-AA-B J7H280000-316-BLK 08/15/2007 12:12	2001.20g.in							Alpha:	Beta:	
7 J5QKT-1-AC-C J7H280000-316-LCS 08/15/2007 12:12	2000.30g.in		QCAG1403 08:15:07.pd 03-07-05					Alpha:	Beta:	

16

TAL RICHARD

9/27/2007 4:50:15 PM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

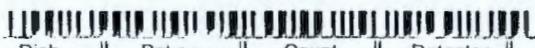
Batch: 7240316

pCi/L

Sep2 DT/Tm Tech:

SEO Batch Test: None

Prep Tech:



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:
J7H280000-316-BLK										
08/15/2007 12:12										

2000.30g *QCA G*
0.0012 L *9/25*
100ml 200min 6x 0831 9/28/07

Comments:

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

J44QT1AA-SAMP Constituent List:

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

J5QKT1AA-BLK:

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

J5QKT1AC-LCS:

Cs-137	K-40	RA-228	U-238	RDL	pCi/L	LCL	UCL	RPD	Cs-137DA	Ra-226	RA-228DA	RDL	pCi/L	LCL	UCL	RPD
				15		70	130	20				15		70	130	20

J5QKT2AA-BLK:

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

J44QT1AA-SAMP Calc Info:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TAL RICHLAND

9/27/2007 4:50:15 PM

Sample Preparation/Analysis

Balance Id:

AW Gamma PrpRC5017
TA Gamma by HPGE
SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240316

pCi/L

Sep2 DT/Tm Tech:

SEO Batch Test: None

Prep Tech:



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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Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
75QKT1AC-LCS:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
75QKT2AA-BLK:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					

Approved By

Date:

TAL RICHLAND

9/24/2007 11:11:39 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabBN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 10/01/2007 W05221

Sep1 DT/Tm Tech:

Batch: 7240313 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

Prep Tech: ClarkR, POSTEDD

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 J44TJ-1-AC J7H170253-1-SAMP 08/16/2007 13:11	3937.10g,in		ITA6560 07/25/07		36.2	160	L2	1322		9/26/07
AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6						Scr:	Alpha: 2.59E-03 uCi/Sa	Beta: -6.59E-04 uCi/Sa		
2 J44V6-1-AC J7H170259-1-SAMP 08/16/2007 13:17	3931.40g,in		ITA6561 07/25/07		33.2		L4	1322		
AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6						Scr:	Alpha: 8.46E-04 uCi/Sa	Beta: 2.09E-03 uCi/Sa		
3 J45GF-1-AA J7H170328-1-SAMP 08/16/2007 11:19	3879.60g,in		ITA6562 07/25/07		33.2		L5	1323		
AmtRec: 20ML,2X500MLP,2X4LP #Containers: 5						Scr:	Alpha: -1.65E-03 uCi/Sa	Beta: 1.69E-03 uCi/Sa		
4 J45JL-1-AA J7H170328-2-SAMP 08/16/2007 11:19	3919.80g,in		ITA6563 07/25/07		34.1		L2	1510		9/26/07 n
AmtRec: 20ML,2X500MLP,2X4LP #Containers: 5						Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: 1.23E-04 uCi/Sa		
5 J45JQ-1-AA J7H170328-3-SAMP 08/16/2007 09:54	3890.10g,in		ITA6564 07/25/07		36.0		L4	1512		9/26/07 n
AmtRec: 20ML,500MLP,2X4LP #Containers: 4						Scr:	Alpha: 5.07E-03 uCi/Sa 3.0E-01L	Beta: 3.01E-04 uCi/Sa		
6 J45J3-1-AA J7H170328-4-SAMP 08/16/2007 09:12	3904.90g,in		ITA6565 07/25/07		36.6		L5	1515		9/26/07 n
AmtRec: 20ML,500MLP,3XLP,2X4LP #Containers: 7						Scr:	Alpha: 9.26E-04 uCi/Sa	Beta: 2.29E-03 uCi/Sa		
7 J45KA-1-AA J7H170328-5-SAMP 08/16/2007 12:36	3944.90g,in		ITA6566 07/25/07		27.7		L2	1700		9/26/07 n
AmtRec: 20ML,500MLP,2X4LP #Containers: 4						Scr:	Alpha: 1.18E-03 uCi/Sa	Beta: 1.04E-03 uCi/Sa		

