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Analytical Data Package Prepared For

Fluor Hanford Inc.

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains _____ Pages

Report No.: 39709

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W05458	F08-145	B1WC06	J8G220106-1	KRXF51AG	9KRXF510	8204266
		B1WC06	J8G220106-1	KRXF51AF	9KRXF510	8204268
		B1WC06	J8G220106-1	KRXF51AJ	9KRXF510	8204277
		B1WC06	J8G220106-1	KRXF51AC	9KRXF510	8204280
		B1WC06	J8G220106-1	KRXF51AD	9KRXF510	8204281
		B1WC06	J8G220106-1	KRXF51AE	9KRXF510	8204283
		B1WC06	J8G220106-1	KRXF51AA	9KRXF510	8204285
		B1WC06	J8G220106-1	KRXF52AH	9KRXF520	8217136

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford, Inc.
1200 Jadwin Ave.
Richland, WA 99352

August 20, 2008

Attention: Steve Trent

SAF Number	:	F08-145
Date SDG Closed	:	July 21, 2008
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W05458
Data Deliverable	:	30/30 Day

CASE NARRATIVE

I. Introduction

On July 21, 2008 one sample was received at TestAmerica for radiochemical analysis. Upon receipt, the sample was assigned to lot J8G220106 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

FH ID#	TALR ID#	MATRIX	DATE OF RECEIPT
B1WC06	KRXF5	WATER	7/21/08

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010
Neptunium-237 by method RICH-RC-5009
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010:
The LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Neptunium-237 by method RICH-RC-5009:
The LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RICH-RC-5017:
The LCS yield was out of limits. The LCS was recounted with acceptable results. There was insufficient volume for a duplicate. Sample B1WC06 was recounted on a different detector for the duplicate (B1WC06 DUP). Except as noted, the LCS, batch blank, sample and sample duplicate (B1WC06) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065:
The TSIE was out of limits for the batch blank and LCS. The sample and QC were recounted with acceptable results. Except as noted, the LCS, batch blank, sample, sample duplicate (B1WC06), and sample matrix spike (B1WC06) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The LCS, batch blank, sample, sample duplicate (B1WC06), and sample matrix spike (B1WC06) results are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
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

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica 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 TestAmerica.
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 TestAmerica "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 TestAmerica 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.

Sample Results Summary

Date: 20-Aug-08

TestAmerica TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 39709 **SDG No:** W05458

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8204285 NP237_LLE_PLATE_AEA									
B1WC06									
	KRXF51AA	NP-237	9.52E-03 +- 1.03E-01	U	pCi/L	77%	3.28E-01	1.00E+00	
B1WC06 DUP									
	KRXF51AV	NP-237	-8.83E-03 +- 9.00E-02	U	pCi/L	71%	2.11E-01	1.00E+00	5313.4
8204268 PUISO_PLATE_AEA									
B1WC06									
	KRXF51AF	PU-238	3.31E-02 +- 1.15E-01	U	pCi/L	59%	3.12E-01	1.00E+00	
		PU239/40	-1.10E-02 +- 1.12E-01	U	pCi/L	59%	2.64E-01	1.00E+00	
B1WC06 DUP									
	KRXF51AL	PU-238	5.57E-02 +- 1.14E-01	U	pCi/L	57%	2.67E-01	1.00E+00	50.9
		PU239/40	-1.11E-02 +- 1.14E-01	U	pCi/L	57%	2.67E-01	1.00E+00	-1.0
8204266 SRISO_SEP_PRECIP_GPC									
B1WC06									
	KRXF51AG	SR-90	-7.01E-02 +- 2.92E-01	U	pCi/L	75%	6.49E-01	2.00E+00	
B1WC06 DUP									
	KRXF51AK	SR-90	3.16E-01 +- 3.26E-01	U	pCi/L	82%	6.64E-01	2.00E+00	314.0
8204283 GAMMA_GS									
B1WC06									
	KRXF51AE	BE-7	-8.50E+00 +- 1.05E+01	U	pCi/L		1.70E+01	5.00E+01	
		CO-60	-1.10E+00 +- 1.31E+00	U	pCi/L		2.11E+00	2.50E+01	
		CS-134	-2.11E-01 +- 1.39E+00	U	pCi/L		2.41E+00	1.50E+01	
		CS-137	-2.85E-02 +- 1.27E+00	U	pCi/L		2.21E+00	1.50E+01	
		EU-152	1.96E+00 +- 3.42E+00	U	pCi/L		5.99E+00	5.00E+01	
		EU-154	-8.59E-01 +- 3.96E+00	U	pCi/L		6.97E+00	5.00E+01	
		EU-155	3.24E+00 +- 3.39E+00	U	pCi/L		6.01E+00	5.00E+01	
		K-40	-5.04E+01 +- 3.94E+01	U	pCi/L		8.01E+01		
		RU-106	6.69E-01 +- 1.10E+01	U	pCi/L		1.93E+01		
		SB-125	1.79E-01 +- 2.97E+00	U	pCi/L		5.20E+00	5.00E+01	
B1WC06 DUP									
	KRXF51AU	BE-7	-4.57E+00 +- 7.04E+00	U	pCi/L		1.15E+01	5.00E+01	
		CO-60	5.42E-01 +- 8.87E-01	U	pCi/L		1.80E+00	2.50E+01	
		CS-134	-6.14E-01 +- 8.47E-01	U	pCi/L		1.40E+00	1.50E+01	
		CS-137	7.97E-01 +- 9.23E-01	U	pCi/L		1.76E+00	1.50E+01	
		EU-152	-1.92E+00 +- 2.04E+00	U	pCi/L		3.18E+00	5.00E+01	
		EU-154	1.32E+00 +- 2.48E+00	U	pCi/L		4.98E+00	5.00E+01	
		EU-155	9.21E-01 +- 1.73E+00	U	pCi/L		3.15E+00	5.00E+01	
		K-40	7.22E+00 +- 2.03E+01	U	pCi/L		1.93E+01		
		RU-106	1.97E+00 +- 7.09E+00	U	pCi/L		1.30E+01		

TestAmerica

rptSTLRchSaSummary2 V5.1.7
A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

Sample Results Summary

TestAmerica TARL

Ordered by Method, Batch No., Client Sample ID.

Date: 20-Aug-08

Report No. : 39709

SDG No: W05458

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8204283 GAMMA_GS									
B1WC06 DUP									
	KRXF51AU	SB-125	1.59E+00 +- 2.00E+00	U	pCi/L		3.79E+00	5.00E+01	
8204280 9310_ALPHABETA_GPC									
B1WC06									
	KRXF51AC	ALPHA	9.45E-02 +- 6.21E-01	U	pCi/L	100%	1.55E+00	3.00E+00	
B1WC06 DUP									
	KRXF51AR	ALPHA	-1.26E-01 +- 5.79E-01	U	pCi/L	100%	1.65E+00	3.00E+00	-1395.5
8204281 9310_ALPHABETA_GPC									
B1WC06									
	KRXF51AD	BETA	1.88E+00 +- 1.40E+00	U	pCi/L	100%	2.71E+00	4.00E+00	
B1WC06 DUP									
	KRXF51AT	BETA	6.02E-01 +- 1.20E+00	U	pCi/L	100%	2.50E+00	4.00E+00	102.9
8204277 UTOT_KPA									
B1WC06									
	KRXF51AJ	TOTAL-URANIUM	7.45E-02 +- 7.89E-03	U	ug/L		8.38E-02	1.44E-01	
B1WC06 DUP									
	KRXF51AN	TOTAL-URANIUM	6.75E-02 +- 7.44E-03	U	ug/L		8.35E-02	1.44E-01	
8217136 TC99_ETVDSK_LSC									
B1WC06									
	KRXF52AH	TC-99	-3.60E+00 +- 5.93E+00	U	pCi/L	100%	1.02E+01	1.50E+01	
B1WC06 DUP									
	KRXF52AQ	TC-99	1.06E+00 +- 6.29E+00	U	pCi/L	100%	1.07E+01	1.50E+01	-367.5

No. of Results: 36

TestAmerica

rptSTLRchSaSummary2 V5.1.7
A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 20-Aug-08

