TESTAMERICA RICHLAND

Analytical Data Package Prepared For

Fluor Hanford

RECEIVED MAY 22 2008 EDMC

Radiochemical Analysis By

TAL Richland TARL

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

Data Package Contains 66 Pages

Report Nbr: 37852

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05260	G08-010	B1PPP2	J7K010365-1	KAC9R1AA	9KAC9R10	7317606
		B1PPP4	J7K010365-2	KAC941AA	9KAC9410	7317606
		B1PPP6	J7K010365-3	KADA61AA	9KADA610	7317606
		B1PPP8	J7K010365-4	KADCF1AA	9KADCF10	7317606
	S08-011	B1R498	J7K050151-1	KAJJ41AA	9KAJJ410	7317605
		B1R498	J7K050151-1	KAJJ41AC	9KAJJ410	7317606
		B1R4B7	J7K050151-2	KAJKK1AA	9KAJKK10	7317605
		B1R4B7	J7K050151-2	KAJKK1AC	9KAJKK10	7317606
		B1R4B4	J7K050151-3	KAJKV1AA	9KAJKV10	7317605
		B1R4B4	J7K050151-3	KAJKV1AC	9KAJKV10	7317606
	G08-011	B1R130	J7K050173-1	KAJP11AA	9KAJP110	7317606
		B1R129	J7K050173-2	KAJP71AA	9KAJP710	7317606
		B1R135	J7K050173-3	KAJP91AA	9KAJP910	7317606
		B1R134	J7K050173-4	KAJQF1AA	9KAJQF10	7317606
		B1R133	J7K050173-5	KAJQJ1AA	9KAJQJ10	7317606

RECEIVED DEC 27 2007

Comments:

0077553

Report Nbr: 37852

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05260	S08-011	B1R4F7	J7K060168-1	KAK741AA	9KAK7410	7317605
		B1R4F7	J7K060168-1	KAK741AC	9KAK7410	7317606
		B1R4H1	J7K060168-2	KAK771AA	9KAK7710	7317605
		B1R4H1	J7K060168-2	KAK771AC	9KAK7710	7317606
		B1R4H0	J7K060168-3	KAK8C1AA	9KAK8C10	7317605
		B1R4H0	J7K060168-3	KAK8C1AC	9KAK8C10	7317606
	I08-009	B1R3M2	J7K070346-1	KAP471AA	9KAP4710	7317608
	G08-011	B1R144	J7K070358-1	KAP7G1AA	9KAP7G10	7317606
		B1R146	J7K070358-2	KAP7N1AA	9KAP7N10	7317606
		B1R128	J7K070358-3	KAP7V1AA	9KAP7V10	7317606

Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352
December 21, 2007

Attention: Steve Trent

SAF Number	:	G08-010, S08-011, G08-011, I08-009
Date SDG Closed	:	November 7, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05260
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between November 1, 2007 and November 7, 2007 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1PPP2	KAC9R	11/01/07	WATER
B1PPP4	KAC94	11/01/07	WATER
B1PPP6	KADA6	11/01/07	WATER
B1PPP8	KADCF	11/01/07	WATER
B1R498	KAJJ4	11/02/07	WATER
B1R4B7	KAJKK	11/02/07	WATER
B1R4B4	KAJKV	11/02/07	WATER
B1R130	KAJP1	11/02/07	WATER
B1R129	KAJP7	11/02/07	WATER
B1R135	KAJP9	11/02/07	WATER
B1R134	KAJQF	11/02/07	WATER
B1R133	KAJQJ	11/02/07	WATER
B1R4F7	KAK74	11/05/07	WATER
B1R4H1	KAK77	11/05/07	WATER

B1R4H0	KAK8C	11/05/07	WATER
B1R3M2	KAP47	11/07/07	WATER
B1R457	KAP6E	11/07/07	WATER
B1R144	KAP7G	11/07/07	WATER
B1R146	KAP7N	11/07/07	WATER
B1R128	KAP7V	11/07/07	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in. Sample B1R457 was cancelled by the client on 11/8/07.

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
Sample B1R4B4 was analyzed with a reduced aliquot based on the screening result. Except as noted, the LCS, batch blank, samples and sample duplicate (B1R4F7) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1PPP4, B1PPP6, B1PPP8, B1R498, B1R130, B1R129, B1R135, B1R134, B1R133, B1R144, B1R146, B1R498 (DUP) were analyzed with reduced aliquots base on screening results.

Samples B1PPP2, B1PPP4, B1PPP6, B1PPP8, B1R498, B1R4B7, B1R4B4, B1R130, B1R129, B1R135, B1R134, B1R133, B1R4F7, B1R4H1, B1R4H0, B1R144, B1R146, B1R128, B1R498 DUP did not meet the CRDL, however the sample MDAs are greater than the CRDL.

Except as noted, the LCS, batch blank, samples and sample duplicate (B1R498) results are within contractual requirements

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The analyst forgot to run a CCV and CCB at the end of the batch for W05257. W05260 was run later in the afternoon with the same standards and the CCV and CCB had acceptable results. The proposed resolution was accepting the results for W05257 based on the CCV and CCB results from W05260. The client agreed to the proposed resolution, IRF Tracking Number 07-118, on 11/15/07. Except as noted, the LCS, batch blank, samples, sample duplicate (B1R3M2), sample matrix spike (B1R3M2), and matrix spike duplicate results (B1R3M2) are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
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 = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

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

12/21/2007 10:03:09 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37852 File Name: h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.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:
9KAC9410	B1PPP4		MW6-SBB-A1	G08-010	W05260				10/18/2007 09:35	11/01/2007 10:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	7.74E+03	pCi/L	4.4E+01	1.0E+03		3.19E+00	100.0	9310_ALPHABETA	1.784E-01	L	12/16/2007 08:58	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:
9KAC9R10	B1PPP2		MW6-SBB-A1	G08-010	W05260				10/18/2007 09:35	11/01/2007 09:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	1.30E+03	pCi/L	1.7E+01	1.7E+02		2.91E+00	100.0	9310_ALPHABETA	2.002E-01	L	12/16/2007 08:58	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:
9KADA610	B1PPP6		MW6-SBB-A1	G08-010	W05260				10/18/2007 09:35	11/01/2007 10:52