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

TAL RICHLAND

9/24/2007 11:11:42 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech:

Batch: 7240313 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,ClarkR



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:
8 J5A1G-1-AA J7H210287-1-SAMP 08/20/2007 10:28	3882.10g,in		ITA6567 07/25/07		35.5	100	L4	1701		9/26/07 R
AmtRec: 20ML,4LP		#Containers: 3		Scr:		Alpha: -2.49E-04 uCi/Sa		Beta: 2.85E-03 uCi/Sa		
9 J5A1G-1-AC-X J7H210287-1-DUP 08/20/2007 10:28	3887.70g,in		ITA6568 07/25/07		36.2		L5	1702		9/26/07 L
AmtRec: 20ML,4LP		#Containers: 3		Scr:		Alpha: -2.49E-04 uCi/Sa		Beta: 2.85E-03 uCi/Sa		
10 J5QKN-1-AA-B J7H280000-313-BLK 08/20/2007 10:28	4001.40g,in		ITA6569 07/25/07		33.4		L2	1405		9/26/07 OR
AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:		
11 J5QKN-1-AC-C J7H280000-313-LCS 08/20/2007 10:28	3972.20g,in		ISD0776 08/15/07		35.7		L4	1906		
AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:		

Comments:

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

J44TJ1AC-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
J5QKN1AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
J5QKN1AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

J44TJ1AC-SAMP Calc Info:
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 2
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 11
Prep_SamplePrep v4.8.26

TAL RICHLAND

9/24/2007 11:11:43 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech:

Batch: 7240313

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ClarkR



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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J5QKN1AA-BLK:

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

J5QKN1AC-LCS:

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

Approved By _____ Date: _____

TAL RICHLAND

9/20/2007 2:23:48 PM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAA Ni-63 PrpRC5016, SepRC5069
S4 Nickel by ICP and Nickel-63 by Liquid Scint
SI CLIENT: HANFORD

Pipet #: _____

AnalyseDueDate: 10/01/2007

Sep1 DT/Tm Tech:

Batch: 7240317 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,FABREM

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 J44TJ-1-AD J7H170253-1-SAMP 			400.29g,in	400.29g	nita2440 06/19/07					
08/16/2007 13:11			AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6				Scr:	Alpha: 2.59E-03 uCi/Sa		Beta: -6.59E-04 uCi/Sa
2 J44V6-1-AD J7H170259-1-SAMP 			400.19g,in	400.19g	nita2441 06/19/07					
08/16/2007 13:17			AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6				Scr:	Alpha: 8.46E-04 uCi/Sa		Beta: 2.09E-03 uCi/Sa
3 J44V6-1-AF-X J7H170259-1-DUP 			400.48g,in	400.48g	nita2442 06/19/07					
08/16/2007 13:17			AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6				Scr:	Alpha: 8.46E-04 uCi/Sa		Beta: 2.09E-03 uCi/Sa
4 J5QKV-1-AA-B J7H280000-317-BLK 			400.27g,in	400.27g	nita2479 09/06/07					
08/16/2007 13:17			AmtRec: #Containers: 1				Scr:	Alpha:		Beta:
5 J5QKV-1-AC-C J7H280000-317-LCS 			400.03g,in	400.03g	nisa0778 09/06/07					
08/16/2007 13:17			AmtRec: #Containers: 1				Scr:	Alpha:		Beta:
6 J5QKV-1-AD-BN J7H280000-317-IBLK 										
08/16/2007 13:17			AmtRec: #Containers: 1				Scr:	Alpha:		Beta:

100

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: 6
Prep_SamplePrep v4.8.26

TAL RICHLAND

9/20/2007 2:23:50 PM

Sample Preparation/Analysis

Balance Id:

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech:

Batch: 7240317
 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 Aliq 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:

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

J44TJ1AD-SAMP Constituent List:

Ni-63	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
J5QKV1AA-BLK:					
Ni-63	RDL:15	pCi/L	LCL:	UCL:	RPD:
J5QKV1AC-LCS:					
Ni-63	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
J5QKV1AD-IBLK:					
Ni-63	RDL:15	pCi/L	LCL:	UCL:	RPD:
J44TJ1AD-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
J5QKV1AA-BLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
J5QKV1AC-LCS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
J5QKV1AD-IBLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	

Approved By _____ Date: _____

TAL RICHLAND

9/13/2007 2:34:39 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
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 09/28/2007 *W05221*

Sep1 DT/Tm Tech:

Batch: 7240303 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ClarkR



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 J44QT-1-AC J7H170249-3-SAMP 08/15/2007 12:12			126.80g,in	126.80g						
<i>60</i>										
			AmtRec: 20ML,2X500MLP,4LP	#Containers: 4			Scr:	Alpha: 5.79E-06 uCi/Sa	Beta: -9.14E-07 uCi/Sa	
2 J44Q8-1-AA J7H170249-4-SAMP 08/15/2007 11:29			125.60g,in	125.60g						
			AmtRec: 20ML,2X500MLP	#Containers: 3			Scr:	Alpha: 6.83E-05 uCi/Sa	Beta: 5.73E-05 uCi/Sa	
3 J44RK-1-AC J7H170251-1-SAMP 08/15/2007 09:17			127.30g,in	127.30g						
			AmtRec: 20ML,2X500ML,4LP	#Containers: 4			Scr:	Alpha: 9.12E-07 uCi/Sa	Beta: 3.95E-07 uCi/Sa	
4 J44TJ-1-AE J7H170253-1-SAMP 08/16/2007 13:11			125.80g,in	125.80g						
			AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6			Scr:	Alpha: 2.59E-03 uCi/Sa	Beta: -6.59E-04 uCi/Sa	
5 J44T1-1-AA J7H170253-2-SAMP 08/16/2007 09:17			127.30g,in	127.30g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 1.79E-04 uCi/Sa	Beta: -1.19E-04 uCi/Sa	
6 J44T6-1-AA J7H170253-3-SAMP 08/16/2007 10:17			125.30g,in	125.30g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 5.09E-05 uCi/Sa	Beta: -1.50E-05 uCi/Sa	
7 J44VD-1-AA J7H170253-4-SAMP 08/16/2007 11:21			125.50g,in	125.50g						
			AmtRec: 20ML,500ML	#Containers: 2			Scr:	Alpha: 4.27E-05 uCi/Sa	Beta: -4.09E-06 uCi/Sa	

TAL RICHLAND

9/13/2007 2:34:41 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
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240303 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,ClarkR



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 J44V6-1-AE J7H170259-1-SAMP 08/16/2007 13:17			126.10g,in	126.10g		60				
			AmtRec: 20ML,500ML,2XLP,2X4LP		#Containers: 6		Scr:	Alpha: 8.46E-04 uCi/Sa	Beta: 2.09E-03 uCi/Sa	
9 J45GF-1-AC J7H170328-1-SAMP 08/16/2007 11:19			125.50g,in	125.50g						
			AmtRec: 20ML,2X500MLP,2X4LP		#Containers: 5		Scr:	Alpha: -1.65E-03 uCi/Sa	Beta: 1.69E-03 uCi/Sa	
10 J45JL-1-AC J7H170328-2-SAMP 08/16/2007 11:19			125.50g,in	125.50g						
			AmtRec: 20ML,2X500MLP,2X4LP		#Containers: 5		Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: 1.23E-04 uCi/Sa	
11 J45JQ-1-AC J7H170328-3-SAMP 08/16/2007 09:54			125.80g,in	125.80g						
			AmtRec: 20ML,500MLP,2X4LP		#Containers: 4		Scr:	Alpha: 5.07E-03 uCi/Sa 3.0E-01L	Beta: 3.01E-04 uCi/Sa	
12 J45J3-1-AD J7H170328-4-SAMP 08/16/2007 09:12			126.80g,in	126.80g						
			AmtRec: 20ML,500MLP,3XLP,2X4LP		#Containers: 7		Scr:	Alpha: 9.26E-04 uCi/Sa	Beta: 2.29E-03 uCi/Sa	
13 J45J3-1-AE-S J7H170328-4-MS 08/16/2007 09:12			126.50g,in	126.50g	TCSG1890 08/22/07,pd 01/10/06,r					
			AmtRec: 20ML,500MLP,3XLP,2X4LP		#Containers: 7		Scr:	Alpha: 9.26E-04 uCi/Sa	Beta: 2.29E-03 uCi/Sa	
14 J5NPA-1-AA J7H270155-1-SAMP 08/24/2007 09:56			126.00g,in	126.00g						
			AmtRec: 20ML,500MLP		#Containers: 2		Scr:	Alpha: -9.45E-05 uCi/Sa	Beta: 1.42E-04 uCi/Sa	