Report No. : 39709

SDG No.: W05458

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
NP237_LLE_PLATE_AEA								
8204285 BLANK QC,								
KRX5J1AA	NP-237	-1.96E-02 +- 1.02E-01	U	pCi/L	73%			2.76E-01
8204285 LCS,								
KRX5J1AC	NP-237	1.02E+01 +- 2.19E+00		pCi/L	79%	109%	0.1	3.85E-01
PUISO_PLATE_AEA								
8204268 BLANK QC,								
KRX4Q1AA	PU-238	7.90E-02 +- 1.43E-01	U	pCi/L	66%			2.79E-01
	PU239/40	9.86E-03 +- 1.06E-01	U	pCi/L	66%			3.39E-01
8204268 LCS,								
KRX4Q1AC	PU239/40	5.26E+00 +- 1.25E+00		pCi/L	77%	113%	0.1	2.02E-01
SRISO_SEP_PRECIP_GPC								
8204266 BLANK QC,								
KRX4M1AA	SR-90	8.89E-02 +- 1.95E-01	U	pCi/L	76%			4.21E-01
8204266 LCS,								
KRX4M1AC	SR-90	1.55E+01 +- 2.34E+00		pCi/L	80%	111%	0.1	4.54E-01
GAMMA_GS								
8204283 BLANK QC,								
KRX5H1AA	BE-7	5.51E-01 +- 1.02E+01	U	pCi/L				1.82E+01
	CO-60	3.21E-01 +- 1.25E+00	U	pCi/L				2.47E+00
	CS-134	-2.89E-01 +- 1.45E+00	U	pCi/L				2.59E+00
	CS-137	3.72E-01 +- 1.35E+00	U	pCi/L				2.50E+00
	EU-152	-5.14E+00 +- 3.43E+00	U	pCi/L				5.04E+00
	EU-154	-2.43E-01 +- 4.22E+00	U	pCi/L				7.74E+00
	EU-155	6.35E-01 +- 2.50E+00	U	pCi/L				4.36E+00
	K-40	-4.74E+01 +- 2.73E+01	U	pCi/L				5.22E+01
	RU-106	-6.99E+00 +- 1.13E+01	U	pCi/L				1.91E+01
	SB-125	1.83E-02 +- 3.18E+00	U	pCi/L				5.68E+00
8204283 LCS,								
KRX5H2AC	CO-60	3.74E+01 +- 6.77E+00		pCi/L		121%	0.2	2.64E+00
	CS-137	4.48E+01 +- 6.72E+00		pCi/L		113%	0.1	2.68E+00
	EU-152	6.55E+01 +- 1.28E+01		pCi/L		107%	0.1	6.62E+00
9310_ALPHABETA_GPC								
8204280 BLANK QC,								
KRX491AA	ALPHA	-2.62E-01 +- 2.92E-01	U	pCi/L	100%			1.19E+00
8204280 LCS,								
KRX491AC	ALPHA	1.71E+01 +- 4.49E+00		pCi/L	100%	75%	-0.2	1.03E+00
9310_ALPHABETA_GPC								
8204281 BLANK QC,								
KRX5D1AA	BETA	9.79E-01 +- 1.32E+00	U	pCi/L	100%			2.71E+00
8204281 LCS,								
KRX5D1AC	BETA	2.38E+01 +- 3.91E+00		pCi/L	100%	104%	0.0	2.60E+00

TestAmerica

rptSTLRchQcSummary V5.1.7 A2002

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 20-Aug-08

Report No. : 39709

SDG No.: W05458

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
UTOT_KPA								
8204277 MATRIX SPIKE, B1WC06								
KRXF51AM	TOTAL-URANIUM	3.88E+01 +- 4.63E+00		ug/L		103%	0.0	8.38E-02
8204277 BLANK QC,								
KRX401AA	TOTAL-URANIUM	4.55E-02 +- 1.84E-02	U	ug/L				8.35E-02
8204277 LCS,								
KRX401AD	TOTAL-URANIUM	3.37E+00 +- 3.45E-01		ug/L		93%	-0.1	8.42E-02
KRX401AC	TOTAL-URANIUM	3.81E+01 +- 4.54E+00		ug/L		102%	0.0	8.42E-02
TC99_ETVDSK_LSC								
8217136 MATRIX SPIKE, B1WC06								
KRXF52AP	TC-99	3.91E+03 +- 2.53E+02		pCi/L	100%	106%	0.1	1.05E+01
8217136 BLANK QC,								
KRX412AA	TC-99	5.30E+00 +- 6.61E+00	U	pCi/L	100%			1.13E+01
8217136 LCS,								
KRX412AC	TC-99	6.14E+02 +- 4.47E+01		pCi/L	100%	110%	0.1	1.07E+01

No. of Results: 31

TestAmerica

rptSTLRchQcSummary V5.1.7 A2002

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 20-Aug-08

Lab Name:	TestAmerica	SDG:	W05458	Collection Date:	7/21/2008 12:36:00 PM
Lot-Sample No.:	J8G220106-1	Report No. :	39709	Received Date:	7/21/2008 3:30:00 PM
Client Sample ID:	B1WC06	COC No. :	F08-145-77	Matrix:	WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8204266	SRISO_SEP_PRECIP_GPC			Work Order: KRXF51AG			Report DB ID: 9KRXF510					
SR-90	***-7.01E-02***	U	2.6E-01	2.9E-01	6.49E-01	pCi/L	75%	*-0.11*	8/13/08 04:30 a		1.0004	GPC3A
						3.06E-01	2.00E+00	*-0.48*			L	
Batch: 8204268	PUISO_PLATE_AEA			Work Order: KRXF51AF			Report DB ID: 9KRXF510					
PU-238	***3.31E-02***	U	1.1E-01	1.1E-01	3.12E-01	pCi/L	59%	*0.11*	7/30/08 08:08 p		0.2001	ALP37
						8.11E-02	1.00E+00	*0.58*			L	
PU239/40	***-1.10E-02***	U	1.1E-01	1.1E-01	2.64E-01	pCi/L	59%	*-0.04*	7/30/08 08:08 p		0.2001	ALP37
						5.74E-02	1.00E+00	*-0.2*			L	
Batch: 8204277	UTOT_KPA			Work Order: KRXF51AJ			Report DB ID: 9KRXF510					
TOTAL-URANIUM	***7.45E-02***	U		7.9E-03	8.38E-02	ug/L		*0.89*	8/14/08 10:59 a		0.025	KPAW3
						2.97E-02	1.44E-01	*(18.9)*			ML	
Batch: 8204280	9310_ALPHABETA_GPC			Work Order: KRXF51AC			Report DB ID: 9KRXF510					
ALPHA	***9.45E-02***	U	6.2E-01	6.2E-01	1.55E+00	pCi/L	100%	*0.06*	8/5/08 05:23 p		0.2001	GPC11A
						6.05E-01	3.00E+00	*0.3*			L	
Batch: 8204281	9310_ALPHABETA_GPC			Work Order: KRXF51AD			Report DB ID: 9KRXF510					
BETA	***1.88E+00***	U	1.4E+00	1.4E+00	2.71E+00	pCi/L	100%	*0.69*	8/5/08 05:25 p		0.2	GPC31A
						1.29E+00	4.00E+00	*(2.7)*			L	
Batch: 8204283	GAMMA_GS			Work Order: KRXF51AE			Report DB ID: 9KRXF510					
BE-7	***-8.50E+00***	U	1.1E+01	1.1E+01	1.70E+01	pCi/L		*-0.5*	7/31/08 01:29 p		2.5001	GER13$1
							5.00E+01	*-(1.6)*			L	

TestAmerica
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V5.1.7 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 20-Aug-08

Lab Name:	TestAmerica	**SDG:**	W05458	**Collection Date:**	7/21/2008 12:36:00 PM
Lot-Sample No.:	J8G220106-1	**Report No. :**	39709	**Received Date:**	7/21/2008 3:30:00 PM
Client Sample ID:	B1WC06	**COC No. :**	F08-145-77	**Matrix:**	WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
CO-60	***-1.10E+00***	U	1.3E+00	1.3E+00	2.11E+00	pCi/L		*-0.52*	7/31/08 01:29 p		2.5001	GER13$1
							2.50E+01	*-(1.7)*			L	
CS-134	***-2.11E-01***	U	1.4E+00	1.4E+00	2.41E+00	pCi/L		*-0.09*	7/31/08 01:29 p		2.5001	GER13$1
							1.50E+01	*-0.3*			L	
CS-137	***-2.85E-02***	U	1.3E+00	1.3E+00	2.21E+00	pCi/L		*-0.01*	7/31/08 01:29 p		2.5001	GER13$1
							1.50E+01	*-0.04*			L	
EU-152	***1.96E+00***	U	3.4E+00	3.4E+00	5.99E+00	pCi/L		*0.33*	7/31/08 01:29 p		2.5001	GER13$1
							5.00E+01	*(1.1)*			L	
EU-154	***-8.59E-01***	U	4.0E+00	4.0E+00	6.97E+00	pCi/L		*-0.12*	7/31/08 01:29 p		2.5001	GER13$1
							5.00E+01	*-0.43*			L	
EU-155	***3.24E+00***	U	3.4E+00	3.4E+00	6.01E+00	pCi/L		*0.54*	7/31/08 01:29 p		2.5001	GER13$1
							5.00E+01	*(1.9)*			L	
K-40	***-5.04E+01***	U	3.9E+01	3.9E+01	8.01E+01	pCi/L		*-0.63*	7/31/08 01:29 p		2.5001	GER13$1
								-(2.6)			L	
RU-106	***6.69E-01***	U	1.1E+01	1.1E+01	1.93E+01	pCi/L		*0.03*	7/31/08 01:29 p		2.5001	GER13$1
								0.12			L	
SB-125	***1.79E-01***	U	3.0E+00	3.0E+00	5.20E+00	pCi/L		*0.03*	7/31/08 01:29 p		2.5001	GER13$1
							5.00E+01	*0.12*			L	
Batch: 8204285	NP237_LLE_PLATE_AEA			**Work Order:**	KRXF51AA		**Report DB ID:**	9KRXF510				
NP-237	***9.52E-03***	U	1.0E-01	1.0E-01	3.28E-01	pCi/L	77%	*0.03*	8/6/08 03:00 p		0.2003	ALP37
						9.94E-02	1.00E+00	*0.19*			L	
Batch: 8217136	TC99_ETVDSK_LSC			**Work Order:**	KRXF52AH		**Report DB ID:**	9KRXF520				

TestAmerica
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V5.1.7 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 20-Aug-08

