

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.: 39580

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.	
W05444	F06-027	B1W890	J8G210164-1	KRWN91AA	9KRWN910	8203411	
		B1W890	J8G210164-1	KRWN91AC	9KRWN910	8203412	
		B1W891	J8G210164-2	KRWPG1AA	9KRWPG10	8203411	
		B1W891	J8G210164-2	KRWPG1AC	9KRWPG10	8203412	
		B1W892	J8G210164-3	KRWPK1AA	9KRWPK10	8203411	
		B1W892	J8G210164-3	KRWPK1AC	9KRWPK10	8203412	
		B1W893	J8G210164-4	KRWPL1AA	9KRWPL10	8203411	
		B1W893	J8G210164-4	KRWPL1AC	9KRWPL10	8203412	
		B1W894	J8G210164-5	KRWPN1AA	9KRWPN10	8203411	
		B1W894	J8G210164-5	KRWPN1AC	9KRWPN10	8203412	
		B1W895	J8G210164-6	KRWPP1AA	9KRWPP10	8203411	
		B1W895	J8G210164-6	KRWPP1AC	9KRWPP10	8203412	
		B1W896	J8G210164-7	KRWPQ1AA	9KRWQ10	8203411	
		B1W896	J8G210164-7	KRWPQ1AC	9KRWQ10	8203412	
		B1W897	J8G210164-8	KRWPR1AA	9KRWPR10	8203411	
		B1W897	J8G210164-8	KRWPR1AC	9KRWPR10	8203412	
		B1W898	J8G210164-9	KRWPT1AA	9KRWPT10	8203411	
		B1W898	J8G210164-9	KRWPT1AC	9KRWPT10	8203412	
		B1W899	J8G210164-10	KRWPX1AA	9KRWPX10	8203411	
		B1W899	J8G210164-10	KRWPX1AC	9KRWPX10	8203412	
		F06-027	B1W8B0	J8G210164-11	KRWP01AA	9KRW010	8203411
			B1W8B0	J8G210164-11	KRWP01AC	9KRW010	8203412
			B1WB53	J8G210164-12	KRWP11AA	9KRW110	8203411
			B1WB53	J8G210164-12	KRWP11AC	9KRW110	8203412
			B1WB54	J8G210164-13	KRWP21AA	9KRW210	8203411
		B1WB54	J8G210164-13	KRWP21AC	9KRW210	8203412	

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JAN 29 2009
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Report No.: 39580

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.
W05444	F06-027	B1WC88	J8G210164-14	KRWP31AA	9KRWP310	8203411
		B1WC88	J8G210164-14	KRWP31AC	9KRWP310	8203412
		B1WC89	J8G210164-15	KRWP41AA	9KRWP410	8203411
		B1WC89	J8G210164-15	KRWP41AC	9KRWP410	8203412
		B1WC90	J8G210164-16	KRWP51AA	9KRWP510	8203411
		B1WC90	J8G210164-16	KRWP51AC	9KRWP510	8203412
		B1WC91	J8G210164-17	KRWP91AA	9KRWP910	8203411
		B1WC91	J8G210164-17	KRWP91AC	9KRWP910	8203412

Certificate of Analysis

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

July 24, 2008

Attention: Steve Trent

SAF Number : F06-027
Date SDG Closed : July 21, 2008
Number of Samples : Seventeen (17)
Sample Type : Water
SDG Number : W05444
Data Deliverable : 3/15 Day

CASE NARRATIVE

I. Introduction

On July 21, 2008 seventeen samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned to lot J8G210164 and assigned the following laboratory ID number to correspond with the Fluor Hanford (FH) specific ID:

<u>FLH ID#</u>	<u>STLR ID#</u>	<u>DATE OF RECEIPT</u>	<u>MATRIX</u>
B1W890	KRWN9	7/21/08	WATER
B1W891	KRWPG	7/21/08	WATER
B1W892	KRWPK	7/21/08	WATER
B1W893	KRWPL	7/21/08	WATER
B1W894	KRWPN	7/21/08	WATER
B1W895	KRWPP	7/21/08	WATER
B1W896	KRW PQ	7/21/08	WATER
B1W897	KRWPR	7/21/08	WATER
B1W898	KRWPT	7/21/08	WATER
B1W899	KRW PX	7/21/08	WATER
B1W8B0	KRW P0	7/21/08	WATER
B1WB53	KRW P1	7/21/08	WATER
B1WB54	KRW P2	7/21/08	WATER

Fluor Hanford, Inc.
July 24, 2008

B1WC88	KRWP3	7/21/08	WATER
B1WC89	KRWP4	7/21/08	WATER
B1WC90	KRWP5	7/21/08	WATER
B1WC91	KRWP9	7/21/08	WATER

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:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The samples were not acidified. TestAmerica notified the client by email on July 21, 2008. TestAmerica also emailed an IRF on July 22, 2008. The client accepted the proposed resolution (Tracking Number: 08-104) on July 23, 2008.

All the samples in this SDG, except for B1WC91, did not meet the CRDL due to reduced aliquot sizes based on weight screens. The samples were counted for the longest time frame appropriate to the analysis.