100

TAL RICHLAND

9/13/2007 2:34:42 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
51 CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240303 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ClarkR

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 J5NPA-1-AC-X J7H270155-1-DUP  08/24/2007 09:56			125.80g.in	125.80g		60				
			AmtRec: 20ML,500MLP	#Containers: 2				Scr: Alpha: -9.45E-05 uCi/Sa	Beta: 1.42E-04 uCi/Sa	
16 J5QKJ-1-AA-B J7H280000-303-BLK  08/24/2007 09:56			125.50g.in	125.50g						
			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
17 J5QKJ-1-AC-C J7H280000-303-LCS  08/24/2007 09:56			125.70g.in	125.70g	TCSE2156 07/17/07,pd 01/10/06,r					
			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
18 J5QKJ-1-AD-BN J7H280000-303-IBLK  08/24/2007 09:56										
			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	
19 J5QKJ-1-AE-BN J7H280000-303-IBLK  08/24/2007 09:56										
			AmtRec:	#Containers: 1				Scr: Alpha:	Beta:	

Comments: pH < 2.0 RC 09/13/07

All Clients for Batch:

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

J44QT1AC-SAMP Constituent List:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

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: 19

Prep_SamplePrep v4.8.26

101

TAL RICHLAND

9/13/2007 2:34:44 PM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240303

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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J45J31AE-MS:

J5QKJ1AA-BLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

J5QKJ1AC-LCS:

Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

J5QKJ1AD-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

J5QKJ1AE-IBLK:

Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

J44QT1AC-SAMP Calc Info:

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

J45J31AE-MS:

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

J5QKJ1AA-BLK:

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

J5QKJ1AC-LCS:

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

J5QKJ1AD-IBLK:

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

J5QKJ1AE-IBLK:

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

Approved By

Date:

102

STL RICHLAND

8/28/2007 3:08:13 PM

Sample Preparation/Analysis

Balance Id: *12445*

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/01/2007 *W05221*

Sep1 DT/Tm Tech: *9-19-07 dm*

Batch: 7240318 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

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 J44TJ-1-AA								
J7H170253-1-SAMP								
08/16/2007 13:11		AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6			Scr: Alpha: 2.59E-03 uCi/Sa	Beta: -6.59E-04 uCi/Sa	
2 J44TJ-1-AF-X								
J7H170253-1-DUP								
08/16/2007 13:11		AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6			Scr: Alpha: 2.59E-03 uCi/Sa	Beta: -6.59E-04 uCi/Sa	
3 J44V6-1-AA								
J7H170259-1-SAMP								
08/16/2007 13:17		AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6			Scr: Alpha: 8.46E-04 uCi/Sa	Beta: 2.09E-03 uCi/Sa	
4 J5QKW-1-AA-B								
J7H280000-318-BLK								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
5 J5QKW-1-AC-C								
J7H280000-318-LCS								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
6 J5QKW-1-AD-BX								
J7H280000-318-MBLK								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
7 J5QKW-1-AE-CM								
J7H280000-318-MLCS								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