Lab Name:	TestAmerica	SDG:	W05458	Collection Date:	7/21/2008 12:36:00 PM
Lot-Sample No.:	J8G220106-1	Report No. :	39709	Received Date:	7/21/2008 3:30:00 PM
Client Sample ID:	B1WC06	COC No. :	F08-145-77	Matrix:	WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
TC-99	***-3.60E+00***	U	4.1E+00	5.9E+00	1.02E+01	pCi/L	100%	*-0.35*	8/4/08 04:27 p		0.1252	LSC6
						4.87E+00	1.50E+01	*-(1.2)*			L	

No. of Results: 18 Comments:

TestAmerica
rptSTLRchSample
V5.1.7 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM II

Date: 20-Aug-08

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W05458	**Collection Date:**	7/21/2008 12:36:00 PM
Lot-Sample No.:	**J8G220106-1**	**Report No. :**	39709	**Received Date:**	7/21/2008 3:30:00 PM
Client Sample ID:	**B1WC06 DUP**	**COC No. :**	F08-145-77	**Matrix:**	WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8204266	SRISO_SEP_PRECIP_GPC			**Work Order:** KRXF51AK		**Report DB ID:** KRXF51KR			**Orig Sa DB ID:** 9KRXF510			
SR-90	3.16E-01	U	3.0E-01	3.3E-01	6.64E-01	pCi/L	82%	0.48	8/13/08 04:30 a		1.0002	GPC3B
	-7.01E-02	U	**RPD**	**314.0**		2.00E+00		(1.9)			L	
Batch: 8204268	PUISO_PLATE_AEA			**Work Order:** KRXF51AL		**Report DB ID:** KRXF51LR			**Orig Sa DB ID:** 9KRXF510			
PU-238	5.57E-02	U	1.1E-01	1.1E-01	2.67E-01	pCi/L	57%	0.21	7/30/08 08:08 p		0.2001	ALP38
	3.31E-02	U	**RPD**	**50.9**		1.00E+00		0.98			L	
PU239/40	-1.11E-02	U	1.1E-01	1.1E-01	2.67E-01	pCi/L	57%	-0.04	7/30/08 08:08 p		0.2001	ALP38
	-1.10E-02	U	**RPD**	**-1.0**		1.00E+00		-0.2			L	
									Alpha Spec Result Sum = 4.5E-02			
Batch: 8204277	UTOT_KPA			**Work Order:** KRXF51AN		**Report DB ID:** KRXF51NR			**Orig Sa DB ID:** 9KRXF510			
TOTAL-URANIUM	6.75E-02	U		7.4E-03	8.35E-02	ug/L		0.81	8/14/08 11:02 a		0.0251	KPAW3
	7.45E-02	U	**RPD**	**9.9**		1.44E-01		(18.1)			ML	
									Alpha Spec Result Sum = 4.5E-02			
Batch: 8204280	9310_ALPHABETA_GPC			**Work Order:** KRXF51AR		**Report DB ID:** KRXF51RR			**Orig Sa DB ID:** 9KRXF510			
ALPHA	-1.26E-01	U	5.8E-01	5.8E-01	1.65E+00	pCi/L	100%	-0.08	8/5/08 05:23 p		0.2002	GPC11C
	9.45E-02	U	**RPD**	**-1395.5**		3.00E+00		-0.44			L	
									Alpha Spec Result Sum = 4.5E-02			
Batch: 8204281	9310_ALPHABETA_GPC			**Work Order:** KRXF51AT		**Report DB ID:** KRXF51TR			**Orig Sa DB ID:** 9KRXF510			
BETA	6.02E-01	U	1.2E+00	1.2E+00	2.50E+00	pCi/L	100%	0.24	8/5/08 05:25 p		0.2002	GPC31B
	1.88E+00	U	**RPD**	**102.9**		4.00E+00		(1.)			L	

TestAmerica **RPD** - Relative Percent Difference.

rptSTLRchDupV5.1 .7 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

Date: 20-Aug-08

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	W05458	**Collection Date:**	7/21/2008 12:36:00 PM
Lot-Sample No.:	J8G220106-1	**Report No. :**	39709	**Received Date:**	7/21/2008 3:30:00 PM
Client Sample ID:	B1WC06 DUP	**COC No. :**	F08-145-77	**Matrix:**	WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8204283	GAMMA_GS			**Work Order:** KRXF51AU		**Report DB ID:** KRXF51UR			**Orig Sa DB ID:** 9KRXF510			
BE-7	-4.57E+00	U	7.0E+00	7.0E+00	1.15E+01	pCi/L		-0.4	7/31/08 05:01 p		2.5001	GER11$1
	-8.50E+00	U	**RPD**	**-60.2**		5.00E+01		-(1.3)			L	
CO-60	5.42E-01	U	8.9E-01	8.9E-01	1.80E+00	pCi/L		0.3	7/31/08 05:01 p		2.5001	GER11$1
	-1.10E+00	U	**RPD**	**-586.2**		2.50E+01		(1.2)			L	
CS-134	-6.14E-01	U	8.5E-01	8.5E-01	1.40E+00	pCi/L		-0.44	7/31/08 05:01 p		2.5001	GER11$1
	-2.11E-01	U	**RPD**	**-97.6**		1.50E+01		-(1.4)			L	
CS-137	7.97E-01	U	9.2E-01	9.2E-01	1.76E+00	pCi/L		0.45	7/31/08 05:01 p		2.5001	GER11$1
	-2.85E-02	U	**RPD**	**214.8**		1.50E+01		(1.7)			L	
EU-152	-1.92E+00	U	2.0E+00	2.0E+00	3.18E+00	pCi/L		-0.6	7/31/08 05:01 p		2.5001	GER11$1
	1.96E+00	U	**RPD**	**23575.6**		5.00E+01		-(1.9)			L	
EU-154	1.32E+00	U	2.5E+00	2.5E+00	4.98E+00	pCi/L		0.26	7/31/08 05:01 p		2.5001	GER11$1
	-8.59E-01	U	**RPD**	**950.6**		5.00E+01		(1.1)			L	
EU-155	9.21E-01	U	1.7E+00	1.7E+00	3.15E+00	pCi/L		0.29	7/31/08 05:01 p		2.5001	GER11$1
	3.24E+00	U	**RPD**	**111.4**		5.00E+01		(1.1)			L	
K-40	7.22E+00	U	2.0E+01	2.0E+01	1.93E+01	pCi/L		0.37	7/31/08 05:01 p		2.5001	GER11$1
	-5.04E+01	U	**RPD**	**-266.9**				0.71			L	
RU-106	1.97E+00	U	7.1E+00	7.1E+00	1.30E+01	pCi/L		0.15	7/31/08 05:01 p		2.5001	GER11$1
	6.69E-01	U	**RPD**	**98.5**				0.56			L	
SB-125	1.59E+00	U	2.0E+00	2.0E+00	3.79E+00	pCi/L		0.42	7/31/08 05:01 p		2.5001	GER11$1
	1.79E-01	U	**RPD**	**159.7**		5.00E+01		(1.6)			L	
Batch: 8204285	NP237_LLE_PLATE_AEA			**Work Order:** KRXF51AV		**Report DB ID:** KRXF51VR			**Orig Sa DB ID:** 9KRXF510			

TestAmerica
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.7 A2002

RPD - Relative Percent Difference.
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U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

Date: 20-Aug-08

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	W05458	**Collection Date:**	7/21/2008 12:36:00 PM
Lot-Sample No.:	**J8G220106-1**	**Report No. :**	39709	**Received Date:**	7/21/2008 3:30:00 PM
Client Sample ID:	**B1WC06 DUP**	**COC No. :**	F08-145-77	**Matrix:**	WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
NP-237	-8.83E-03	U	9.0E-02	9.0E-02	2.11E-01	pCi/L	71%	-0.04	8/6/08 03:01 p		0.2001	ALP38
	9.52E-03	U	**RPD**	**5313.4**		1.00E+00		-0.2			L	

Batch: 8217136 TC99_ETVDSK_LSC **Work Order:** KRXF52AQ **Report DB ID:** KRXF52QR **Orig Sa DB ID:** 9KRXF520

TC-99	1.06E+00	U	4.4E+00	6.3E+00	1.07E+01	pCi/L	100%	0.1	8/4/08 06:33 p	0.1249	LSC6
	-3.60E+00	U	**RPD**	**-367.5**		1.50E+01		0.34		L	

No. of Results: 18 **Comments:**

TestAmerica
rptSTLRchDupV5.1
.7 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 20-Aug-08