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	1.73E+03	pCi/L	2.3E+01	2.2E+02		3.76E+00	100.0	9310_ALPHABETA	1.40E-01	L	12/16/2007 08:58	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:
9KADCF10	B1PPP8		MW6-SBB-A1	G08-010	W05260				10/18/2007 09:35	11/01/2007 11:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	4.43E+03	pCi/L	3.4E+01	5.6E+02		4.72E+00	100.0	9310_ALPHABETA	7.89E-02	L	12/16/2007 08:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAJJ410	B1R498		MW6-SBB-A1	S08-011	W05260					11/02/2007 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	4.81E+00	pCi/L	1.9E+00	2.2E+00		1.40E+00	100.0	9310_ALPHABETA	2.002E-01	L	12/17/2007 12:21	I
7317606	BETA	12587-47-2	2.60E+03	pCi/L	3.0E+01	3.3E+02		4.53E+00	100.0	9310_ALPHABETA	1.199E-01	L	12/16/2007 08:58	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:
9KAJKK10	B1R4B7		MW6-SBB-A1	S08-011	W05260					11/02/2007 10:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	2.54E+00	pCi/L	1.3E+00	1.5E+00		1.40E+00	100.0	9310_ALPHABETA	2.00E-01	L	12/17/2007 12:21	I
7317606	BETA	12587-47-2	7.56E+00	pCi/L	1.7E+00	2.0E+00		2.68E+00	100.0	9310_ALPHABETA	1.999E-01	L	12/16/2007 08:58	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:
9KAJKV10	B1R4B4		MW6-SBB-A1	S08-011	W05260					11/02/2007 11:19

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

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37852 File Name: h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	2.27E+00	pCi/L	1.5E+00	1.6E+00		1.97E+00	100.0	9310_ALPHABETA	1.665E-01	L	12/17/2007 13:31	I
7317606	BETA	12587-47-2	1.11E+01	pCi/L	2.0E+00	2.4E+00		2.73E+00	100.0	9310_ALPHABETA	2.001E-01	L	12/16/2007 08:58	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:
9KAJP110	B1R130		MW6-SBB-A1	G08-011	W05260					11/02/2007 12:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	4.19E+03	pCi/L	3.5E+01	5.3E+02		3.92E+00	100.0	9310_ALPHABETA	1.402E-01	L	12/16/2007 08:58	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:
9KAJP710	B1R129		MW6-SBB-A1	G08-011	W05260					11/02/2007 12:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	2.66E+03	pCi/L	2.3E+01	4.7E+02		3.55E+00	100.0	9310_ALPHABETA	9.59E-02	L	12/16/2007 08:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAJP910	B1R135		MW6-SBB-A1	G08-011	W05260					11/02/2007 11:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	4.92E+03	pCi/L	3.6E+01	6.2E+02		4.83E+00	100.0	9310_ALPHABETA	7.79E-02	L	12/16/2007 08:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAJQF10	B1R134		MW6-SBB-A1	G08-011	W05260					11/02/2007 11:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	4.91E+03	pCi/L	4.1E+01	6.3E+02		6.26E+00	100.0	9310_ALPHABETA	6.11E-02	L	12/16/2007 08:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAJQJ10	B1R133		MW6-SBB-A1	G08-011	W05260					11/02/2007 10:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	1.75E+03	pCi/L	2.7E+01	2.2E+02		5.43E+00	100.0	9310_ALPHABETA	1.052E-01	L	12/16/2007 08:58	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:
9KAK7410	B1R4F7		MW6-SBB-A1	S08-011	W05260					11/05/2007 09:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	1.52E+00	pCi/L	1.1E+00	1.2E+00	U	1.57E+00	100.0	9310_ALPHABETA	1.998E-01	L	12/17/2007 13:31	I
7317606	BETA	12587-47-2	1.21E+01	pCi/L	2.0E+00	2.8E+00		2.75E+00	100.0	9310_ALPHABETA	2.001E-01	L	12/16/2007 08:58	I

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

12/21/2007 10:03:10 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 37852 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.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:
9KAK7710	B1R4H1		MW6-SBB-A1	S08-011	W05260					11/05/2007 08:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	-8.14E-02	pCi/L	2.2E-01	2.2E-01	U	9.10E-01	100.0	9310_ALPHABETA	2.003E-01	L	12/17/2007 13:31	I
7317606	BETA	12587-47-2	4.34E+00	pCi/L	1.5E+00	1.6E+00		2.69E+00	100.0	9310_ALPHABETA	2.00E-01	L	12/16/2007 08:58	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:
9KAK8C10	B1R4H0		MW6-SBB-A1	S08-011	W05260					11/05/2007 10:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317605	ALPHA	12587-46-1	4.90E-01	pCi/L	7.7E-01	7.8E-01	U	1.60E+00	100.0	9310_ALPHABETA	2.001E-01	L	12/17/2007 15:39	I
7317606	BETA	12587-47-2	1.41E+01	pCi/L	2.2E+00	2.8E+00		2.86E+00	100.0	9310_ALPHABETA	2.00E-01	L	12/16/2007 08:58	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:
9KAP7G10	B1R144		MW6-SBB-A1	G08-011	W05260					11/07/2007 13:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	1.90E+01	pCi/L	3.7E+00	4.4E+00		5.34E+00	100.0	9310_ALPHABETA	1.053E-01	L	12/16/2007 10:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAP7N10	B1R146		MW6-SBB-A1	G08-011	W05260					11/07/2007 12:17

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	1.94E+03	pCi/L	2.4E+01	2.5E+02		3.61E+00	100.0	9310_ALPHABETA	1.399E-01	L	12/16/2007 10:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KAP7V10	B1R128		MW6-SBB-A1	G08-011	W05260					11/07/2007 12:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7317606	BETA	12587-47-2	5.69E+02	pCi/L	1.1E+01	7.3E+01		2.69E+00	100.0	9310_ALPHABETA	2.001E-01	L	12/16/2007 10:44	I

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

Friday, December 21, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id: KA67R1AB **Sdg/Rept Nbr:** W05260 37852 **Collection Date:** 11/05/2007 09:51

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 11/05/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AS	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
7317605	ALPHA	-1.01E-01	pCi/L	2.2E-01	U	9.41E-01	100.0		9310_ALPHAB	1.999E-01	12/17/2007				D
BLK	12587-46-1			2.2E-01						L	15:39				

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.