Except as noted, the LCS, batch blank, sample and sample duplicate (B1W890) results are within contractual requirements.

Fluor Hanford, Inc.
July 24, 2008

Gross Beta by method RICH-RC-5014:

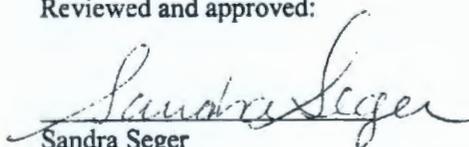
The samples were not acidified. TestAmerica notified the client by email on July 21, 2008. TestAmerica also emailed an IRF on July 22, 2008. The client accepted the proposed resolution (Tracking Number: 08-104) on July 23, 2008.

All the samples in this SDG ,except for B1WC91, did not meet the CRDL due to reduced aliquot sizes based on weight screens. The samples were counted for the longest time frame appropriate to the analysis.

Except as noted, the LCS, batch blank, sample and sample duplicate (B1W8918) 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

**TAL RICHLAND ISSUE RESOLUTION FORM
FOR CONTRACT 615**

Tracking Number: 08-104

SAF No.: F06-027

Date: July 22, 2008

SDG: W05442, W05443, W05444

Test: Gross Alpha and Gross Beta

Sample No.(s) See Sample ID List Attached

Submitted By: Sandra Seger

Submitted To: Steve Trent (FH)

Phone No. 509-375-3131 x158

Phone No. 509-373-5869

Fax No. 509-375-5590

Fax No. 866-252-5816

ISSUE

The sample bottle labels indicate the samples were acidified, however the pH of all the samples were above 5.

The requested analytes were gross alpha and gross beta.

PROPOSED RESOLUTION

Samples were acidified by TestAmerica on 7/21/08 at approximately 14:30. Analysis will be started on 7/22/08, 24 hours after acidification of samples. The due date is 7/25/08 instead of 7/24/08 because of the 24 hour acidification delay.

The client was notified by email on 7/21/08.

TestAmerica was instructed by the client to generate an IRF for these samples.

FLH COMMENTS -

Accept proposed resolution and note issue in case narrative.

Heidi Hampt 7/23/08

Signature and date

**TAL RICHLAND ISSUE RESOLUTION FORM
FOR CONTRACT 615**

SDGs: W05442, W05443, W05444

Client IDs:

W05442	W05443	W05444
B1WB68	B1WCF6	B1W890
B1WB69	B1WCF7	B1W891
B1WB70	B1WCF8	B1W892
B1WB71	B1WCF9	B1W893
B1WB72	B1WCH0	B1W894
B1WB73	B1WCH1	B1W895
B1WB74	B1WCH2	B1W896
B1WB75	B1WCH3	B1W897
B1WB76	B1WCH4	B1W898
B1WB77	B1WCH5	B1W899
B1WB78	B1WCH6	B1W8B0
B1WB79	B1WCH7	B1W853 B1WB53 SKS 7/23/08
B1WB80	B1WCH8	B1W854 B1WB54 SKS 7/23/08
B1WB81	B1WCH9	B1WC88
B1WB82	B1WCJ0	B1WC89
B1WB83	B1WCJ1	B1WC90
B1WB84	B1WCJ2	B1WC91
B1WCC4		
B1WCC5		
B1WCC6		
B1WCC7		
B1WCC8		
B1WCC9		
B1WCD0		
B1WCD1		
B1WCD2		
B1WCD3		
B1WCD4		

Seger, Sandra

From: Hampt, Heidi [Heidi_Hampt@RL.gov]
Sent: Wednesday, July 23, 2008 10:02 AM
To: Seger, Sandra
Cc: Trent, Stephen J; Ayres, Doris E; Widrig, Dana L
Subject: FW: IRF for W05442, W05443, W05444
Attachments: IRF W05442_ W05443_ W05444_ FLH.DOC; IRF W05442_ W05443_ W05444_ SAMPLE IDs_ FLH.DOC; 08-104.DOC

Sandra,

Response is attached.

Thanks,
Heidi

From: Trent, Stephen J
Sent: Tuesday, July 22, 2008 3:27 PM
To: Hampt, Heidi
Subject: FW: IRF for W05442, W05443, W05444

Heidi,

Doesn't look like Sandra sent to you. I've already sent these to Scott Conley.

Steve

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Tuesday, July 22, 2008 8:31 AM
To: Widrig, Dana L
Cc: Trent, Stephen J
Subject: IRF for W05442, W05443, W05444

<<IRF W05442_ W05443_ W05444_ FLH.DOC>> <<IRF W05442_ W05443_ W05444_ SAMPLE IDs_ FLH.DOC>>

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Please consider the environment before printing this e-mail.

Seger, Sandra

From: Seger, Sandra
Sent: Monday, July 21, 2008 3:08 PM
To: 'Trent, Stephen J'
Subject: RE: 3 Day Alpha & Beta Samples

All but three samples had a pH of about 7. The other 3 had a pH of about 5. It's possible there is a buffering problem but seems unlikely for 62 samples.