Lab Name: TestAmerica
Matrix: WATER

SDG: W05458
Report No. : 39709

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8204268	PUISO_PLATE_AEA			**Work Order:** KRX4Q1AA		**Report DB ID:** KRX4Q1AB						
PU-238	7.90E-02	U	1.4E-01	1.4E-01	2.79E-01	pCi/L	66%	0.28	7/30/08 08:08 p		0.2003	ALP39
					7.26E-02	1.00E+00		(1.1)			L	
PU239/40	9.86E-03	U	1.1E-01	1.1E-01	3.39E-01	pCi/L	66%	0.03	7/30/08 08:08 p		0.2003	ALP39
					1.03E-01	1.00E+00		0.19			L	
Batch: 8204283	GAMMA_GS			**Work Order:** KRX5H1AA		**Report DB ID:** KRX5H1AB						
BE-7	5.51E-01	U	1.0E+01	1.0E+01	1.82E+01	pCi/L		0.03	7/31/08 01:29 p		2.5003	GER7$1
								0.11			L	
CO-60	3.21E-01	U	1.2E+00	1.2E+00	2.47E+00	pCi/L		0.13	7/31/08 01:29 p		2.5003	GER7$1
						1.00E+01		0.51			L	
CS-134	-2.89E-01	U	1.4E+00	1.4E+00	2.59E+00	pCi/L		-0.11	7/31/08 01:29 p		2.5003	GER7$1
						1.50E+01		-0.4			L	
CS-137	3.72E-01	U	1.4E+00	1.4E+00	2.50E+00	pCi/L		0.15	7/31/08 01:29 p		2.5003	GER7$1
						1.50E+01		0.55			L	
EU-152	-5.14E+00	U	3.4E+00	3.4E+00	5.04E+00	pCi/L		-(1.)	7/31/08 01:29 p		2.5003	GER7$1
						5.00E+01		-(3.)			L	
EU-154	-2.43E-01	U	4.2E+00	4.2E+00	7.74E+00	pCi/L		-0.03	7/31/08 01:29 p		2.5003	GER7$1
						5.00E+01		-0.11			L	
EU-155	6.35E-01	U	2.5E+00	2.5E+00	4.36E+00	pCi/L		0.15	7/31/08 01:29 p		2.5003	GER7$1
						5.00E+01		0.51			L	
K-40	-4.74E+01	U	2.7E+01	2.7E+01	5.22E+01	pCi/L		-0.91	7/31/08 01:29 p		2.5003	GER7$1
								-(3.5)			L	
RU-106	-6.99E+00	U	1.1E+01	1.1E+01	1.91E+01	pCi/L		-0.37	7/31/08 01:29 p		2.5003	GER7$1
								-(1.2)			L	

TestAmerica
rptSTLRchBlank
V5.1.7 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM II
BLANK RESULTS

Date: 20-Aug-08

Lab Name: TestAmerica
Matrix: WATER

SDG:
Report No. : 39709

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
SB-125	1.83E-02	U	3.2E+00	3.2E+00	5.68E+00	pCi/L		0.	7/31/08 01:29 p		2.5003	GER7$1
						5.00E+01		0.01			L	
Batch: 8204280	9310_ALPHABETA_GPC			**Work Order:**	KRX491AA		**Report DB ID:**	KRX491AB				
ALPHA	-2.62E-01	U	2.9E-01	2.9E-01	1.19E+00	pCi/L	100%	-0.22	8/5/08 05:23 p		0.2	GPC11D
					4.56E-01	3.00E+00		-(1.8)			L	
Batch: 8204281	9310_ALPHABETA_GPC			**Work Order:**	KRX5D1AA		**Report DB ID:**	KRX5D1AB				
BETA	9.79E-01	U	1.3E+00	1.3E+00	2.71E+00	pCi/L	100%	0.36	8/5/08 05:25 p		0.2003	GPC31C
					1.29E+00	4.00E+00		(1.5)			L	
Batch: 8204266	SRISO_SEP_PRECIP_GPC			**Work Order:**	KRX4M1AA		**Report DB ID:**	KRX4M1AB				
SR-90	8.89E-02	U	1.6E-01	1.9E-01	4.21E-01	pCi/L	76%	0.21	8/13/08 04:30 a		1.0004	GPC3C
					1.93E-01	1.00E+01		0.91			L	
Batch: 8204277	UTOT_KPA			**Work Order:**	KRX401AA		**Report DB ID:**	KRX401AB				
TOTAL-URANIUM	4.55E-02	U		1.8E-02	8.35E-02	ug/L		0.55	8/14/08 10:51 a		0.0251	KPAW3
					2.95E-02	1.00E+00		(5.)			ML	
Batch: 8217136	TC99_ETVDSK_LSC			**Work Order:**	KRX412AA		**Report DB ID:**	KRX412AB				
TC-99	5.30E+00	U	4.7E+00	6.6E+00	1.13E+01	pCi/L	100%	0.47	8/4/08 07:35 p		0.1254	LSC6
					5.41E+00	1.00E+01		(1.6)			L	
Batch: 8204285	NP237_LLE_PLATE_AEA			**Work Order:**	KRX5J1AA		**Report DB ID:**	KRX5J1AB				
NP-237	-1.96E-02	U	1.0E-01	1.0E-01	2.76E-01	pCi/L	73%	-0.07	8/6/08 03:01 p		0.2003	ALP39
					7.19E-02	6.00E-01		-0.38			L	

No. of Results: 18 **Comments:**

TestAmerica
rptSTLRchBlank
V5.1.7 A2002

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FORM II

LCS RESULTS

Date: 20-Aug-08

Lab Name: TestAmerica

Matrix: WATER

SDG: W05458

Report No. : 39709

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 8204268	PUISO_PLATE_AEA			**Work Order:**	KRX4Q1AC		**Report DB ID:**	KRX4Q1CS					
PU239/40	5.26E+00		9.4E-01	1.3E+00	2.02E-01	pCi/L	77%	4.64E+00	1.40E-01	113%	7/30/08 08:09 p	0.2002	ALP40
							Rec Limits:	75	125	0.1		L	
Batch: 8204283	GAMMA_GS			**Work Order:**	KRX5H2AC		**Report DB ID:**	KRX5H2CS					
CO-60	3.74E+01		6.8E+00	6.8E+00	2.64E+00	pCi/L		3.09E+01	1.95E-01	121%	8/1/08 11:09 a	2.5001	GER13$1
							Rec Limits:	75	125	0.2		L	
CS-137	4.48E+01		6.7E+00	6.7E+00	2.68E+00	pCi/L		3.98E+01	9.45E+01	113%	8/1/08 11:09 a	2.5001	GER13$1
							Rec Limits:	70	130	0.1		L	
EU-152	6.55E+01		1.3E+01	1.3E+01	6.62E+00	pCi/L		6.11E+01	2.45E+00	107%	8/1/08 11:09 a	2.5001	GER13$1
							Rec Limits:	70	130	0.1		L	
Batch: 8204280	9310_ALPHABETA_GPC			**Work Order:**	KRX491AC		**Report DB ID:**	KRX491CS					
ALPHA	1.71E+01		2.8E+00	4.5E+00	1.03E+00	pCi/L	100%	2.27E+01	3.49E-01	75%	8/5/08 05:23 p	0.2003	GPC12A
							Rec Limits:	70	130	-0.2		L	
Batch: 8204281	9310_ALPHABETA_GPC			**Work Order:**	KRX5D1AC		**Report DB ID:**	KRX5D1CS					
BETA	2.38E+01		2.5E+00	3.9E+00	2.60E+00	pCi/L	100%	2.28E+01	2.63E-01	104%	8/5/08 05:25 p	0.2004	GPC31D
							Rec Limits:	70	130	0.0		L	
Batch: 8204266	SRISO_SEP_PRECIP_GPC			**Work Order:**	KRX4M1AC		**Report DB ID:**	KRX4M1CS					
SR-90	1.55E+01		7.6E-01	2.3E+00	4.54E-01	pCi/L	80%	1.40E+01	2.71E-01	111%	8/13/08 04:30 a	0.9999	GPC3D
							Rec Limits:	70	130	0.1		L	
Batch: 8204277	UTOT_KPA			**Work Order:**	KRX401AC		**Report DB ID:**	KRX401CS					
TOTAL-URANIUM	3.81E+01			4.5E+00	8.42E-02	ug/L		3.75E+01	1.16E+00	102%	8/14/08 10:55 a	0.0249	KPAW3
							Rec Limits:	75	125	0.0		ML	
Batch: 8204277	UTOT_KPA			**Work Order:**	KRX401AD		**Report DB ID:**	KRX401DS					

TestAmerica Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V5.1.7 A2002

FORM II

LCS RESULTS

Date: 20-Aug-08

Lab Name: TestAmerica

Matrix: WATER

SDG: W05458

Report No. : 39709

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
TOTAL-URANIUM	3.37E+00			3.4E-01	8.42E-02	ug/L		3.63E+00	2.39E-02	93%	8/14/08 10:57 a	0.0249	KPAW3
							Rec Limits:	75	125	-0.1		ML	
Batch: 8217136	TC99_ETVDSK_LSC			**Work Order:**	KRX412AC		**Report DB ID:**	KRX412CS					
TC-99	6.14E+02		1.5E+01	4.5E+01	1.07E+01	pCi/L	100%	5.57E+02	8.80E-01	110%	8/4/08 08:38 p	0.1254	LSC6
							Rec Limits:	75	125	0.1		L	
Batch: 8204285	NP237_LLE_PLATE_AEA			**Work Order:**	KRX5J1AC		**Report DB ID:**	KRX5J1CS					
NP-237	1.02E+01		1.4E+00	2.2E+00	3.85E-01	pCi/L	79%	9.36E+00	2.81E-01	109%	8/6/08 03:01 p	0.2002	ALP40
							Rec Limits:	75	125	0.1		L	

No. of Results: 11 **Comments:**

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

FORM II

MATRIX SPIKE RESULTS

Date: 20-Aug-08

Lab Name: TestAmerica **SDG:** W05458

Lot-Sample No.: J8G220106-1, B1WC06 **Report No. :** 39709 **Matrix:** WATER

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 8204277	Work Order:	KRXF51AM		Report DB ID:	KRXF51MW		Orig Sa DB ID:	9KRXF510				
TOTAL-URANIUM	3.88E+01			4.6E+00	8.38E-02	ug/L		103.43%	3.75E+01	8/14/08 11:01 a	0.025	UTOT_KPA
	7.45E-02								1.16E+00		ML	KPAW3
Batch: 8217136	Work Order:	KRXF52AP		Report DB ID:	KRXF52PW		Orig Sa DB ID:					
TC-99	3.91E+03		3.5E+01	2.5E+02	1.05E+01	pCi/L	100%	106.08%	3.69E+03	8/4/08 05:30 p	0.125	TC99_ETVDSK_LSC
									3.65E+00		L	LSC6