03

STL RICHLAND

8/28/2007 3:08:15 PM

Sample Preparation/Analysis

Balance Id: 12415

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech: 9-19-07 *aw*

Batch: 7240318 pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

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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8 J5QKW-1-AF-BN								
J7H280000-318-IBLK								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

9 J5QKW-1-AG-BN								
J7H280000-318-IBLK								
08/16/2007 13:11		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

J44TJ1AA-SAMP Constituent List:									
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20				
J5QKW1AA-BLK:									
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:				
J5QKW1AC-LCS:									
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20				
J5QKW1AD-MBLK:									
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:				
J5QKW1AE-MLCS:									
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20				
J5QKW1AF-IBLK:									
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:				
J5QKW1AG-IBLK:									
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:				
J44TJ1AA-SAMP Calc Info:									
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.:	Y	ODRs:	B
J5QKW1AA-BLK:									
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.:	Y	ODRs:	B
J5QKW1AC-LCS:									
Uncert Level (#s):	2	Decay to SaDt:	Y	Blk Subt.:	N	Sci.Not.:	Y	ODRs:	B

04

STL RICHLAND

8/28/2007 3:08:15 PM

Sample Preparation/Analysis

Balance Id: 12445

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

Pipet #: _____

AnalyDueDate: 10/01/2007

Sep1 DT/Tm Tech: 9-19-07

Batch: 7240318 pCi/L
 SEQ Batch, Test: None

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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J5QRW1AD-MBLK:								
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B			
J5QRW1AE-MLCS:								
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B			
J5QRW1AF-IBLK:								
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B			
J5QRW1AG-IBLK:								
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B			

Approved By _____ Date: _____

05

TAL RICHLAND

9/19/2007 3:02:24 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 09/28/2007 **W05221**

Sep1 DT/Tm Tech:

Batch: 7240314 WATER ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ClarkR



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 J44QC-1-AC J7H170249-1-SAMP 08/15/2007 09:42	26.70g,in							
<p>AmtRec: 20ML,500ML,3XLP #Containers: 5 Scr: Alpha: 8.33E-04 uCi/Sa Beta: -2.86E-05 uCi/Sa</p>								
2 J44QH-1-AC J7H170249-2-SAMP 08/15/2007 10:32	26.50g,in							
<p>AmtRec: 20ML,500ML,3XLP #Containers: 5 Scr: Alpha: 6.67E-04 uCi/Sa Beta: -5.63E-04 uCi/Sa</p>								
3 J44QT-1-AD J7H170249-3-SAMP 08/15/2007 12:12	26.60g,in							
<p>AmtRec: 20ML,2X500MLP,4LP #Containers: 4 Scr: Alpha: 5.79E-06 uCi/Sa Beta: -9.14E-07 uCi/Sa</p>								
4 J44Q8-1-AC J7H170249-4-SAMP 08/15/2007 11:29	26.80g,in							
<p>AmtRec: 20ML,2X500MLP #Containers: 3 Scr: Alpha: 6.83E-05 uCi/Sa Beta: 5.73E-05 uCi/Sa</p>								
5 J44RK-1-AD J7H170251-1-SAMP 08/15/2007 09:17	26.20g,in							
<p>AmtRec: 20ML,2X500ML,4LP #Containers: 4 Scr: Alpha: 9.12E-07 uCi/Sa Beta: 3.95E-07 uCi/Sa</p>								
6 J44RM-1-AC J7H170251-2-SAMP 08/15/2007 10:11	27.50g,in							
<p>AmtRec: 20ML,500ML,3XLP #Containers: 5 Scr: Alpha: 2.69E-04 uCi/Sa Beta: 9.67E-06 uCi/Sa</p>								
7 J44RP-1-AC J7H170251-3-SAMP 08/15/2007 11:59	27.00g,in							
<p>AmtRec: 20ML,500ML,3XLP #Containers: 5 Scr: Alpha: 7.72E-05 uCi/Sa Beta: 1.82E-04 uCi/Sa</p>								

106

TAL RICHLAND

9/19/2007 3:02:26 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabDH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 09/28/2007