1

Friday, December 21, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id: KA67T1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05260 37852
Matrix: WATER WATER
QC Type: BLK

Collection Date: 11/02/2007 10:10
Sample On Date:
Received Date: 11/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AU	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
7317606	BETA	8.28E-01	pCi/L	9.3E-01	U	1.79E+00	100.0		9310_ALPHAB	1.999E-01	12/16/2007				D
BLK	12587-47-2			9.2E-01						L	09:57				

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

Friday, December 21, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id:	KA67R1CS	**Sdg/Rept Nbr:**	W05260 37852	**Collection Date:**	11/05/2007 09:51
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	11/05/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AT	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
7317605	ALPHA	1.92E+01	pCi/L	5.3E+00		8.06E-01	100.0	2.28E+01	9310_ALPHAB	1.998E-01	12/17/2007			70	D
BS	12587-46-1			2.8E+00				84.4		L	15:39			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.

Friday, December 21, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id:	KA67T1CS	**Sdg/Rept Nbr:**	W05260 37852	**Collection Date:**	11/02/2007 10:10
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	11/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AV	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
7317606	BETA	2.78E+01	pCi/L	4.2E+00		1.69E+00	100.0	2.26E+01	9310_ALPHAB	2.004E-01	12/16/2007			70	D
BS	12587-47-2			1.8E+00				122.9		L	09:57			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.

Friday, December 21, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id:	KAJJ41DR	**Sdg/Rept Nbr:**	W05260 37852	**Collection Date:**	11/02/2007 10:10
Client Id:	B1R498	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	11/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-011	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
7317606	BETA	2.58E+03	pCi/L	3.3E+02		4.34E+00	100.0		9310_ALPHAB	1.201E-01	12/16/2007	.6	0.1		D
DUP	12587-47-2	2.60E+03		3.0E+01						L	08:58	20.0	3		

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

Friday, December 21, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05260.Edd, h:\Reportdb\edd\FeadIV\Rad\37852.Edd

Lab Sample Id:	KAK741DR	**Sdg/Rept Nbr:**	W05260 37852	**Collection Date:**	11/05/2007 09:51
Client Id:	B1R4F7	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	11/05/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-011	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7317605	ALPHA	3.11E-01	pCi/L	6.2E-01	U	1.35E+00	100.0		9310_ALPHAB	2.00E-01	12/17/2007	132.0	2.8		D
DUP	12587-46-1	1.52E+00		6.1E-01						L	13:31	20.0	3		

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

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	J. Peterson	Calibration Curve Information				SOP Information		BATCH #	7317608
Start Date:	11/6/2007		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05260
Start Time:	16:00	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	11/6/2007	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.470			Instrument Information	
		Std. 3	0.750	0.375	0.707	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.390			Wavelength:	540
		Std 5	2.000	1.000	1.831			R Squared	0.99984
Date:	11/14/07	Standard Volume (mL):			100.000			Slope:	1.83545
		Date of Curve:			11/6/2007			Intercept:	0.00634

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-07-0139	Cr-07-0140		Cr-07-0139		Cr-07-0139	
Prep Date:	11/06/07	11/06/07		11/06/07		11/06/07	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	11/07/07	11/07/07		11/07/07		11/07/07	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.945	0.000	0.945	1	0.5114	0.511	102.28%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
KA67W-1AA	n/a	Prep Blank	100.000	0.000		0.000	1	<MDL	<MDL	
KA67W-1AC	n/a	LCS	100.000	0.940		0.940	1	0.5087	0.509	101.74%
KAP47-1AA	B1R3M2	Sample	100.000	0.056	0.040	0.016	1	0.0053	0.005	
KAP47-1AC-S	B1R3M2-MS	MS	100.000	0.554	0.040	0.514	1	0.2766	0.2772	103.10%
KAP47-1AD-D	B1R3M2-MSD	MSD	100.000	0.548	0.040	0.508	1	0.2733	~~0.273~~ 0.260	101.86%
KAP47-1AE-X	B1R3M2-DUP	Duplicate	100.000	0.056	0.040	0.016	1	0.0053	0.005	
D	SVS 12/21/07		100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.880		0.880	1	0.4760	0.476	95.20%
n/a	n/a	CCB	100.000	0.000		0.000	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SVS 12/21/07

TESTAMERICA RICHLAND 17

SEVERN STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

12/18/2007 1:45:47 PM

Lot No., Due Date: J7K050151,J7K060168; 12/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7317605; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05260; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => KAJKV1AA 166.50<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> KAK741AD ALPHA 130.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => KAJJ41AA ALPHA 4.8E+00 L:1.4E+00 KAJKK1AA ALPHA 2.5E+00 L:1.4E+00 KAJKV1AA ALPHA 2.3E+00 L:2.0E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Lisa Anderson **Date** 12/15/07

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 7317605

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: Jodie Date: 12/20/07

SEVERN STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

12/18/2007 9:47:14 AM

Lot No., Due Date: J7K010365,J7K050151,J7K050173,J7K060168,J7K070358; 12/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7317606; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05260; WATER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:
NCM# 10-11495

First Level Review Eric Harbinson **Date** 12-18-2007

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 7317606

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

Comments on any "No" response: see NCM

Second Level Review: Jodie Co Date: 12/18/07

Clouseau
Nonconformance Memo

TestAmerica

NCM #: 10-11495
NCM Initiated By: David Harbinson
Date Opened: 12/18/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J7K010365 (1,2,3,4), J7K050151 (1,2,3), J7K050173 (1,2,3,4,5), J7K060168 (1,2,3), J7K070358 (1,2,3), J7K130000 (606),
QC Batches: 7317606,

Nonconformance: MDA not met
Subcategory: Sample size reduced due to high residue mass

Problem Description / Root Cause

Name	Date	Description
David Harbinson	12/18/2007	Samples did not met CRDL. Sample aliquots was reduced due to high residue mass. Sample Mda greater than CRDL. Accept data.

Corrective Action

Name	Date	Corrective Action
David Harbinson	12/18/2007	N/A

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 12/18/2007

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **7317608**

Lab Sample Numbers or WQ5260 J7K670346

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?				✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis				
1 Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?			✓	✓
2 Were all sample holding times met?	✓			✓
D. QC Samples				
1 All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: [signature] Date: 11/14//2007

Second-Level Review: [signature] Date: 12/21/7

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

IRF Tracking Number: 07-118
SAF No.: I08-005
Date: November 15, 2007
SDG: W05257
Sample No.(s) B1R199
Submitted By: Sherryl Adam

Submitted To: **Steve Trent (FH)**

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

Phone No. **509-373-5869**
Fax No. 866-252-5816

ISSUE	PROPOSED RESOLUTION
On this Cr-VI analysis the tech forgot to run a CCV and CCB at the end. W05260 was run later that afternoon with the same standards. The CCV and CCB had acceptable results.	Accept results based on the CCV and CCB results from second batch.