Number of Results: 2

Comments:

TestAmerica
rptSTLRchMs
V5.1.7 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/1/2008 10:13:01 AM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204268; RPUISO Pulso by ALP

SDG, Matrix: W05458; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review John Notts **Date** 8-18

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8204268

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 C Date: 8/4/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/12/2008 8:52:10 AM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204285; RNP237 Np-237 w/tracer

SDG, Matrix: W05458; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Lisa Christenson **Date** 8/12/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8204285

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: Eilee Ford Date: 8/12/18

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

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204280; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05458; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. 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. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A

8.3 Comments:

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

First Level Review Lisa Anderson **Date** 8/18/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8204280

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: Erika Ford Date: 8/12/18

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/12/2008 8:56:31 AM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204281; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05458; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> KRXF51AT BETA 100.0 (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. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. 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 8/12/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8204281

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: Erika Job Date: 8/12/18

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/14/2008 9:22:33 AM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204266; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05458; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Tina Cutsonson **Date** 8/14/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 82042666

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: Erika Ford Date: 8/14/8

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/4/2008 11:27:52 AM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204283; RGAMMA Gamma by GER

SDG, Matrix: W05458; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?		✓	
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?	✓		
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:
Please see NCM # 10-12801

First Level Review John J. [illegible] **Date** 8-4-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8204283

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 C. Date: 8/4/08

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-12801**
NCM Initiated By: John Norton
Date Opened: 08/04/2008
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J8G220000 (283), J8G220106 (1),
QC Batches: 8204283,

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

Problem Description / Root Cause

Name	Date	Description
John Norton	08/04/2008	The LCS yield was high.

Corrective Action

Name	Date	Corrective Action
John Norton	08/04/2008	The LCS was re-counted for acceptable results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 8/4/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/5/2008 1:08:47 PM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8217136; RTC99 Tc-99 by LSC

SDG, Matrix: W05458; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. **Yes No N/A**

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

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

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

8.3 Comments: NCM# 0-12814

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

First Level Review Lisa Clinton **Date** 9/5/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8217136

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 nem

Second Level Review: Erika Jordan Date: 8/6/8

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-12814**
NCM Initiated By: Lisa Antonson
Date Opened: 08/05/2008
Date Closed:

Classification: **Anomaly**
Status: **QAREVIEW**
Production Area: Environmental - Prep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J8G220000 (278), J8G220106 (1),
QC Batches: 8217136,

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

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	08/05/2008	The blank and LCS were out of limits for TSIE on the original count . The samples were recounted with good results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	08/05/2008	The samples were recounted.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 8/5/2008

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

8/19/2008 2:54:12 PM

Lot No., Due Date: J8G220106; 08/20/2008

Client, Site: 384868; FLH HANFORD

QC Batch No., Method Test: 8204277; RUNAT UNat by KPA

SDG, Matrix: W05458; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	✓		
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Lisa Anderson **Date** 8/19/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8204277

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: Erika Ford Date: 8/20/18

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

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-145-77

COLLECTOR: R. Ellingsworth

COMPANY CONTACT: Steve Trent

TELEPHONE NO.: 509-373-5869

PROJECT COORDINATOR: TRENT, SJ

PRICE CODE: 7H

DATA TURNAROUND: 30 Days / 30 Days

SAMPLING LOCATION: 200-ZP-1

PROJECT DESIGNATION: 200-ZP-1 Characterization Sampling and Analysis - Special Analysis

SAF NO.: F08-145

AIR QUALITY: ☐

ICE CHEST NO.

FIELD LOGBOOK NO.: HNF-N-606-15

ACTUAL SAMPLE DEPTH

COA

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

SHIPPED TO: TestAmerica Incorporated, Richland

OFFSITE PROPERTY NO.

BILL OF LADING/AIR BILL NO.

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION			HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2			
TYPE OF CONTAINER			G/P	P	G/P	G/P	G/P	P	G/P			
NO. OF CONTAINER(S)			3	1	1	1	3	1	1			
VOLUME			1000mL	1000mL	1000mL	1000mL	1000mL	500mL	500mL			
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Isotopic Plutonium; X	Neptunium-237; X	Strontium-89,90 -- Sr-90 (Strontium-90) X	Technetium-99 (ETVDSK); X	Total Uranium; X			
SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**									
B1WC06	WATER	7-21-08	1236	✓	✓	✓	✓	✓	✓	✓		

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R. Ellingsworth [signature]	72108 1530	LJLANE [signature] TAL	72108 1530
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

(1)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} X

(2)Gross Alpha & Gross Beta {Gross alpha, Gross beta} X

J8G220106
W054~~46~~ 58 RW 7/22/08
DUE 8 20 08
KRKFS

LABORATORY SECTION | **RECEIVED BY** | **TITLE** | **DATE/TIME**

FINAL SAMPLE DISPOSITION | **DISPOSAL METHOD** | **DISPOSED BY** | **DATE/TIME**

A-6003-618(01/06)

TestAmerica Laboratories

43

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 72108 1530 GM Screen Result 0.1K

Client: FLH SDG #: W05458 NA[ ] SAF #: F08-145 NA [ ]

Work Order Number: J8G220106 Chain of Custody # F08-145-77

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
   - ✓ 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 [ ] Amount HNO_3 Added _____
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: _____ Date: 72108

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TestAmerica Laboratories

7/29/2008 1:11:05 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

6D Pu PrpRC5016, SepRC~~5010~~(5039) 7/29/08
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:

AnalyDueDate: 08/20/2008 WD5458

Sep1 DT/Tm Tech:

Batch: 8204268 **WATER** **pCi/L** **PM, Quote: SS , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8204266 CLTL, 8204268 6DSO, 8204277 DHSS, 8204278 FPS5, 8204280 AZS7, 8204281 BCS8, 8204283 AWTA, 8204285 KQXW,

Prep Tech: ,HarrisD

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 KRXF5-1-AF J8G220106-1-SAMP 07/21/2008 12:36	AmtRec: 2X500MLP,9XLP	200.10g,in #Containers: 11	PUTC11140 07/23/08,pd 06/07/94,r	200		Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AL-X J8G220106-1-DUP 07/21/2008 12:36	AmtRec: 2X500MLP,9XLP	200.10g,in #Containers: 11	PUTC11141 07/23/08,pd 06/07/94,r			Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRX4Q-1-AA-B J8G220000-268-BLK 07/21/2008 12:36	AmtRec:	200.30g,in #Containers: 1	PUTC11142 07/23/08,pd 06/07/94,r			Scr:	Alpha:	Beta:
4 KRX4Q-1-AC-C J8G220000-268-LCS 07/21/2008 12:36	AmtRec:	200.20g,in #Containers: 1	PUSG0973 05/14/08,pd 06/07/94,r			Scr:	Alpha:	Beta:

Comments: PH 2.0 DWA 7/29/08

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

KRXF51AF-SAMP Constituent List:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

KRX4Q1AA-BLK:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

KRX4Q1AC-LCS:

PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20	Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20

7/29/2008 1:11:06 PM

Sample Preparation/Analysis

6D Pu PrpRC5016, SepRC5010(5039)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204268 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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

KRXF51AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4Q1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4Q1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/1/2008 10:12:10 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/2/2007, 8/6/2008, Batch: '8204268', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204268						
AC		**Rev1C**	**HarrisD**	7/29/2008 1:00:02 PM		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/29/2008 1:00:02 PM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/29/2008 1:11:09 PM	RL-PRP-004 REVISION 0
SC			ManisD	InSep1	7/30/2008 7:53:51 AM	RL-ALP-001 REV 0
SC			ManisD	Sep1C	7/30/2008 12:13:08 PM	RL-ALP-001 REV 0
SC			ManisD	InSep2	7/30/2008 12:13:27 PM	RL-ALP-015 REV 0
SC			DAWKINSO	InCnt1	7/30/2008 6:31:19 PM	RL-CI-008 REVISION 0
SC			ClarkR	CalcC	7/31/2008 11:57:19 AM	RL-CI-008 REVISION 0
SC			nortonj	Rev1C	8/1/2008 10:10:51 AM	RICH-RC-0002 REV 8
AC			**HarrisD**	7/29/2008 1:11:09 PM		
AC			**ManisD**	7/30/2008 7:53:51		
AC			**ManisD**	7/30/2008 12:13:08		
AC			**ManisD**	7/30/2008 12:13:27		
AC			**DAWKINSO**	7/30/2008 6:31:19 PM		
AC			**ClarkR**	7/31/2008 11:57:19		
AC			**nortonj**	8/1/2008 10:10:51		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 8