Sandra

From: Trent, Stephen J [mailto:Stephen_J_Trent@RL.gov]
Sent: Monday, July 21, 2008 2:52 PM
To: Seger, Sandra
Subject: RE: 3 Day Alpha & Beta Samples

Any problem with acidifying these samples? In other words, is it possible the matrix of the sample buffered the preservative added by the samplers?

Steve

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Monday, July 21, 2008 2:53 PM
To: Trent, Stephen J; Widrig, Dana L
Subject: RE: 3 Day Alpha & Beta Samples

Steve,

I'll send a IRF in the morning.

Thanks,
Sandra

From: Trent, Stephen J [mailto:Stephen_J_Trent@RL.gov]
Sent: Monday, July 21, 2008 2:45 PM
To: Seger, Sandra; Widrig, Dana L
Subject: RE: 3 Day Alpha & Beta Samples

Sandra,

Thanks for the information – Can you create an IRF for the preservation issue. Do what you can on turnaround time.

Steve

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]

Sent: Monday, July 21, 2008 2:38 PM
To: Widrig, Dana L
Cc: Trent, Stephen J
Subject: 3 Day Alpha & Beta Samples

Dana,

Today we received samples for the alpha and beta 3 day TAT project.

The labels indicate the samples have been acidified. However, the samples are not acidified. We will acidify the sample this afternoon. According to the procedure, the samples have to be acidified for 24 hours before we can aliquot and process samples. This is going to add an extra day to the due date. The samples will be due on Friday 7/25/08 instead of Thursday 7/24/08.

We received 62 samples for alpha and beta. Sixteen samples over the 46 per day maximum. The sixteen extra samples plus their QC may pose a counting problem. We did accept other priority samples based on the fact that we would have available detector space. If we do end up with a conflict, then the extra samples would be due on Monday 7/28/08. We will do our best to meet the due date of 7/25/08.

Thanks,
Sandra

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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, $R = \text{constants} * f(x,y,z,...)$. 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/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or 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) <i>u_c Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c the combined uncertainty.</i> The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or 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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgmdCnt}/\text{BkgmdCntMin})/\text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \text{Sqrt}((\text{BkgmdCnt}/\text{BkgmdCntMin})/\text{SCntMin}) + 2.71/\text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D)/[\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ 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: 24-Jul-08

TestAmerica TARL

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

Report No. : 39580

SDG No: W05444

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8203411	9310_ALPHABETA_GPC								
	B1W890								
	KRWN91AA	ALPHA	3.42E+00 +- 7.29E+00	U	pCi/L	100%	1.49E+01	3.00E+00	
	B1W890 DUP								
	KRWN91AD	ALPHA	1.71E+00 +- 5.53E+00	U	pCi/L	100%	1.21E+01	3.00E+00	66.7
	B1W891								
	KRWPG1AA	ALPHA	3.03E+00 +- 3.26E+00	U	pCi/L	100%	5.79E+00	3.00E+00	
	B1W892								
	KRWPK1AA	ALPHA	3.83E+00 +- 7.59E+00	U	pCi/L	100%	1.54E+01	3.00E+00	
	B1W893								
	KRWPL1AA	ALPHA	1.25E+01 +- 9.26E+00	U	pCi/L	100%	1.26E+01	3.00E+00	
	B1W894								
	KRWPN1AA	ALPHA	-3.09E-01 +- 3.71E+00	U	pCi/L	100%	9.63E+00	3.00E+00	
	B1W895								
	KRWPP1AA	ALPHA	9.05E+00 +- 1.27E+01	U	pCi/L	100%	2.39E+01	3.00E+00	
	B1W896								
	KRWPPQ1AA	ALPHA	1.20E+01 +- 1.31E+01	U	pCi/L	100%	2.33E+01	3.00E+00	
	B1W897								
	KRWPR1AA	ALPHA	4.66E+00 +- 9.68E+00	U	pCi/L	100%	1.96E+01	3.00E+00	
	B1W898								
	KRWPT1AA	ALPHA	-6.96E-01 +- 6.24E+00	U	pCi/L	100%	1.59E+01	3.00E+00	
	B1W899								
	KRWPX1AA	ALPHA	-4.40E+00 +- 3.85E+00	U	pCi/L	100%	1.28E+01	3.00E+00	
	B1W8B0								
	KRWPC1AA	ALPHA	-4.68E-01 +- 5.59E+00	U	pCi/L	100%	1.34E+01	3.00E+00	
	B1WB53								
	KRWP11AA	ALPHA	-3.41E+00 +- 6.57E+00	U	pCi/L	100%	1.60E+01	3.00E+00	
	B1WB54								
	KRWP21AA	ALPHA	2.87E-01 +- 2.49E+00	U	pCi/L	100%	5.96E+00	3.00E+00	
	B1WC88								
	KRWP31AA	ALPHA	1.83E+00 +- 2.58E+00	U	pCi/L	100%	4.79E+00	3.00E+00	
	B1WC89								
	KRWP41AA	ALPHA	-2.06E+00 +- 2.05E+00	U	pCi/L	100%	6.78E+00	3.00E+00	
	B1WC90								
	KRWP51AA	ALPHA	-1.18E-01 +- 4.19E+00	U	pCi/L	100%	9.90E+00	3.00E+00	
	B1WC91								
	KRWP91AA	ALPHA	1.43E-01 +- 4.26E-01	U	pCi/L	100%	1.07E+00	3.00E+00	
8203412	9310_ALPHABETA_GPC								
	B1W890								
	KRWN91AC	BETA	2.98E+01 +- 1.48E+01		pCi/L	100%	2.60E+01	4.00E+00	