BHI/FH/PNNL COMMENTS -

Accept proposed resolution and note in the case narrative. Also, please let us know what the lab is doing to prevent this type of occurrence in the future. This is the second IRF in two days documenting missed QC.

Heidi Hampt 11/15/07
Signature and date

Adam, Sherryl

From: Hampt, Heidi [Heidi_Hampt@RL.gov]
Sent: Thursday, November 15, 2007 2:04 PM
To: Adam, Sherryl; Trent, Stephen J; Anastos, Heather L
Subject: RE: IRF W05257/07-118
Attachments: 07-118.DOC

From: Adam, Sherryl [mailto:Sherryl.Adam@testamericainc.com]
Sent: Thursday, November 15, 2007 1:42 PM
To: Trent, Stephen J; Hampt, Heidi; Anastos, Heather L
Subject: IRF W05257

Steve et al,
Please see the attached IRF and advise us how to proceed. Thanks.

<<IRFW05257.DOC>>

Sherryl A. Adam
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
(formerly STL Richland)

2800 George Washington Way
Richland, WA 99354
Tel 509.375.3131 x164 | Fax 509.375.5590
www.testamericainc.com www.stl-inc.com

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K010365 W05260 DUE 121707 KAC9R

C.O.C. # G08-010-20

Collector: White, Julian	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, OCTOBER 2007		Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPP2		W	11-1-07	0935	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPP2		W	11-1-07	0935	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RD Julian			11-1-07 1535		LWLANE	TAL-R	110107 1535
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K010365 W05260 DUE 121707 KAC94

C.O.C. # G08-010-22

Page 1 of 1

Collector: White, Dalton	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, OCTOBER 2007		Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPP4		W	11-1-07	1019	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPP4		W	11-1-07	1019	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
C. Dalton			11-1-07 1535		LJLANE	TAL-R	110107 1535
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K010365 W05260 DUE 121707 KADA6

C.O.C. # G08-010-24

Collector: White, Julian	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB OCTOBER 2007		Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPP6		W	11-1-07	1052	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPP6		W	11-1-07	1052	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R.D. Sidley / [signature]	11-1-07 1535	[signature] LJ LANE TAL-R	110107 1535

Matrix *

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

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

TESTAMERICA RICHLAND

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K010365 W05260 DUE 121707 KADCF

C.O.C. # G08-010-26

Page 1 of 1

Collector: White, Julian	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB OCTOBER 2007		Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPP8		W	11-1-07	1110	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPP8		W	11-1-07	1110	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R.D. Julian			11-1-07 1535		LULANE	TAL-R	110107 1535
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

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Sample Check-in List

DUE 121707

Date/Time Received: 110107 1535

Client: PGW SDG #: W05260 NA[ ] SAF #: G08-010 NA [ ]

Work Order Number: J7K010365 Chain of Custody # G08-010-20,-22,-24,-26

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ___ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: RJL Date: 110107

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S08-011-181
	JTK050151 W05260 Due 12-17-07	Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV NOVEMBER 2007	HNF-N-506-12	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R498		W	11-2-07	1010	1x20-mL P	Activity Scan	None
B1R498		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						KAJ54	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
			NOV 02 2007 1330	Fluor Hanford	D.S. BREWINGTON	DR Brewington	NOV 02 2007 1330
Fluor Hanford	D.S. BREWINGTON	DR Brewington	NOV 02 2007 1434				NOV 02 2007 1434
					LJLANE	TAL-R	
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

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FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J7K050151 W05260 Due 12-17-07	C.O.C. # S08-011-199 Page 1 of 1

Collector: Steve Overdahl, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, NOVEMBER 2007	HNF-N-506 11	Ice Chest No.: SUK 538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4B7		W	11-2-07	1015	1x20-mL P	Activity Scan	None
B1R4B7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						KATKK	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Steve Overdahl, Fluor Hanford			1330 NOV 0 2 2007	Fluor Hanford D. R. BREWINGTON	D.R. Brewington		1330 NOV 0 2 2007
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		1434 NOV 0 2 2007		LLANE TAL-R		1434 NOV 0 2 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K050151 W05260 Due 12-17-07

C.O.C. # **S08-011-193**

Page 1 of 1

Collector Steve Overdahl Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV NOVEMBER 2007	HNF-N-506 11	**Ice Chest No.** 5UL 538 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4B4		W	11-2-07	1119	1x20-mL P	Activity Scan	None
B1R4B4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						KAJKV	

Relinquished By: Steve Overdahl Fluor Hanford (Print) (Sign)	Date/Time 1330 NOV 0 2 2007	Received By: Fluor Hanford D. R. BREWINGTON (Print) DR Brewington (Sign)	Date/Time 1330 NOV 0 2 2007
Relinquished By: Fluor Hanford D. R. BREWINGTON D.R. Brewington	Date/Time 1434 NOV 0 2 2007	Received By: LVLANE TAL-R	Date/Time 1434 NOV 0 2 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 11 2 07 1434

Client: PGW SDG#: W05260 NA[ ] SAF#: 508-011 NA [ ]

Work Order Number: J7K050151 Chain of Custody # 508-011-181,-199,-193

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ___ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 11 2 07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J7K050173 W05260 Due 12-17-07	C.O.C. # G08-011-5 Page 1 of 1

Collector	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB.NOVEMBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R130		W	11/2/07	1239	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R130		W	1	1	1x20-mL P	Activity Scan	None
						KAJPI	

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Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford R. T. SICKLE Print / Sign	NOV 02 2007 1330	Fluor Hanford D. R. BREWINGTON Print / Sign D. R. Brewington	NOV 02 2007 1330
Fluor Hanford D. R. BREWINGTON D. R. Brewington	11-2-07 1434	LJLANE TAL-R	11-2-07 1434