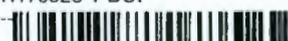
Sep1 DT/Tm Tech:

Batch: 7240314 WATER ug/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,ClarkR

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 J44RQ-1-AC J7H170251-4-SAMP 08/15/2007 11:18	26.30g,in							
								
			AmtRec: 20ML,500ML,3XLP	#Containers: 5	Scr:	Alpha: 2.80E-04 uCi/Sa	Beta: -1.05E-04 uCi/Sa	
9 J45GF-1-AD J7H170328-1-SAMP 08/16/2007 11:19	26.00g,in							
								
			AmtRec: 20ML,2X500MLP,2X4LP	#Containers: 5	Scr:	Alpha: -1.65E-03 uCi/Sa	Beta: 1.69E-03 uCi/Sa	
10 J45GF-1-AE-X J7H170328-1-DUP 08/16/2007 11:19	27.50g,in							
								
			AmtRec: 20ML,2X500MLP,2X4LP	#Containers: 5	Scr:	Alpha: -1.65E-03 uCi/Sa	Beta: 1.69E-03 uCi/Sa	
11 J45JL-1-AD J7H170328-2-SAMP 08/16/2007 11:19	26.00g,in							
								
			AmtRec: 20ML,2X500MLP,2X4LP	#Containers: 5	Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: 1.23E-04 uCi/Sa	
12 J45JL-1-AE-S J7H170328-2-MS 08/16/2007 11:19	26.10g,in		UNSF3960 09/06/07.pd 01/23/07.t					
								
			AmtRec: 20ML,2X500MLP,2X4LP	#Containers: 5	Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: 1.23E-04 uCi/Sa	
13 J45KA-1-AC J7H170328-5-SAMP 08/16/2007 12:36	26.00g,in							
								
			AmtRec: 20ML,500MLP,2X4LP	#Containers: 4	Scr:	Alpha: 1.18E-03 uCi/Sa	Beta: 1.04E-03 uCi/Sa	
14 J5QKQ-1-AA-B J7H280000-314-BLK 08/16/2007 11:19	26.80g,in							
								
			AmtRec:	#Containers: 1	Scr:	Alpha:	Beta:	

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

ISV - Insufficient Volume for Analysis

WO Cnt: 14
Prep_SamplePrep v4.8.26

107

TAL RICHLAND

9/19/2007 3:02:27 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 09/28/2007

Sep1 DT/Tm Tech:

Batch: 7240314
 SEQ Batch, Test: None

ug/L

Sep2 DT/Tm Tech:

Prep Tech: ,ClarkR



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:
15 J5QKQ-1-AC-C J7H280000-314-LCS 08/16/2007 11:19		25.30g,in	UNSF3961 09/06/07,pd 01/23/07,r					
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16 J5QKQ-1-AD-C J7H280000-314-LCS 08/16/2007 11:19		25.90g,in	UNSC1907 08/06/07,pd 04/28/06,r					
		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments: pH < 2.0 RC 09/19/07

All Clients for Batch:

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

J44QC1AC-SAMP Constituent List:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
J45JL1AE-MS:					
J5QKQ1AA-BLK:					
Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:
J5QKQ1AC-LCS:					
Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
J5QKQ1AD-LCS:					
Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
J44QC1AC-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J45JL1AE-MS:					
Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J5QKQ1AA-BLK:					
Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J5QKQ1AC-LCS:					
Uncert Level (#s): 2	Decay to SaDt: Y		Blk Subt.: N	Sci.Not.: Y	ODRs: B
J5QKQ1AD-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
 Prep_SamplePrep v4.8.26