TestAmerica
rptSTLRchSaSum
mary2 V5.1.6
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

Date: 24-Jul-08

TestAmerica TARL

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

Report No. : 39580

SDG No: W05444

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
8203412	9310_ALPHABETA_GPC								
	B1W891								
	KRWPG1AC	BETA	1.32E+01 +- 5.75E+00		pCi/L	100%	9.80E+00	4.00E+00	
	B1W891 DUP								
	KRWPG1AD	BETA	8.52E+00 +- 5.27E+00	U	pCi/L	100%	9.57E+00	4.00E+00	43.0
	B1W892								
	KRWPK1AC	BETA	9.23E+01 +- 2.23E+01		pCi/L	100%	2.91E+01	4.00E+00	
	B1W893								
	KRWPL1AC	BETA	2.71E+01 +- 1.65E+01	U	pCi/L	100%	2.99E+01	4.00E+00	
	B1W894								
	KRWPN1AC	BETA	2.59E+01 +- 1.59E+01	U	pCi/L	100%	2.89E+01	4.00E+00	
	B1W895								
	KRWPP1AC	BETA	5.97E+01 +- 2.43E+01		pCi/L	100%	4.11E+01	4.00E+00	
	B1W896								
	KRWPPQ1AC	BETA	3.23E+01 +- 1.99E+01	U	pCi/L	100%	3.64E+01	4.00E+00	
	B1W897								
	KRWPR1AC	BETA	1.03E+03 +- 1.71E+02		pCi/L	100%	2.50E+01	4.00E+00	
	B1W898								
	KRWPT1AC	BETA	5.77E+01 +- 2.36E+01		pCi/L	100%	3.97E+01	4.00E+00	
	B1W899								
	KRWPX1AC	BETA	9.05E+02 +- 1.24E+02		pCi/L	100%	2.96E+01	4.00E+00	
	B1W8B0								
	KRWPC1AC	BETA	3.97E+02 +- 5.65E+01		pCi/L	100%	2.23E+01	4.00E+00	
	B1WB53								
	KRWP11AC	BETA	4.12E+02 +- 7.66E+01		pCi/L	100%	1.90E+01	4.00E+00	
	B1WB54								
	KRWP21AC	BETA	1.81E+03 +- 2.35E+02		pCi/L	100%	1.49E+01	4.00E+00	
	B1WC88								
	KRWP31AC	BETA	6.10E+02 +- 7.91E+01		pCi/L	100%	1.20E+01	4.00E+00	
	B1WC89								
	KRWP41AC	BETA	4.73E+02 +- 6.28E+01		pCi/L	100%	1.59E+01	4.00E+00	
	B1WC90								
	KRWP51AC	BETA	9.07E+02 +- 1.28E+02		pCi/L	100%	1.67E+01	4.00E+00	
	B1WC91								
	KRWP91AC	BETA	5.47E+00 +- 1.71E+00		pCi/L	100%	2.60E+00	4.00E+00	
	No. of Results: 36								

TestAmerica

RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V5.1.6
A2002

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

Date: 24-Jul-08

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 39580

SDG No.: W05444

Batch	Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
9310_ALPHABETA_GPC									
	8203411	BLANK QC,							
	KRWRJ1AA	ALPHA	1.56E-01 +- 2.00E-01	U	pCi/L	100%			3.67E-01
	8203411	LCS,							
	KRWRJ1AC	ALPHA	1.81E+01 +- 3.93E+00		pCi/L	100%	81%	-0.2	4.44E-01
9310_ALPHABETA_GPC									
	8203412	BLANK QC,							
	KRWRM1AA	BETA	1.61E+00 +- 1.18E+00	U	pCi/L	100%			2.19E+00
	8203412	LCS,							
	KRWRM1AC	BETA	2.41E+01 +- 3.48E+00		pCi/L	100%	106%	0.1	1.94E+00
No. of Results: 4									

TestAmerica Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSummary V5.1.6 A2002 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: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 12:05:00 PM

Lot-Sample No.: J8G210164-1

Report No.: 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W890

COC No.: F06-027-201

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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWN91AA		Report DB ID: 9KRWN910					
ALPHA	3.42E+00	U	7.3E+00	7.3E+00	1.49E+01	pCi/L	100%	0.23	7/23/08 03:41 p		0.0098	GPC10A
							6.29E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWN91AC		Report DB ID: 9KRWN910					
BETA	2.98E+01		1.4E+01	1.5E+01	2.60E+01	pCi/L	100%	(1.1)	7/23/08 03:29 p		0.017	GPC26A
							1.26E+01	4.00E+00			L	