ICOCFractions v4.8.34

TestAmerica Laboratories

7/29/2008 1:16:18 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

KO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
5I CLIENT: HANFORD

Balance Id:1120482733 8-5-08 9:37 am TB

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

AnalyDueDate: 08/20/2008 WO 54558

Batch: 8204285 WATER pCi/L **PM, Quote: SS , 57671**

SEQ Batch, Test: None

Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRXF5-1-AA J8G220106-1-SAMP 07/21/2008 12:36			200.30g,in AmtRec: 2X500MLP,9XLP	200.30g #Containers: 11	NPTA7111 07/14/08,pd 06/01/01,r			200		Scr: Alpha: -5.17E-04 uCi/Sa		Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AV-X J8G220106-1-DUP 07/21/2008 12:36			200.10g,in AmtRec: 2X500MLP,9XLP	200.10g #Containers: 11	NPTA7112 07/14/08,pd 06/01/01,r					Scr: Alpha: -5.17E-04 uCi/Sa		Beta: -3.32E-04 uCi/Sa
3 KRX5J-1-AA-B J8G220000-285-BLK 07/21/2008 12:36			200.30g,in AmtRec:	200.30g #Containers: 1	NPTA7113 07/14/08,pd 06/01/01,r					Scr: Alpha:		Beta:
4 KRX5J-1-AC-C J8G220000-285-LCS 07/21/2008 12:36			200.20g,in AmtRec:	200.20g #Containers: 1	NPSE0476 07/14/08,pd 06/01/01,r					Scr: Alpha:		Beta:

Comments: PH 2.0 DLH 7/29/08

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

KRXF51AA-SAMP Constituent List:
Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KRX5J1AA-BLK:
Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KRX5J1AC-LCS:

KRXF51AA-SAMP Calc Info:

7/29/2008 1:16:20 PM

Sample Preparation/Analysis

KO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

AnalyDueDate: 08/20/2008

Batch: 8204285 pCi/L
SEQ Batch, Test: None

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

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

KRX5J1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KRX5J1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/12/2008 8:51:33 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/13/2007, 8/17/2008, Batch: '8204285', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204285						
AC		Rev1C	HarrisD	7/29/2008 1:12:55 PM		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/29/2008 1:12:55 PM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/29/2008 1:16:16 PM	RL-PRP-004 REVISION 0
SC			ManisD	InSep1	7/30/2008 7:54:13 AM	RL-ALP-006 REV 0
SC			ManisD	Sep2C	8/6/2008 10:49:58 AM	RL-ALP-016 REV 0
SC			ClarkR	InCnt1	8/6/2008 11:16:53 AM	RL-CI-008 REVISION 0
SC			BlackCL	CalcC	8/7/2008 4:30:58 AM	RL-CI-008 REVISION 0
SC			antonsonl	Rev1C	8/12/2008 8:51:26 AM	RL-DR-001 REV 0
AC			HarrisD	7/29/2008 1:16:16 PM		
AC			ManisD	7/30/2008 7:54:13		
AC			ManisD	8/6/2008 10:49:58		
AC			ClarkR	8/6/2008 11:16:53		
AC			BlackCL	8/7/2008 4:30:58 AM		
AC			antonsonl	8/12/2008 8:51:26		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 7

ICOCFractions v4.8.34

TestAmerica Laboratories

7/30/2008 9:04:47 AM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 08/20/2008 W05458

Batch: 8204280 WATER pCi/L

SEQ Batch, Test: None

Sample Preparation/Analysis

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

PM, Quote: SS , 57671

Balance Id:1120482733
Pipet #: 245
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: HarrisD / Back 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 KRXF5-1-AC J8G220106-1-SAMP 07/21/2008 12:36	AmtRec: 2X500MLP,9XLP	200.10g,in	#Containers: 11	1.5	13.4	50	11A	1749	8/5/08 8010 Scr: Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AR-X J8G220106-1-DUP 07/21/2008 12:36	AmtRec: 2X500MLP,9XLP	200.20g,in	#Containers: 11		13.4		11C		Scr: Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRX49-1-AA-B J8G220000-280-BLK 07/21/2008 12:36	AmtRec:	200.00g,in	#Containers: 1		0.3		11D		Scr: Alpha:	Beta:
4 KRX49-1-AC-C J8G220000-280-LCS 07/21/2008 12:36	AmtRec:	200.30g,in	ASD4521 07/03/08,pd 06/01/01,r #Containers: 1		0.5		12A		Scr: Alpha:	Beta:

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

PH250 DLH 7/30/08

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

KRXF51AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KRX491AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KRX491AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

7/30/2008 9:04:48 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204280 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:

KRXF51AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX491AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX491AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/12/2008 10:00:10 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/13/2007, 8/17/2008, Batch: '8204280', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204280						
AC		**Rev1C**	**HarrisD**	7/30/2008 9:00:56		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/30/2008 9:00:56 AM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/30/2008 9:04:50 AM	RL-PRP-004 REVISION 0
SC			BockJ	InPrep2	8/4/2008 8:18:35 AM	RL-GPC-001 REVISION 0
SC			BockJ	Prep2C	8/5/2008 2:10:13 PM	RL-GPC-001 REVISION 0
SC			ClarkR	InCnt1	8/5/2008 2:13:17 PM	RL-CI-006 REVISION 0
SC			DAWKINSO	CalcC	8/5/2008 10:11:56 PM	RL-CI-006 REVISION 0
SC			antonsonl	Rev1C	8/12/2008 9:57:32 AM	RL-DR-001 REV 8
AC			**HarrisD**	7/30/2008 9:04:50		
AC			**BockJ**	8/4/2008 8:18:35 AM		
AC			**BockJ**	8/5/2008 2:10:13 PM		
AC			**ClarkR**	8/5/2008 2:13:17 PM		
AC			**DAWKINSO**	8/5/2008 10:11:56 PM		
AC			**antonsonl**	8/12/2008 9:57:32		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 7

ICOCFractions v4.8.34

TestAmerica Laboratories

7/30/2008 9:08:11 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #: 245

AnalyDueDate: 08/20/2008 WO5458

Batch: 8204281 WATER pCi/L PM, Quote: SS , 57671

SEQ Batch, Test: None

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: HarrisD | Back

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 KRXF5-1-AD J8G220106-1-SAMP 07/21/2008 12:36		200.00g,in AmtRec: 2X500MLP,9XLP	#Containers: 11	1.5	26.9	100	31A Scr:	1814 Alpha: -5.17E-04 uCi/Sa	8/5/08 DC Beta: -3.32E-04 uCi/Sa	
2 KRXF5-1-AT-X J8G220106-1-DUP 07/21/2008 12:36		200.20g,in AmtRec: 2X500MLP,9XLP	#Containers: 11		25.5		31B Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa	
3 KRX5D-1-AA-B J8G220000-281-BLK 07/21/2008 12:36		200.30g,in AmtRec:	#Containers: 1		∅		31C Scr:	Alpha:	Beta:	
4 KRX5D-1-AC-C J8G220000-281-LCS 07/21/2008 12:36		200.40g,in AmtRec:	BESB3294 06/30/08,pd #Containers: 1		0.2		31D Scr:	Alpha:	Beta:	

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

PH200 DLH 7/30/08

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

KRXF51AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
KRX5D1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
KRX5D1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

7/30/2008 9:08:12 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204281 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:

KRXF51AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX5D1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX5D1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/12/2008 8:55:17 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/13/2007, 8/17/2008, Batch: '8204281', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204281						
AC		Rev1C	HarrisD	7/30/2008 9:06:08		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/30/2008 9:06:08 AM	RL-PRP-004 REVISION 0
SC			BockJ	InPrep2	8/4/2008 8:18:53 AM	RL-GPC-001 REVISION 0
SC			BockJ	Prep2C	8/5/2008 2:10:18 PM	RL-GPC-001 REVISION 0
SC			ClarkR	InCnt1	8/5/2008 2:13:22 PM	RL-CI-006 REVISION 0
SC			DAWKINSO	CalcC	8/5/2008 10:12:14 PM	RL-CI-006 REVISION 0
SC			antonsonl	Rev1C	8/12/2008 8:55:13 AM	RL-DR-001 REV 8
AC			BockJ	8/4/2008 8:18:53 AM		
AC			BockJ	8/5/2008 2:10:18 PM		
AC			ClarkR	8/5/2008 2:13:22 PM		
AC			DAWKINSO	8/5/2008 10:12:14 PM		
AC			antonsonl	8/12/2008 8:55:13		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 6

ICOCFractions v4.8.34

TestAmerica Laboratories

8/11/2008 2:07:18 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733,E32905
Pipet #:

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech: 07/31/2008 11:20,ManisD

Batch: 8204266 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech: 08/11/2008 10:03,ManisD

SEQ Batch, Test: None All Tests: 8204266 CLTL, 8204268 6DSO, 8204277 DHSS, 8204278 FPS5, 8204280 AZS7, 8204281 BCS8, 8204283 AWTA, 8204285 KOXW, 8217136 FPS5,

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRXF5-1-AG J8G220106-1-SAMP		1000.40g,in	SRTB16284 07/15/08,pd 05/22/07 r		1.0	21.8	100	3A 3A	0612 0519	8/12/08 8/13/08	
						~~07/31/2008 11:20,s1, 08/11/2008~~					
07/21/2008 12:36		AmtRec: 2X500MLP,9XLP		#Containers: 11				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa	
2 KRXF5-1-AK-X J8G220106-1-DUP		1000.20g,in	SRTB16285 07/15/08,pd 05/22/07 r		1.0	22.5	100	3B 3B	0612 0519	8/12/08 8/13/08	
						~~07/31/2008 11:20,s1, 08/11/2008~~					
07/21/2008 12:36		AmtRec: 2X500MLP,9XLP		#Containers: 11				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa	
3 KRX4M-1-AA-B J8G220000-266-BLK		1000.40g,in	SRTB16286 07/15/08,pd 05/22/07 r		1.0	22	100	3C 3C	0612 0519	8/12/08 8/13/08	
						~~07/31/2008 11:20,s1, 08/11/2008~~					
07/21/2008 12:36		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:	
4 KRX4M-1-AC-C J8G220000-266-LCS		999.90g,in	SRSG1489 07/23/08,pd 05/22/07 r		1.0	21.7	100	3D 3D	0612 0519	8/12/08 8/13/08	
						~~07/31/2008 11:20,s1, 08/11/2008~~					
07/21/2008 12:36		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:	