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10/1/2007 3:11:10 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/1/2006, 10/6/2007, Batch: '7240315', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240315				
AC	CalcC	ClarkR	9/14/2007 2:36:01 PM	
SC		wagarr	IsBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		ClarkR	InPrep 9/14/2007 2:36:01 PM	RICH-RC-5017 Revision 6
SC		ClarkR	Prep1C 9/14/2007 2:56:48 PM	RICH-RC-5016 REVISION 7
SC		ManisD	InSep1 9/14/2007 3:00:48 PM	RICH-RC-5006 REV 7
SC		ManisD	Sep1C 9/20/2007 4:02:44 PM	RICH-RC-5006 REV 7
SC		StringerR	InCnt1 9/20/2007 4:30:07 PM	RICH-RD-0007 REVISION 6
SC		BlackCL	Cnt1C 9/21/2007 6:04:39 AM	RICH-RD-0007 REVISION 6
SC		ManisD	Sep2C 9/28/2007 11:28:05 AM	RICH-RC-5071 REV 5
SC		StringerR	InCnt1 9/28/2007 11:29:47 AM	RICH-RD-0003 REVISION 5
SC		BlackCL	CalcC 9/30/2007 8:41:28 AM	RICH-RD-0003 REVISION 5
AC		ClarkR	9/14/2007 2:56:48 PM	
AC		ManisD	9/14/2007 3:00:48 PM	
AC		ManisD	9/20/2007 4:02:44 PM	
AC		StringerR	9/20/2007 4:30:07 PM	
AC		BlackCL	9/21/2007 6:04:39	
AC		ManisD	9/28/2007 11:28:05	
AC		StringerR	9/28/2007 11:29:47	
AC		BlackCL	9/30/2007 8:41:28	

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

10/1/2007 3:38:16 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/1/2006, 10/6/2007, Batch: '7240316', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
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7240316				
AC	CalcC	ClarkR	9/20/2007 12:13:52	
SC		wagarr	isBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		ClarkR	InPrep 9/20/2007 12:13:52 PM	RICH-RC-5017 Revision 6
SC		ClarkR	Prep1C 9/20/2007 1:34:35 PM	RICH-RC-5017 REVISION 6
SC		BockJ	InPrep2 9/21/2007 7:33:33 AM	RICH-RC-5017 REVISION 6
SC		BockJ	Prep2C 9/24/2007 9:46:22 AM	RICH-RC-5017 REVISION 6
SC		BlackCL	InCnt1 9/24/2007 9:53:23 AM	RICH-RD-0007 REVISION 6
SC		DAWKINSO	CalcC 9/24/2007 7:18:43 PM	RICH-RD-0007 REVISION 6
SC		DAWKINSO	InCnt1 9/27/2007 5:35:12 PM	RICH-RD-0007 REVISION 6
SC		StringerR	CalcC 9/28/2007 9:07:27 AM	RICH-RD-0007 REVISION 6
AC		ClarkR	9/20/2007 1:34:35 PM	
AC		BockJ	9/21/2007 7:33:33	
AC		BockJ	9/24/2007 9:46:22	
AC		BlackCL	9/24/2007 9:53:23	
AC		DAWKINSO	9/24/2007 7:18:43 PM	
AC		DAWKINSO	9/27/2007 5:35:12 PM	
AC		StringerR	9/28/2007 9:07:27	

AC: Accepting Entry SC: Status Change

STL Richland
Richland Wa.

10/4/2007 11:36:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 10/4/2006, 10/9/2007, Batch: '7240313', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240313				
AC	CalcC	ClarkR	9/24/2007 10:35:32	
SC		wagarr	IsBatched	8/28/2007 3:13:11 PM
SC		ClarkR	InPrep	9/24/2007 10:35:32 AM
SC		ClarkR	Prep1C	9/24/2007 11:11:42 AM
SC		BostedD	InPrep2	9/24/2007 11:53:57 AM
SC		BostedD	Prep2C	9/26/2007 11:33:30 AM
SC		BlackCL	InCnt1	9/26/2007 11:43:17 AM
SC		DAWKINSO	CalcC	9/26/2007 8:50:22 PM
AC		ClarkR	9/24/2007 11:11:42	ICOC_RADCALC v4.8.26
AC		BostedD	9/24/2007 11:53:57	RICH-RC-5014 Revision 7
AC		BostedD	9/26/2007 11:33:30	RICH-RC-5016 REVISION 7
AC		BlackCL	9/26/2007 11:43:17	RICH-RC-5016 REVISION 7
AC		DAWKINSO	9/26/2007 8:50:22 PM	RICH-RC-5016 REVISION 7