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K050173 W05260 Due 12.17.07

C.O.C. # G08-011-4

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509 373 5869 **MSIN** **FAX**
SAF No. G08-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB.NOVEMBER 2007	HNF-N-506-5	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R129		W	11/2/07	1239	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R129		W	↓	↓	1x20-mL P	Activity Scan	None
						KAJP7	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	R. T. SICKLE		NOV 02 2007 1330	Fluor Hanford	D. R. BREWINGTON	D.R. Brewington	NOV 02 2007 1330
Fluor Hanford	D. R. BREWINGTON	D.R. Brewington	NOV 02 2007 1434	L LANE	TAL-SL		NOV 02 2007 1434
			Date/Time				Date/Time
			Date/Time				Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K050173 W05260 Due 12-17-07

C.O.C. # G08-011-10

Page 1 of 1

Collector	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB NOVEMBER 2007	HNF-N-506-5	Ice Chest No.: 6W-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R135		W	11/2/07	1127	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R135		W	1	1	1x20-mL P	Activity Scan	None
						KAJ P9	

Relinquished By	Date/Time	Received By	Date/Time
Print: Fluor Hanford R. T. SICKLE Sign:	NOV 02 2007 1330	Print: Fluor Hanford D. R. BREWINGTON Sign: D.R. Brewington	NOV 02 2007 1330
Print: Fluor Hanford D. R. BREWINGTON D.R. Brewington	NOV 02 2007 1434	LJ LANE TAL-R	NOV 02 2007 1434

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K050173 W05260 Due 12.17.07

C.O.C. # G08-011-9

Page 1 of 1

Collector	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB NOVEMBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R134		W	11/2/07	1127	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R134		W			1x20-mL P	Activity Scan	None
						KAJQF	

Relinquished By	Date/Time	Received By	Date/Time
Print: Fluor Hanford; Sign: [signature]	NOV 1 7 2007 1330	Print: D.R. BREWINGTON; Sign: D.R. Brewington	NOV 0 2 2007 1330
Print: R.D. SICKLE Fluor Hanford; Sign: D.R. BREWINGTON D.R. Brewington	NOV 0 2 2007 1434	Print: L.V. LANE; Sign: TAL-R	NOV 0 2 2007 1434

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K050173 W05260 Due 12-17-07

C.O.C. # G08-011-7

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509 373 5869 **MSIN** **FAX**
SAF No. G08-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title INR2-RB NOVEMBER 2007	HNF-N-506-5	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R133		W	11/2/07	1031	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R133		W	↓	↓	1x20-mL P	Activity Scan	None
						KAJQJ	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford R. T. SICKLE		1330 NOV 02 2007	Fluor Hanford D. R. BREWINGTON	D.R. Brewington	1330 NOV 02 2007
Fluor Hanford D. R. BREWINGTON	D.R. Brewington	1434 NOV 02 2007		LLANE TAL-R	1434 NOV 02 2007
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

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Sample Check-in List

Date/Time Received: 11 2 07 1434

Client: PGW SDG #: W05260 NA[ ] SAF #: 608-011 NA [ ]

Work Order Number: J7K050173 Chain of Custody # 608-011-5,-4,-10,9,-7

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ___ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 11 2 07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S08-011-2
	J7K060168 W05260 DUE 122007 KAK74	Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. NOVEMBER 2007	HNF-W-506-12 Pg 16	Ice Chest No.: SML-438 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4F7		W	11/5/07	0951	1x20-mL P	Activity Scan	None
B1R4F7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford D. R. BREWINGTON	NOV 05 2007 1515	LILANE TAL-R	NOV 05 2007 1515

Matrix *

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

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

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TESTAMERICA RICHLAND

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K060168 W05260 DUE 122007 KAK77

C.O.C. # S08-011-6

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. NOVEMBER 2007	HNF-N-506-12 Pg. 16	Ice Chest No.: SMC-438 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

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

11-8-07

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4H1		W	10/5/07	0930	1x20-mL P	Activity Scan	None
B1R4H1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford D.R. Brewington D.R. BREWINGTON	NOV 05 2007 1515	LJLANE TAL-R	NOV 05 2007 1515
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K060168 W05260 DUE 122007 KAK77

C.O.C. # S08-011-6

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, NOVEMBER 2007	HNF-N-506-12 Pg. 16	Ice Chest No.: SMC-438 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4H1		W	10/5/07	0830	1x20-mL P	Activity Scan	None
B1R4H1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D.R. Brewington	D.R. Brewington	NOV 05 2007 1515		LJLANE	TALR	NOV 05 2007 1515
Relinquished By: D.R. BREWINGTON			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

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TESTAMERICA RICHLAND

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K060168 W05260 DUE 122007 KAK8C

C.O.C. # S08-011-5

Page 1 of 1

Collector Fluor Hanford D. B. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S08-011	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV, NOVEMBER 2007	HWF-N-506-12 Pg. 16	Ice Chest No. SML 438 Temp.
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R4H0		W	11/5/07	1036	1x20-mL P	Activity Scan	None
B1R4H0		W	↓		1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. B. BREWINGTON		D. B. Brewington	NOV 15 2007 1515		LJ LANE TAL-R		NOV 15 2007 1515
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

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Sample Check-in List

DUE 12 2007

Date/Time Received: 11-5-07 1515

Client: PGW SDG #: W05260 NA[ ] SAF #: 508-011 NA [ ]

Work Order Number: JTK060168 Chain of Custody # 508-011-2,-6,-5,

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 11-5-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K070346 W05260 Due 12/31/07

C.O.C. # I08-009-70

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title ISRM, NOVEMBER 2007	HNF-IU-506-5	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica 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 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R3M2		W	11/7/07	0951	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
B1R3M2		W	↓	↓	1x20-mL P	Activity Scan	None
						KAP47	

11/7/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			1955 NOV 07 2007				1955 11/07
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

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Sample Check-in List

Date/Time Received: 110707 1505

Client: PGW SDG #: W05260 NA[ ] SAF #: I08-009 NA [ ]

Work Order Number: J7K070346 Chain of Custody # I08-009-70

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [✓] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [✓] Yes [X] No [ ]
3. Chain of Custody record present? NA [ ] Yes [X] No [ ]
4. Cooler Temperature: _____ NA [X] 5. Vermiculite/packing materials is NA [X] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [X] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - X Appropriate Sample Lables
9. Samples are:
   - X In Good Condition
   - _____ Broken
   - _____ Leaking
   - _____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [X] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 11.07.07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S08-011-113
	J7K070352 W05260 Due 12-21-07	Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. S08-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, NOVEMBER 2007	HNF-N-506-12 Pg 18	**Ice Chest No.** GW-1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R457		W	11/7/07	0906	1x20-mL P	Activity Scan	None
B1R457		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						KAPGE	
						Sample WAS Cancelled By Client on 11/8/07. See	
						Attached emAiled. SKS 12/21/07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		NOV 07 2007 1505	S. Smith	S. Smith		NOV 07 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 11.07.07 1505