No. of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 11:58:00 AM

Lot-Sample No.: J8G210164-2

Report No.: 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W891

COC No.: F06-027-201

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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPG1AA		Report DB ID: 9KRWPG10					
ALPHA	3.03E+00	U	3.2E+00	3.3E+00	5.79E+00	pCi/L	100%	0.52	7/23/08 03:41 p		0.0235	GPC10C
						2.43E+00	3.00E+00	(1.9)			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPG1AC		Report DB ID: 9KRWPG10					
BETA	1.32E+01		5.5E+00	5.7E+00	9.80E+00	pCi/L	100%	(1.3)	7/23/08 03:29 p		0.0403	GPC26B
						4.72E+00	4.00E+00	(4.6)			L	

No. of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 11:52:00 AM

Lot-Sample No.: J8G210164-3

Report No.: 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W892

COC No.: F06-027-201

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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPK1AA	Report DB ID: 9KRWPK10						
ALPHA	3.83E+00	U	7.5E+00	7.6E+00	1.54E+01	pCi/L	100%	0.25	7/23/08 03:41 p		0.0081	GPC10D
						6.27E+00	3.00E+00	(1.)			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPK1AC	Report DB ID: 9KRWPK10						
BETA	9.23E+01		1.9E+01	2.2E+01	2.91E+01	pCi/L	100%	(3.2)	7/23/08 03:29 p		0.0134	GPC26D
						1.40E+01	4.00E+00	(8.3)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-4
Client Sample ID: B1W893

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 12:24:00 PM
Received Date: 7/21/2008 11:35:00 AM
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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPL1AA	Report DB ID: 9KRWPL10						
ALPHA	1.25E+01	U	8.9E+00	9.3E+00	1.26E+01	pCi/L	100%	0.99	7/23/08 03:41 p		0.0078	GPC10E
						4.83E+00	3.00E+00	(2.7)			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPL1AC	Report DB ID: 9KRWPL10						
BETA	2.71E+01	U	1.6E+01	1.7E+01	2.99E+01	pCi/L	100%	0.91	7/23/08 03:30 p		0.0123	GPC27A
						1.44E+01	4.00E+00	(3.3)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 12:14:00 PM

Lot-Sample No.: J8G210164-5

Report No.: 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W894

COC No.: F06-027-201

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: 8203411	9310_ALPHABETA_GPC											
ALPHA	-3.09E-01	U	3.7E+00	3.7E+00	9.63E+00	pCi/L	100%	-0.03	7/23/08 03:41 p		0.0111	GPC10F
							3.77E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC											
BETA	2.59E+01	U	1.5E+01	1.6E+01	2.89E+01	pCi/L	100%	0.9	7/23/08 03:30 p		0.0141	GPC27B
							1.40E+01	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 12:52:00 PM

Lot-Sample No.: J8G210164-6

Report No. : 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W895

COC No. : F06-027-201

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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPP1AA		Report DB ID: 9KRWPP10					
ALPHA	9.05E+00	U	1.3E+01	1.3E+01	2.39E+01	pCi/L	100%	0.38	7/23/08 03:41 p		0.0066	GPC11A
							9.92E+00	3.00E+00	(1.4)		L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPP1AC		Report DB ID: 9KRWPP10					
BETA	5.97E+01		2.3E+01	2.4E+01	4.11E+01	pCi/L	100%	(1.5)	7/23/08 03:30 p		0.0104	GPC27C
							1.99E+01	4.00E+00	(4.9)		L	

No. of Results: 2

Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-7
Client Sample ID: B1W896

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 12:45:00 PM
Received Date: 7/21/2008 11:35:00 AM
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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPQ1AA		Report DB ID: 9KRWPQ10					
ALPHA	1.20E+01	U	1.3E+01	1.3E+01	2.33E+01	pCi/L	100%	0.52	7/23/08 03:41 p		0.0075	GPC11B
							9.85E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPQ1AC		Report DB ID: 9KRWPQ10					
BETA	3.23E+01	U	1.9E+01	2.0E+01	3.64E+01	pCi/L	100%	0.89	7/23/08 03:30 p		0.0116	GPC27D
							1.76E+01	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-8
Client Sample ID: B1W897

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:33:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPR1AA	Report DB ID: 9KRWPR10						
ALPHA	4.66E+00	U	9.6E+00	9.7E+00	1.96E+01	pCi/L	100%	0.24	7/23/08 03:41 p		0.0098	GPC11C
						8.39E+00	3.00E+00	0.96			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPR1AC	Report DB ID: 9KRWPR10						
BETA	1.03E+03		4.1E+01	1.7E+02	2.50E+01	pCi/L	100%	(41.2)	7/23/08 03:29 p		0.0151	GPC28B
						1.20E+01	4.00E+00	(12.1)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-9
Client Sample ID: B1W898