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

10/9/2007 1:46:30 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/9/2006, 10/14/2007, Batch: '7240317', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240317				
AC	CalcC	FABREM	9/20/2007 2:07:13 PM	
SC		wagarr	IsBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		FABREM	InPrep 9/20/2007 2:07:13 PM	rich-rc-5016 rEVISION 7
SC		FABREM	Sep1C 9/27/2007 12:48:39 PM	RICH-RC-5069 REVISION 6
SC		StringerR	InCnt1 9/27/2007 12:55:43 PM	RICH-RD-0001 REVISION 4
SC		BlackCL	CalcC 10/7/2007 10:17:50 AM	RICH-RD-0001 REVISION 4
SC		StringerR	CalcC 10/7/2007 10:56:41 AM	RICH-RD-0003 REVISION 5
AC		FABREM	9/27/2007 12:48:39	
AC		StringerR	9/27/2007 12:55:43	
AC		BlackCL	10/7/2007 10:17:50	
AC		StringerR	10/7/2007 10:56:41	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

9/19/2007 4:23:53 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/19/2006, 9/24/2007, Batch: '7240303', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240303				
AC	CalcC	ClarkR	9/13/2007 1:56:28 PM	
SC		wagarr	IsBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		ClarkR	InPrep 9/13/2007 1:56:28 PM	RICH-RC-5015 Revision 6
SC		FABREM	Sep1C 9/17/2007 1:17:23 PM	RICH-RC-5065 REVISION 6
SC		BlackCL	InCnt1 9/17/2007 1:19:04 PM	RICH-RD-0001 REVISION 4
SC		BlackCL	CalcC 9/19/2007 7:43:54 AM	RICH-RD-0001 REVISION 4
AC		FABREM	9/17/2007 1:17:23 PM	
AC		BlackCL	9/17/2007 1:19:04 PM	
AC		BlackCL	9/19/2007 7:43:54	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

10/1/2007 3:14:04 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/1/2006, 10/6/2007, Batch: '7240318', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240318				
AC	CalcC	McDowellD	9/18/2007 9:19:27	
SC		wagarr	IsBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		McDowellD	InSep1 9/18/2007 9:19:27 AM	RICH-RC-5007 REVISION 6
SC		McDowellD	Sep1C 9/20/2007 2:11:47 PM	RICH-RC-5007 REVISION 6
SC		StringerR	InCnt1 9/20/2007 2:47:31 PM	RICH-RD-0001 REVISION 4
SC		StringerR	CalcC 9/23/2007 9:38:14 AM	RICH-RD-0001 REVISION 4
AC		McDowellD	9/20/2007 2:11:47 PM	
AC		StringerR	9/20/2007 2:47:31 PM	
AC		StringerR	9/23/2007 9:38:14	

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.

9/28/2007 9:30:04 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/28/2006, 10/3/2007, Batch: '7240314', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7240314				
AC		Cnt1C	ClarkR 9/19/2007 2:47:20 PM	
SC		wagarr	IsBatched 8/28/2007 3:13:11 PM	ICOC_RADCALC v4.8.26
SC		ClarkR	InPrep 9/19/2007 2:47:20 PM	rich-rc-5016 rEVISION 7
SC		ClarkR	Prep1C 9/19/2007 3:02:31 PM	RICH-RC-5015 REVISION 6
SC		BockJ	InPrep2 9/20/2007 8:50:51 AM	RICH-RC-5015 REVISION 6
SC		BockJ	Prep2C 9/24/2007 2:02:54 PM	RICH-RC-5015 REVISION 6
SC		NelsonT	Cnt1C 9/26/2007 3:26:57 PM	RICH-RC-5058 REV 7
AC		ClarkR	9/19/2007 3:02:31 PM	
AC		BockJ	9/20/2007 8:50:51	
AC		BockJ	9/24/2007 2:02:54 PM	
AC		NelsonT	9/26/2007 3:26:57 PM	

AC: Accepting Entry; SC: Status Change

STL Richland
Richland Wa.