Client: PGW **SDG #:** W05260 NA[ ] **SAF #:** 808-011 NA [ ]

Work Order Number: J7K070352 **Chain of Custody #** 808-011-113

Shipping Container ID: _____ **Air Bill #** _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ____ Custody Seals
   - ____ Hazard Lables
   - 1 Appropriate Sample Lables
9. Samples are:
   - 1 In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] **Date:** 11.07.07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

Wagar, Rhonda

From: Adam, Sherryl
Sent: Thursday, November 08, 2007 1:24 PM
To: Smith, Summer; Wagar, Rhonda
Subject: FW: Cancellation of analyses
Importance: High

FYI

From: Trent, Stephen J [mailto:Stephen_J_Trent@RL.gov]
Sent: Thursday, November 08, 2007 12:56 PM
To: Adam, Sherryl
Cc: Lynch, Sherry A; Hampt, Heidi; Waters-husted, Karen S
Subject: Cancellation of analyses
Importance: High

Sherryl,

Apparently there was a problem at one of the wells sampled yesterday. We need to have all analyses associated with the following sample cancelled -

B1R457

Sherry,

Can you generate SDR that documents the analyses were cancelled because the wrong sampling documentation was used during sampling of Well 199-H4-13.

Steve

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K070358 W05260 Due 12-21-07

C.O.C. # G08-011-18

Page 1 of 1

Collector: KB Hulse	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB NOVEMBER 2007	HNF-N-506-10 / #23	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R144		W	11-7-07	1359	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R144		W	11-7-07	1359	1x20-mL P	Activity Scan KAPTG	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford K. B. HULSE	KB Hulse	NOV 07 2007 1505		S. Smith	S. Smith	11707 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J7K070358 W05260 Due 12-21-07	C.O.C. # G08-011-20 Page 1 of 1

Collector: KB Hulse	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB NOVEMBER 2007	HNF-N-506-10 pg 23	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R146		W	11-7-07	1217	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R146		W	11-7-07	1217	1x20-mL P	Activity Scan	None
						KAF7N	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford K. B. HULSE	NOV 07 2007 1505	K. Smith S. Smith	11/07 1505

Matrix *

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

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

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7K070358 W05260 Due 12-21-07

C.O.C. # G08-011-2

Page 1 of 1

Collector: KB Hulse	Contact/Requester: Steve Trent	Telephone No.: 509 373 5869 MSIN FAX
SAF No.: G08-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB NOVEMBER 2007	HNF-N-506-10 / #23	Ice Chest No.: Cooler 1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R128		W	11-7-07	1251	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1R128		W	11-7-07	1251	1x20-mL P	Activity Scan	None
						KAPTV	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford K. B. HULSE	KB Hulse	NOV 07 2007 1505		S. Smith	S. Smith	11/07 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

TESTAMERICA RICHLAND

55

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 11.07.07 1505

Client: PGW SDG #: W05260 NA[ ] SAF #: G08011 NA [ ]

Work Order Number: JTK070358 Chain of Custody # G08-011-18, 20, 2

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - _____ Broken
   - _____ Leaking
   - _____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 11.07.07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA RICHLAND

12/12/2007 11:57:04 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 12/17/2007 W052160

Sep1 DT/Tm Tech:

Batch: 7317605 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD | Back g.

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KAJJ4-1-AA J7K050151-1-SAMP 11/02/2007 10:10		200.20g,in AmtRec: 20ML,LP #Containers: 2		1.5	32.4	50	10D	1247	12/17/07 RC	
								Scr:	Alpha: 2.99E-04 uCi/Sa	Beta: 7.64E-04 uCi/Sa 1.2E-01L
2 KAJKK-1-AA J7K050151-2-SAMP 11/02/2007 10:15		200.00g,in AmtRec: 20ML,LP #Containers: 2			28.3		10F			
								Scr:	Alpha: -6.09E-05 uCi/Sa	Beta: 2.66E-04 uCi/Sa
3 KAJKV-1-AA J7K050151-3-SAMP 11/02/2007 11:19		166.50g,in AmtRec: 20ML,LP #Containers: 2			34.4		10A	1357	12/17/07 RC	
								Scr:	Alpha: -5.05E-06 uCi/Sa	Beta: 2.23E-04 uCi/Sa
4 KAK74-1-AA J7K060168-1-SAMP 11/05/2007 09:51		199.80g,in AmtRec: VIAL20,LP #Containers: 2			33.2		10C			
								Scr:	Alpha: 1.06E-04 uCi/Sa	Beta: -1.36E-06 uCi/Sa
5 KAK74-1-AD-X J7K060168-1-DUP 11/05/2007 09:51		200.00g,in AmtRec: VIAL20,LP #Containers: 2			33.8		10D			
								Scr:	Alpha: 1.06E-04 uCi/Sa	Beta: -1.36E-06 uCi/Sa
6 KAK77-1-AA J7K060168-2-SAMP 11/05/2007 08:30		200.30g,in AmtRec: VIAL20,LP #Containers: 2			0.7		10F			
								Scr:	Alpha: -1.50E-04 uCi/Sa	Beta: 1.50E-04 uCi/Sa
7 KAK8C-1-AA J7K060168-3-SAMP 11/05/2007 10:36		200.10g,in AmtRec: VIAL20,LP #Containers: 2			32.6		10X	1605 ~~1457~~ 12/17	12/17/07	
								Scr:	Alpha: -8.54E-05 uCi/Sa	Beta: 1.39E-04 uCi/Sa

TA Richland
Richland Wa.