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 12:39:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPT1AA		Report DB ID: 9KRWPT10					
ALPHA	-6.96E-01	U	6.2E+00	6.2E+00	1.59E+01	pCi/L	100%	-0.04	7/23/08 03:41 p		0.0079	GPC11D
							6.39E+00 3.00E+00	-0.22			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPT1AC		Report DB ID: 9KRWPT10					
BETA	5.77E+01		2.2E+01	2.4E+01	3.97E+01	pCi/L	100%	(1.5)	7/23/08 03:29 p		0.0104	GPC28C
							1.92E+01 4.00E+00	(4.9)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-10
Client Sample ID: B1W899

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:04:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWPX1AA	Report DB ID: 9KRWPX10						
ALPHA	-4.40E+00	U	3.7E+00	3.8E+00	1.28E+01	pCi/L	100%	-0.34	7/23/08 03:42 p		0.0111	GPC12A
						5.28E+00	3.00E+00	-(2.3)			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPX1AC	Report DB ID: 9KRWPX10						
BETA	9.05E+02		4.2E+01	1.2E+02	2.96E+01	pCi/L	100%	(30.5)	7/23/08 03:29 p		0.0133	GPC28D
						1.43E+01	4.00E+00	(14.7)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-11
Client Sample ID: B1W8B0

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 12:32:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP01AA		Report DB ID: 9KRWP010					
ALPHA	-4.68E-01	U	5.6E+00	5.6E+00	1.34E+01	pCi/L	100%	-0.04	7/23/08 03:42 p		0.0109	GPC12B
						5.62E+00	3.00E+00	-0.17			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP01AC		Report DB ID: 9KRWP010					
BETA	3.97E+02		2.5E+01	5.7E+01	2.23E+01	pCi/L	100%	(17.8)	7/23/08 03:41 p		0.0168	GPC31A
						1.08E+01	4.00E+00	(14.)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-12
Client Sample ID: B1WB53

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:41:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP11AA		Report DB ID: 9KRWP110					
ALPHA	-3.41E+00	U	6.5E+00	6.6E+00	1.60E+01	pCi/L	100%	-0.21	7/23/08 03:42 p		0.0133	GPC12C
							7.09E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP11AC		Report DB ID: 9KRWP110					
BETA	4.12E+02		2.3E+01	7.7E+01	1.90E+01	pCi/L	100%	(21.7)	7/23/08 03:41 p		0.0208	GPC31B
							9.12E+00	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-13
Client Sample ID: B1WB54

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:49:00 PM
Received Date: 7/21/2008 11:35:00 AM
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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP21AA	Report DB ID: 9KRWP210						
ALPHA	2.87E-01	U	2.5E+00	2.5E+00	5.96E+00	pCi/L	100%	0.05	7/23/08 07:30 p		0.0166	GPC10F
							2.33E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP21AC	Report DB ID: 9KRWP210						
BETA	1.81E+03		3.9E+01	2.4E+02	1.49E+01	pCi/L	100%	(121.5)	7/23/08 03:41 p		0.0263	GPC31D
							7.18E+00	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-14
Client Sample ID: B1WC88

SDG: W05444
Report No. : 39580
COC No. : F06-027-201

Collection Date: 7/18/2008 1:12:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP31AA		Report DB ID: 9KRWP310					
ALPHA	1.83E+00	U	2.6E+00	2.6E+00	4.79E+00	pCi/L	100%	0.38	7/23/08 07:30 p		0.0202	GPC10E
							1.83E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP31AC		Report DB ID: 9KRWP310					
BETA	6.10E+02		2.1E+01	7.9E+01	1.20E+01	pCi/L	100%	(50.7)	7/23/08 03:41 p		0.0348	GPC32A
							5.80E+00	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-15
Client Sample ID: B1WC89

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:56:00 PM
Received Date: 7/21/2008 11:35:00 AM
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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP41AA		Report DB ID: 9KRWP410					
ALPHA	-2.06E+00	U	2.0E+00	2.0E+00	6.78E+00	pCi/L	100%	-0.3	7/23/08 07:30 p		0.0159	GPC10D
							2.76E+00 3.00E+00	-(2.)			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP41AC		Report DB ID: 9KRWP410					
BETA	4.73E+02		2.1E+01	6.3E+01	1.59E+01	pCi/L	100%	(29.8)	7/23/08 03:41 p		0.0255	GPC32B
							7.65E+00 4.00E+00	(15.)			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-16
Client Sample ID: B1WC90

SDG: W05444
Report No.: 39580
COC No.: F06-027-201

Collection Date: 7/18/2008 1:18:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Allquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP51AA		Report DB ID: 9KRWP510					
ALPHA	-1.18E-01	U	4.2E+00	4.2E+00	9.90E+00	pCi/L	100%	-0.01	7/23/08 07:30 p		0.014	GPC10C
							4.16E+00	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP51AC		Report DB ID: 9KRWP510					
BETA	9.07E+02		3.0E+01	1.3E+02	1.67E+01	pCi/L	100%	(54.4)	7/23/08 03:41 p		0.023	GPC32C
							8.02E+00	4.00E+00			L	