8/11/2008 2:07:19 PM

Sample Preparation/Analysis

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech: 07/31/2008 11:20,ManisD

Batch: 8204266 pCi/L

Sep2 DT/Tm Tech: 08/11/2008 10:03,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

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

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

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

KRXF51AG-SAMP Constituent List:

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

KRX4M1AA-BLK:

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

KRX4M1AC-LCS:

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

KRXF51AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TestAmerica Laboratories

7/30/2008 7:29:37 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #:
Sep1 DT/Tm Tech: 7-31-08 1120 DRM
Sep2 DT/Tm Tech: 8-11-08 10:03:34
Prep Tech: HarrisD DRM

AnalyDueDate: 08/20/2008 W0S458

Batch: 8204266 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRXF5-1-AG J8G220106-1-SAMP YTA18997 Ex:4/29/2009 07/21/2008 12:36	0.86815 86.815 DRM 4/31/08	1000.40g,in AmtRec: 2X500MLP,9XLP	SRTB16284 1.991 07/15/08,pd 2.0680 05/22/07 #Containers: 11				100	4'	1214 Scr: Alpha: -5.17E-04 uCi/Sa	7/31/08 DRM Beta: -3.32E-04 uCi/Sa	
2 KRXF5-1-AK-X J8G220106-1-DUP YTA18998 Ex:4/29/2009 07/21/2008 12:36	0.9217	1000.20g,in AmtRec: 2X500MLP,9XLP	SRTB16285 1.914 07/15/08,pd 2.0765 05/22/07 #Containers: 11					3"	1214 Scr: Alpha: -5.17E-04 uCi/Sa	7/31/08 DRM Beta: -3.32E-04 uCi/Sa	
3 KRX4M-1-AA-B J8G220000-266-BLK YTA18999 Ex:4/29/2009 07/21/2008 12:36	0.8750	1000.40g,in AmtRec:	SRTB16286 1.809 07/15/08,pd 2.0675 05/22/07 #Containers: 1					9"	1249 Scr: Alpha:	7/31/0800 Beta:	
4 KRX4M-1-AC-C J8G220000-266-LCS YTA19000 Ex:4/29/2009 07/21/2008 12:36	0.9401	999.90g,in AmtRec:	SRSG1489 1.912 07/23/08,pd 2.0338 05/22/07 #Containers: 1					9"	1249 Scr: Alpha:	7/31/0800 Beta:	

TAL 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

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ISV - Insufficient Volume for Analysis

WO Cnt: 4
Prep_SamplePrep v4.8.32

TestAmerica Laboratories

7/30/2008 7:29:38 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech: 7-31-08 1120 Dm

Sep2 DT/Tm Tech:

Prep Tech: ,HarrisD

AnalyDueDate: 08/20/2008

Batch: 8204266 pCi/L

SEQ Batch, Test: None

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

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

pH<2.0 OUT 7/30/08

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

KRXF51AG-SAMP Constituent List:

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

KRX4M1AA-BLK:

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

KRX4M1AC-LCS:

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

KRXF51AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX4M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/14/2008 9:20:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/15/2007, 8/19/2008, Batch: '8204266', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204266						
AC		Rev1C	HarrisD	7/30/2008 7:22:50		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/30/2008 7:22:50 AM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/30/2008 7:29:39 AM	RL-PRP-004 REVISION 0
SC			ManisD	InSep1	7/30/2008 12:50:45 PM	RL-GPC-003
SC			McDowellD	InSep1	7/31/2008 11:34:32 AM	RL-GPC-003 REVISION 0
SC			ClarkR	InCnt1	7/31/2008 11:44:50 AM	RL-CI-007 REVISION 0
SC			DAWKINSO	Cnt1C	7/31/2008 1:07:43 PM	RL-CI-007 REVISION 0
SC			ManisD	InSep2	8/4/2008 12:29:24 PM	RL-GPC-004 REV 0
SC			ManisD	Sep2C	8/11/2008 2:11:10 PM	RL-GPC-004 REV 0
SC			DAWKINSO	InCnt2	8/11/2008 3:20:43 PM	RL-CI-006 REVISION 0
SC			BlackCL	CalcC	8/13/2008 6:48:50 AM	RL-CI-006 REVISION 0
SC			antonsonl	Rev1C	8/14/2008 9:20:34 AM	RL-DR-001 REV 8
AC			HarrisD	7/30/2008 7:29:39		
AC			ManisD	7/30/2008 12:50:45		REV 0
AC			McDowellD	7/31/2008 11:34:32		
AC			ClarkR	7/31/2008 11:44:50		
AC			DAWKINSO	7/31/2008 1:07:43 PM		
AC			ManisD	8/4/2008 12:29:24 PM		
AC			ManisD	8/11/2008 2:11:10 PM		
AC			DAWKINSO	8/11/2008 3:20:43 PM		
AC			BlackCL	8/13/2008 6:48:50		
AC			antonsonl	8/14/2008 9:20:34		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 11

ICOCFractions v4.8.34

8/1/2008 11:01:21 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204283 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8204266 CLTL, 8204268 6DSO, 8204277 DHSS, 8204278 FPS5, 8204280 AZS7, 8204281 BCS8, 8204283 HAWTA, 8204285 KOXW,

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:
1 KRXF5-1-AE J8G220106-1-SAMP 07/21/2008 12:36		2500.10g,in AmtRec: 2X500MLP,9XLP	#Containers: 11					Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AU-X J8G220106-1-DUP 07/21/2008 12:36		AmtRec: 2X500MLP,9XLP	#Containers: 11					Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRX5H-1-AA-B J8G220000-283-BLK 07/21/2008 12:36		2500.30g,in AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
4 KRX5H-1-AC-C J8G220000-283-LCS 07/21/2008 12:36		2500.10g,in AmtRec:	QCAG1494 07/29/08,pd 06/08/05,r #Containers: 1					Scr:	Alpha:	Beta:
[redacted] J8G220000-283-LCS 07/21/2008 12:36		2500.1 AmtRec:	QCAG1494 #Containers: 1		100ml	200 min	G13	Scr:	1429 Alpha:	8/1/08 Beta:

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

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

KRXF51AE-SAMP Constituent List:

TestAmerica Laboratories

Sample Preparation/Analysis

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

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

AnalyDueDate: 08/20/2008

Batch: 8204283 pCi/L
SEQ Batch, Test: None

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

Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						
KRX5H1AA-BLK:											
Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						
KRX5H1AC-LCS:											
Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						
KRX5H2AC-LCS:											

KRXF51AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX5H1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX5H1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX5H2AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TestAmerica Laboratories

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

RE-COUNT REQUEST

DUE DATE 8-20

CUSTOMER PGW

ANALAYSIS γ

MATRIX H2O

LOT NUMBER J8G220106

SAMPLE DELIVERY GROUP WO 5458

OLD BATCH NUMBER 820 4283

NEW BATCH NUMBER ↓

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) KRX5H1AC		HIGH LCS YIELD
2)		
3)		
4)		
5)		
6)		
7)		
8)		
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14)		
15)		
16)		
17)		
18)		
19)		
20)		

RC-126, 12/07, Rev 5

TestAmerica Laboratories

7/30/2008 7:06:31 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 08/20/2008 1105458

Sep1 DT/Tm Tech:

Batch: 8204283 **WATER** **pCi/L** **PM, Quote: SS , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8204266 CLTL, 8204268 6DSO, 8204277 DHSS, 8204278 FPS5, 8204280 AZS7, 8204281 BCS8, 8204283 AWTA, 8204285 KOXW,

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:
1 KRXF5-1-AE J8G220106-1-SAMP 07/21/2008 12:36		2500.10g,in AmtRec: 2X500MLP,9XLP			#Containers: 11	200	G13	1649	7/31/08 DLH Scr: Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AU-X J8G220106-1-DUP 07/21/2008 12:36		AmtRec: 2X500MLP,9XLP			#Containers: 11		G11	2021	Scr: Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRX5H-1-AA-B J8G220000-283-BLK 07/21/2008 12:36		2500.30g,in AmtRec:			#Containers: 1		G7	1649	Scr: Alpha:	Beta:
4 KRX5H-1-AC-C J8G220000-283-LCS 07/21/2008 12:36		2500.10g,in AmtRec:	QCAG1494 07/29/08,pd 06/08/05 r		#Containers: 1		G14	1650	Scr: Alpha:	Beta:

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

RR200 DLH 7/30/08

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

KRXF51AE-SAMP Constituent List:

Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						

KRX5H1AA-BLK:

65

7/30/2008 7:06:33 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204283 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:

Co-60	RDL:2.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:
Eu-152	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	Eu-154	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:
Eu-155	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:	K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Sb-125	RDL:5.00E+01	pCi/L	LCL:	UCL:	RPD:						
KRX5H1AC-LCS:											
Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