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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.29

TESTAMERICA RICHLAND

12/12/2007 11:57:06 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #:

AnalyDueDate: 12/17/2007

Sep1 DT/Tm Tech:

Batch: 7317605 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KA67R-1-AA-B J7K130000-605-BLK 11/05/2007 09:51	AmtRec:	199.90g,in	#Containers: 1	1.5	0.5	50	NC	1605 ~~1457~~ 12/7/07	Scr: Alpha: Beta:	
9 KA67R-1-AC-C J7K130000-605-LCS 11/05/2007 09:51	AmtRec:	199.80g,in	ASD4358 11/27/07,pd 06/01/01,r #Containers: 1		0.8		100		Scr: Alpha: Beta:	

Comments: KAJJ4-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"

pH<2.0 DLH 12/12/07

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

KAJJ41AA-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KA67R1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KA67R1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KAJJ41AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67R1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67R1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

12/18/2007 1:45:30 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/18/2006, 12/23/2007, Batch: '7317605', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7317605						
AC		**CalcC**	**HarrisD**	12/12/2007 11:48:22		
SC			wagarr	IsBatched	11/14/2007 8:09:22 AM	ICOC_RADCALC v4.8.29
SC			HarrisD	InPrep	12/12/2007 11:48:22 AM	RICH-RC-5014 Revision 7
SC			HarrisD	Prep1C	12/12/2007 11:57:09 AM	RICH-RC-5014 REVISION 7
SC			BockJ	InPrep2	12/13/2007 3:21:15 PM	RICH-RC-5014 REVISION 7
SC			BockJ	Prep2C	12/15/2007 12:24:19 PM	RICH-RC-5014 REVISION 7
SC			DAWKINSO	InCnt1	12/15/2007 1:11:17 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	12/17/2007 10:06:00 PM	RICH-RD-0003 REVISION 5
AC			**HarrisD**	12/12/2007 11:57:09		
AC			**BockJ**	12/13/2007 3:21:15		
AC			**BockJ**	12/15/2007 12:24:19		Revision 7
AC			**BockJ**	12/15/2007 12:24:28		
AC			**DAWKINSO**	12/15/2007 1:11:17		
AC			**DAWKINSO**	12/17/2007 10:06:00		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.30

TESTAMERICA RICHLAND

12/12/2007 11:58:37 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 12/17/2007 W05260

Sep1 DT/Tm Tech:

Batch: 7317606 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD | Brk 8.

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KAC9R-1-AA J7K010365-1-SAMP 11/01/2007 09:35 Mid Pnt: 10/25/07 09:37 AmtRec: VIAL20,LP #Containers: 2		200.20g,in		1.5	68.0	100	26A	0948	12/16/07 DP Scr: Alpha: 1.86E-04 uCi/Sa Beta: 3.64E-04 uCi/Sa	
2 KAC94-1-AA J7K010365-2-SAMP 11/01/2007 10:19 Mid Pnt: 10/25/07 09:37 AmtRec: VIAL20,LP #Containers: 2		178.40g,in			110.4		26B		Scr: Alpha: -2.21E-05 uCi/Sa Beta: 2.36E-03 uCi/Sa 3.8E-02L	
3 KADA6-1-AA J7K010365-3-SAMP 11/01/2007 10:52 Mid Pnt: 10/25/07 09:37 AmtRec: VIAL20,LP #Containers: 2		140.00g,in			57.1		26C		Scr: Alpha: 2.36E-04 uCi/Sa Beta: 6.66E-04 uCi/Sa 1.4E-01L	
4 KADCF-1-AA J7K010365-4-SAMP 11/01/2007 11:10 Mid Pnt: 10/25/07 09:37 AmtRec: VIAL20,LP #Containers: 2		78.90g,in			15.1	200	31A	1032	Scr: Alpha: 2.35E-04 uCi/Sa Beta: 1.14E-03 uCi/Sa 7.9E-02L	
5 KAJJ4-1-AC J7K050151-1-SAMP 11/02/2007 10:10 AmtRec: 20ML,LP #Containers: 2		119.90g,in			55.8	100	26D	0948	Scr: Alpha: 2.99E-04 uCi/Sa Beta: 7.64E-04 uCi/Sa 1.2E-01L	
6 KAJJ4-1-AD-X J7K050151-1-DUP 11/02/2007 10:10 AmtRec: 20ML,LP #Containers: 2		120.10g,in			56.2		27A		Scr: Alpha: 2.99E-04 uCi/Sa Beta: 7.64E-04 uCi/Sa 1.2E-01L	
7 KAJKK-1-AC J7K050151-2-SAMP 11/02/2007 10:15 AmtRec: 20ML,LP #Containers: 2		199.90g,in			66.9		27B		Scr: Alpha: -6.09E-05 uCi/Sa Beta: 2.66E-04 uCi/Sa	

TA Richland
Richland Wa.

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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep. SamplePrep v4.8.29

TESTAMERICA RICHLAND

12/12/2007 11:58:39 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 12/17/2007

Sep1 DT/Tm Tech:

Batch: 7317606 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KAJKV-1-AC J7K050151-3-SAMP 11/02/2007 11:19		200.10g,in AmtRec: 20ML,LP	#Containers: 2	1.5	100.7	100	27C	0948	12/16/07 DR	Scr: Alpha: -5.05E-06 uCi/Sa Beta: 2.23E-04 uCi/Sa
9 KAJP1-1-AA J7K050173-1-SAMP 11/02/2007 12:39		140.20g,in AmtRec: 20ML,LP	#Containers: 2		67.2		27D			Scr: Alpha: 7.51E-04 uCi/Sa 2.4E-01L Beta: 6.45E-04 uCi/Sa 1.4E-01L
10 KAJP7-1-AA J7K050173-2-SAMP 11/02/2007 12:39		95.90g,in AmtRec: 20ML,LP	#Containers: 2		37.6	200	31B	1032		Scr: Alpha: 4.32E-04 uCi/Sa Beta: 9.37E-04 uCi/Sa 9.6E-02L
11 KAJP9-1-AA J7K050173-3-SAMP 11/02/2007 11:27		77.90g,in AmtRec: 20ML,LP	#Containers: 2		61.5		31C			Scr: Alpha: 6.98E-04 uCi/Sa 2.6E-01L Beta: 1.18E-03 uCi/Sa 7.6E-02L
12 KAJQF-1-AA J7K050173-4-SAMP 11/02/2007 11:27		61.10g,in AmtRec: 20ML,LP	#Containers: 2		48.7		31D			Scr: Alpha: 1.54E-04 uCi/Sa Beta: 1.49E-03 uCi/Sa 6.1E-02L
13 KAJQJ-1-AA J7K050173-5-SAMP 11/02/2007 10:31		105.20g,in AmtRec: 20ML,LP	#Containers: 2		97.3	100	28A	0948		Scr: Alpha: 9.09E-05 uCi/Sa Beta: 4.83E-04 uCi/Sa
14 KAK74-1-AC J7K060168-1-SAMP 11/05/2007 09:51		200.10g,in AmtRec: VIAL20,LP	#Containers: 2		62.8		28B			Scr: Alpha: 1.06E-04 uCi/Sa Beta: -1.36E-06 uCi/Sa