No. of Results: 2 Comments:

FORM I
SAMPLE RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica
Lot-Sample No.: J8G210164-17
Client Sample ID: B1WC91

SDG: W05444
Report No. : 39580
COC No. : F06-027-201

Collection Date: 7/18/2008 1:24:00 PM
Received Date: 7/21/2008 11:35:00 AM
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/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 8203411	9310_ALPHABETA_GPC				Work Order: KRWP91AA	Report DB ID: 9KRWP910						
ALPHA	1.43E-01	U	4.3E-01	4.3E-01	1.07E+00	pCi/L	100%	0.13	7/23/08 06:18 p		0.2	GPC12A
							3.72E-01	3.00E+00			L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWP91AC	Report DB ID: 9KRWP910						
BETA	5.47E+00		1.6E+00	1.7E+00	2.60E+00	pCi/L	100%	(2.1)	7/23/08 06:22 p		0.2	GPC31A
							1.23E+00	4.00E+00			L	

No. of Results: 2 Comments:

FORM II

Date: 24-Jul-08

DUPLICATE RESULTS

Lab Name: TestAmerica

SDG: W05444

Collection Date: 7/18/2008 12:05:00 PM

Lot-Sample No.: J8G210164-1

Report No. : 39580

Received Date: 7/21/2008 11:35:00 AM

Client Sample ID: B1W890 DUP

COC No. : F06-027-201

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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWN91AD	Report DB ID: KRWN91DR			Orig Sa DB ID: 9KRWN910			
ALPHA	1.71E+00	U	5.5E+00	5.5E+00	1.21E+01	pCi/L	100%	0.14	7/23/08 03:41 p		0.0099	GPC10B
	3.42E+00	U		RPD 66.7		3.00E+00		0.62			L	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.

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

.6 A2002 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: 24-Jul-08

DUPLICATE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: J8G210164-2
 Client Sample ID: B1W891 DUP

SDG: W05444
 Report No. : 39580
 COC No. : F06-027-201

Collection Date: 7/18/2008 11:58:00 AM
 Received Date: 7/21/2008 11:35:00 AM
 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: 8203412	9310_ALPHABETA_GPC				Work Order: KRWPG1AD	Report DB ID: KRWPG1DR			Orig Sa DB ID: 9KRWPG10			
BETA	8.52E+00	U	5.2E+00	5.3E+00	9.57E+00	pCi/L	100%	0.89	7/23/08 03:29 p		0.0403	GPC26C
	1.32E+01			RPD 43.0		4.00E+00		(3.2)			L	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.
 rptSTLRchDupV5.1 MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 .6 A2002 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: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Matrix: WATER

Report No. : 39580

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: 8203411	9310_ALPHABETA_GPC		Work Order: KRWRJ1AA		Report DB ID: KRWRJ1AB							
ALPHA	1.56E-01	U	2.0E-01	2.0E-01	3.67E-01	pCi/L	100%	0.43	7/23/08 07:30 p		0.2	GPC10B
					1.48E-01	3.00E+00		(1.6)			L	
Batch: 8203412	9310_ALPHABETA_GPC		Work Order: KRWRM1AA		Report DB ID: KRWRM1AB							
BETA	1.61E+00	U	1.2E+00	1.2E+00	2.19E+00	pCi/L	100%	0.73	7/23/08 03:41 p		0.2	GPC32D
					1.06E+00	4.00E+00		(2.7)			L	
No. of Results: 2	Comments:											

FORM II
LCS RESULTS

Date: 24-Jul-08

Lab Name: TestAmerica

SDG: W05444

Matrix: WATER

Report No. : 39580

Parameter	Result	Count Qual 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: 8203411	9310_ALPHABETA_GPC				Work Order: KRWRJ1AC		Report DB ID: KRWRJ1CS					
ALPHA	1.81E+01	1.4E+00	3.9E+00	4.44E-01	pCi/L	100%	2.24E+01	3.30E-01	81%	7/23/08 07:30 p	0.2	GPC10A
						Rec Limits:	70	130	-0.2		L	
Batch: 8203412	9310_ALPHABETA_GPC				Work Order: KRWRM1AC		Report DB ID: KRWRM1CS					
BETA	2.41E+01	1.8E+00	3.5E+00	1.94E+00	pCi/L	100%	2.27E+01	2.97E-01	106%	7/23/08 07:12 p	0.2	GPC28C
						Rec Limits:	70	130	0.1		L	

No. of Results: 2 Comments:

Lot No., Due Date: J8G210164; 07/25/2008
Client, Site: 108302; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8203411; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05444; WATER

1.0 COC

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

Yes No N/A

2.0 QC Batch

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

3.0 QC & Samples

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

4.0 Raw Data

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

Yes No N/A

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

Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.0 Other

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.4 Was transcription checked? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

6.0 Comments on any No response:

Please see NCM # 10-12724

First Level Review John [Signature] Date 7-24-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8203411

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 Nam

Second Level Review: Jodie G Date: 7/24/08

Clouseau Nonconformance Memo



NCM #: 10-12724 NCM Initiated By: John Norton Date Opened: 07/24/2008 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: Alpha by GPC-Am Lot #'s (Sample #'s): J8G210000 (411), J8G210164 (1,10,11,12,13,14,15,16,17,2, 3,4,5,6,7,8,9), QC Batches: 8203411,
Nonconformance: MDA not met Subcategory: Sample size reduced due to high residue mass	

Problem Description / Root Cause

Name	Date	Description
John Norton	07/24/2008	With the exception of sample J8G210164-17 these samples did not meet the RDL due to reduced aliquot sizes caused by high residue weights.