KRXF51AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KRX5H1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KRX5H1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/4/2008 11:22:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 8/5/2007, 8/9/2008, Batch: '8204283', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204283						
AC		**Rev1C**	**HarrisD**	7/30/2008 6:53:23		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/30/2008 6:53:23 AM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/30/2008 7:06:35 AM	RL-PRP-004 REVISION 0
SC			AshworthA	Prep2C	7/31/2008 1:17:20 PM	RL-GAM-001 REVISION 0
SC			DAWKINSO	InCnt1	7/31/2008 1:30:54 PM	RL-CI-007 REVISION 0
SC			DAWKINSO	CalcC	7/31/2008 8:59:21 PM	RL-CI-007 REVISION 0
SC			DAWKINSO	InCnt1	8/1/2008 11:12:57 AM	RL-CI-007 REVISION 0
SC			DAWKINSO	CalcC	8/1/2008 4:07:19 PM	RL-CI-007 REVISION 0
SC			nortonj	Rev1C	8/4/2008 10:14:49 AM	RICH-RC-0002 REV 8
AC			**HarrisD**	7/30/2008 7:06:35		
AC			**AshworthA**	7/31/2008 1:17:20 PM		
AC			**DAWKINSO**	7/31/2008 1:30:54 PM		
AC			**DAWKINSO**	7/31/2008 8:59:21 PM		
AC			**DAWKINSO**	8/1/2008 11:12:57		
AC			**DAWKINSO**	8/1/2008 4:07:19 PM		
AC			**nortonj**	8/4/2008 10:14:49		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.34

TestAmerica Laboratories

7/29/2008 3:14:21 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #:

AnalyDueDate: 08/20/2008 W0S458

Batch: 8204278 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,HarrisD

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRXF5-1-AH J8G220106-1-SAMP 07/21/2008 12:36		AmtRec: 2X500MLP,9XLP	125.20g,in #Containers: 11	125.20g		60		Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AP-S J8G220106-1-MS 07/21/2008 12:36		AmtRec: 2X500MLP,9XLP	125.00g,in #Containers: 11	125.00g	TCSG2102 07/10/08,pd 01/10/06,r			Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRXF5-1-AQ-X J8G220106-1-DUP 07/21/2008 12:36		AmtRec: 2X500MLP,9XLP	124.90g,in #Containers: 11	124.90g				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
4 KRX41-1-AA-B J8G220000-278-BLK 07/21/2008 12:36		AmtRec:	#Containers: 1	125.40g				Scr:	Alpha:	Beta:
5 KRX41-1-AC-C J8G220000-278-LCS 07/21/2008 12:36		AmtRec:	#Containers: 1	125.40g	TCSE2240 07/10/08,pd 01/10/06,r			Scr:	Alpha:	Beta:
6 KRX41-1-AD-BN J8G220000-278-IBLK 07/21/2008 12:36		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

TAL 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: 6
Prep_SamplePrep v4.8.32

TestAmerica Laboratories

7/29/2008 3:14:24 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 08/20/2008

Batch: 8204278 pCi/L
SEQ Batch, Test: None

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

Comments: pH<2.0 DAH 7/29/08

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

KRXF51AH-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
KRXF51AP-MS Constituent List:

KRX411AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
KRX411AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
KRX411AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

KRXF51AH-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRXF51AP-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX411AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX411AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX411AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

RE-COUNT REQUEST

DUE DATE 8-20

CUSTOMER PGW

ANALAYSIS Tc 99

MATRIX H_2O

LOT NUMBER J8G220106

SAMPLE DELIVERY GROUP W05458

OLD BATCH NUMBER 8204278

NEW BATCH NUMBER 8217136

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) KRXF5/AH		
2) KRXF5/AP S		TSIE OUT
3) KRXF5/AQ X		
4) KRX41/AA B		
5) KRX41/AC C		SHAKE & RE-COUNT
6) KRX41/AD BN		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

RC-126, 12/07, Rev 5

8/4/2008 9:18:46 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

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

AnalyDueDate: 08/20/2008

Batch: 8217136 WATER pCi/L PM, Quote: SS , 57671

SEQ Batch, Test: None All Tests: 8204266 CLTL, 8204268 6DSO, 8204277 DHSS, 8204278 FPS5, 8204280 AZS7, 8204281 BCS8, 8204283 AWTA, 8204285 KOXW, 8217136 FPS5,

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRXF5-2-AH										
J8G220106-1-SAMP										
07/21/2008 12:36		AmtRec: 2X500MLP,9XLP		#Containers: 11				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-2-AP-S										
J8G220106-1-MS										
07/21/2008 12:36		AmtRec: 2X500MLP,9XLP		#Containers: 11				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRXF5-2-AQ-X										
J8G220106-1-DUP										
07/21/2008 12:36		AmtRec: 2X500MLP,9XLP		#Containers: 11				Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
4 KRX41-2-AA-B										
J8G220000-278-BLK										
07/21/2008 12:36		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:
5 KRX41-2-AC-C										
J8G220000-278-LCS										
07/21/2008 12:36		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:
6 KRX41-2-AD-BN										
J8G220000-278-IBLK										
07/21/2008 12:36		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

TestAmerica Laboratories

8/4/2008 9:18:47 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 08/20/2008

Batch: 8217136 pCi/L
SEQ Batch, Test: None

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

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

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

KRXF52AH-SAMP Constituent List:

KRXF52AP-MS Constituent List:

KRX412AA-BLK:

KRX412AC-LCS:

KRX412AD-IBLK:

KRXF52AH-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRXF52AP-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX412AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX412AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX412AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/5/2008 1:08:26 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/6/2007, 8/10/2008, Batch: '8217136', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8217136						
AC		**Rev1C**	**BlackCL**	8/4/2008 9:43:23 AM		
SC			nortonj	IsBatched	8/4/2008 7:29:51 AM	ICOC_RADCALC v4.8.34
SC			BlackCL	InCnt1	8/4/2008 9:43:23 AM	RL-CI-005 REVISION 0
SC			BlackCL	CalcC	8/5/2008 5:57:07 AM	RL-CI-005 REVISION 0
SC			antonsonl	Rev1C	8/5/2008 1:08:17 PM	RL-DR-001 REV 0
AC			**BlackCL**	8/5/2008 5:57:07 AM		
AC			**antonsonl**	8/5/2008 1:08:17 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 3

ICOCFractions v4.8.34

TestAmerica Laboratories

7/30/2008 7:21:24 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 08/20/2008 WO5158

Sep1 DT/Tm Tech:

Batch: 8204277 WATER ug/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD / Brock J.

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 KRXF5-1-AJ J8G220106-1-SAMP 07/21/2008 12:36		25.10g,in AmtRec: 2X500MLP,9XLP	#Containers: 11			Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
2 KRXF5-1-AM-S J8G220106-1-MS 07/21/2008 12:36		25.00g,in AmtRec: 2X500MLP,9XLP	UNSF4274 07/02/08,pd 08/01/57,r #Containers: 11			Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
3 KRXF5-1-AN-X J8G220106-1-DUP 07/21/2008 12:36		25.10g,in AmtRec: 2X500MLP,9XLP	#Containers: 11			Scr:	Alpha: -5.17E-04 uCi/Sa	Beta: -3.32E-04 uCi/Sa
4 KRX40-1-AA-B J8G220000-277-BLK 07/21/2008 12:36		25.10g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 KRX40-1-AC-C J8G220000-277-LCS 07/21/2008 12:36		24.90g,in AmtRec:	UNSF4275 07/02/08,pd 08/01/57,r #Containers: 1			Scr:	Alpha:	Beta:
6 KRX40-1-AD-C J8G220000-277-LCS 07/21/2008 12:36		24.90g,in AmtRec:	UNSC2541 05/22/08,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:

TAL 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

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ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8.32

TestAmerica Laboratories

7/30/2008 7:21:25 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 08/20/2008

Sep1 DT/Tm Tech:

Batch: 8204277 ug/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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: KRXF5-SAMP "Comments: ISV for gamma dup. Please recount on a different detector. DLH 7/30/08"

PH20 DLH 7/30/08

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

KRXF51AJ-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
KRXF51AM-MS Constituent List:

KRX401AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
KRX401AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
KRX401AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

KRXF51AJ-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRXF51AM-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX401AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX401AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KRX401AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

8/19/2008 2:51:40 PM

ICOC Fraction Transfer/Status Report

ByDate: 8/20/2007, 8/24/2008, Batch: '8204277', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8204277						
AC		**Rev1C**	**HarrisD**	7/30/2008 7:17:57		
SC			wagarr	IsBatched	7/22/2008 11:11:30 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep	7/30/2008 7:17:57 AM	RL-PRP-004 REVISION 0
SC			HarrisD	Prep1C	7/30/2008 7:21:25 AM	RL-PRP-004 REVISION 0
SC			BockJ	InPrep2	8/5/2008 8:12:04 AM	RL-KPA-001 REVISION 0
SC			BockJ	Prep2C	8/6/2008 8:52:35 AM	RL-KPA-001 REVISION 0
SC			NelsonT	Cnt1C	8/14/2008 10:51:41 AM	RL-KPA-003 REVISION 0
SC			antonsonl	Rev1C	8/19/2008 2:51:14 PM	RL-DR-001 REV 0
AC			**HarrisD**	7/30/2008 7:21:25		
AC			**BockJ**	8/5/2008 8:12:04 AM		
AC			**BockJ**	8/6/2008 8:52:35 AM		
AC			**NelsonT**	8/14/2008 10:51:41		
AC			**antonsonl**	8/19/2008 2:51:14 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 6

ICOCFractions v4.8.34