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TESTAMERICA RICHLAND

12/12/2007 11:58:40 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 12/17/2007

Sep1 DT/Tm Tech:

Batch: 7317606 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 KAK77-1-AC J7K060168-2-SAMP 11/05/2007 08:30		200.00g,in AmtRec: VIAL20,LP	#Containers: 2	1.5	Ø	100	28C	0948	12/16/07 DW Scr: Alpha: -1.50E-04 uCi/Sa	Beta: 1.50E-04 uCi/Sa
16 KAK8C-1-AC J7K060168-3-SAMP 11/05/2007 10:36		200.00g,in AmtRec: VIAL20,LP	#Containers: 2		64.5		28D		Scr: Alpha: -8.54E-05 uCi/Sa	Beta: 1.39E-04 uCi/Sa
17 KAP7G-1-AA J7K070358-1-SAMP 11/07/2007 13:59		105.30g,in AmtRec: 20ML,LP	#Containers: 2		97.5		26B	1134	Scr: Alpha: 1.48E-04 uCi/Sa	Beta: 2.90E-04 uCi/Sa
18 KAP7N-1-AA J7K070358-2-SAMP 11/07/2007 12:17		139.90g,in AmtRec: 20ML,LP	#Containers: 2		29.2		26C		Scr: Alpha: -1.27E-05 uCi/Sa	Beta: 6.58E-04 uCi/Sa 1.4E-01L
19 KAP7V-1-AA J7K070358-3-SAMP 11/07/2007 12:51		200.10g,in AmtRec: 20ML,LP	#Containers: 2		34.8		26D		Scr: Alpha: 1.40E-04 uCi/Sa	Beta: 8.50E-05 uCi/Sa
20 KA67T-1-AA-B J7K130000-606-BLK 11/02/2007 10:10		199.90g,in AmtRec:	#Containers: 1		0.2	200	32A	1137	Scr: Alpha:	Beta:
21 KA67T-1-AC-C J7K130000-606-LCS 11/02/2007 10:10		200.40g,in AmtRec:	BESB3176 11/12/07,pd 08/08/06 r #Containers: 1		2.9	12/16/07 ~~312~~	32B		Scr: Alpha:	Beta:

TA Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3 ISV - Insufficient Volume for Analysis WO Cnt: 21

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.29

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12/12/2007 11:58:41 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 12/17/2007

Sep1 DT/Tm Tech:

Batch: 7317606 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

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

Comments:
KADA6-SAMP "Comments: aliquot reduced due to screening DLH 12/12/07"
KADCF-SAMP "Comments: aliquot reduced due to screening DLH 12/12/07"
KAJJ4-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"
KAJP1-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"
KAJP7-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"
KAJP9-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"
KAJQF-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"
KAP7N-SAMP "Comments:aliquot reduced due to screening DLH 12/12/07"

PH LDO DLH 12/12/07
Aliquots reduced due to weight screens

All Clients fc
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

KAC9R1AA-SAMP Constituent List:
BETA RDL:4.00E+00 pCi/L LCL: UCL: RPD:
KA67T1AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
KA67T1AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

KAC9R1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67T1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67T1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TESTAMERICA RICHLAND

12/18/2007 9:46:04 AM

ICOC Fraction Transfer/Status Report

ByDate: 12/18/2006, 12/23/2007, Batch: '7317606', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7317606						
AC		InRev1	HarrisD	12/12/2007 11:21:27		
SC			wagarr	IsBatched	11/14/2007 8:09:22 AM	ICOC_RADCALC v4.8.29
SC			HarrisD	InPrep	12/12/2007 11:21:27 AM	RICH-RC-5014 Revision 7
SC			HarrisD	Prep1C	12/12/2007 11:42:10 AM	RICH-RC-5014 REVISION 7
SC			BockJ	InPrep2	12/13/2007 3:21:23 PM	RICH-RC-5014 REVISION 7
SC			BockJ	Prep2C	12/15/2007 12:24:40 PM	RICH-RC-5014 REVISION 7
SC			DAWKINSO	InCnt1	12/15/2007 1:11:11 PM	RICH-RD-0003 REVISION 5
SC			DAWKINSO	CalcC	12/16/2007 12:57:34 PM	RICH-RD-0003 REVISION 5
SC			HARBINSOND	InRev1	12/17/2007 9:56:04 AM	RICH-RC-0002 REVISION 8
AC			HarrisD	12/12/2007 11:42:10		
AC			BockJ	12/13/2007 3:21:23		
AC			BockJ	12/15/2007 12:24:40		
AC			DAWKINSO	12/15/2007 1:11:11		
AC			DAWKINSO	12/16/2007 12:57:34		
AC			HARBINSOND	12/17/2007 9:56:04		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.30

TESTAMERICA RICHLAND

11/14/2007 8:05:05 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)

AnalyDueDate: 12/21/2007 W05260

5I CLIENT: HANFORD

Batch: 7317608 WATER mg/L

PM, Quote: SA , 57671

SEQ Batch, Test: None

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KAP47-1-AA J7K070346-1-SAMP 11/07/2007 09:51		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
2 KAP47-1-AC-S J7K070346-1-MS 11/07/2007 09:51		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
3 KAP47-1-AD-X J7K070346-1-DUP 11/07/2007 09:51		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
4 KAP47-1-AE-S J7K070346-1-MS 11/07/2007 09:51		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
5 KA67W-1-AA-B J7K130000-608-BLK 11/07/2007 09:51		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 KA67W-1-AC-C J7K130000-608-LCS 11/07/2007 09:51		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TA Richland
Richland Wa.

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

ISV - Insufficient Volume for Analysis

WO Cnt: 6
ICOC v4.8.29

TESTAMERICA RICHLAND

11/14/2007 8:05:05 AM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 12/21/2007

Batch: 7317608 mg/L
SEQ Batch, Test: None

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

Comments:

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

KAP471AA-SAMP Constituent List:

KAP471AC-MS Constituent List:

KAP471AE-MS:

KA67W1AA-BLK:

KA67W1AC-LCS:

KAP471AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KAP471AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KAP471AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67W1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KA67W1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____