Corrective Action

Name	Date	Corrective Action
John Norton	07/24/2008	The samples were all counted for the longest time frame appropriate to this analysis.

Client Notification Summary

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

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J8G210164; 07/25/2008
Client, Site: 108302; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8203412; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05444; WATER

1.0 COC

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

Yes No N/A

2.0 QC Batch

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

3.0 QC & Samples

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

4.0 Raw Data

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

Yes No N/A

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

Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.0 Other

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.4 Was transcription checked? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

6.0 Comments on any No response:

Please see NCM # 10-12725

First Level Review *[Signature]*

Date 7-24-8

Data Review Checklist RADIOCHEMISTRY Second Level Review

Batch Number: 8203412

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

Comments on any "No" response: see Ncm

Second Level Review: Jodie C Date: 7/24/08

Clouseau Nonconformance Memo

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-12725 NCM Initiated By: John Norton Date Opened: 07/24/2008 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: Beta by GPC-Sr/Y Lot #'s (Sample #'s): J8G210000 (412), J8G210164 (1,10,11,12,13,14,15,16,17,2, 3,4,5,6,7,8,9), QC Batches: 8203412,
Nonconformance: MDA not met Subcategory: Sample size reduced due to high residue mass	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
John Norton	07/24/2008	With the exception of sample J8G210164-17 these samples did not meet the RDL due to reduced aliquot sized caused by high residue weights.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
John Norton	07/24/2008	The samples were counted for the longest time frame appropriate to this analysis.

Client Notification Summary

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

Quality Assurance Verification

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

Approval History

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

COLLECTOR

Mueler

SAMPLING LOCATION

100-NR-2 Inj. #4/Day 0 - Post-Inject

ICE CHEST NO.

SHIPPED TO

TestAmerica Incorporated, Richland

MATRIX*

- A=Air
- DL=Drum
- Liquids
- DS=Drum
- Solids
- L=Liquid
- O=Oil
- S=Soil
- SE=Sediment
- T=Tissue
- V=Vegetation
- W=Water
- WT=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

COMPANY CONTACT

FABRE, RJ

PROJECT DESIGNATION

100-N Apatite Barrier Performance Monitoring

FIELD LOGBOOK NO.

HNF-N-585-11

OFFSITE PROPERTY NO.

TELEPHONE NO.

373-2774

PROJECT COORDINATOR

TRENT, SJ

SAF NO.

F06-027

COA

122561ES20

BILL OF LADING/AIR BILL NO.

PRICE CODE

7A

AIR QUALITY

DATA TURNAROUND

3 Days / 15 Days

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

PRESERVATION

HNO3 to pH <2

TYPE OF CONTAINER

P

NO. OF CONTAINER(S)

1

VOLUME

1000mL

SAMPLE ANALYSIS

Gross Alpha
(Gross alpha)
Gross Beta
(Gross beta)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
✓ B1W890	KRWNG WATER	7/18/08	1205	✓						
✓ B1W891	KRWPG WATER	7/18/08	1158	✓						
✓ B1W892	KRWPK WATER	7/18/08	1152	✓						
✓ B1W893	KRWPL WATER	7/18/08	1227	✓						
✓ B1W894	KRWPN WATER	7/18/08	1214	✓						

CHAIN OF POSSESSION

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>S. Mueler / J. H. H. H.</i>	7/18/08 1500	<i>MO 413 R 1</i>	7/18/08 1500
<i>MO 413 R 1</i>	7/21/08 0800	<i>J. Herrick / J. H. H. H.</i>	7/21/08 0800
<i>J. Herrick / J. H. H. H.</i>	7/21/08 1135	<i>R. L. LANE TAL</i>	7/21/08 1135
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

J8G210164
W05444
DUE 72408

LABORATORY SECTION

RECEIVED BY

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

TITLE

DATE/TIME

DISPOSED BY

DATE/TIME

TESTAMERICA

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F06-027-201

PAGE 2 OF 4

COLLECTOR

Mo/FA

SAMPLING LOCATION

100-NR-2 Inj. #4/Day 0 - Post-Inject

ICE CHEST NO.

SHIPPED TO

TestAmerica Incorporated, Richland

COMPANY CONTACT

FABRE, RJ

TELEPHONE NO.

373-2774

PROJECT COORDINATOR

TRENT, SJ

PROJECT DESIGNATION

100-N Apatite Barrier Performance Monitoring

SAF NO.

F06-027

FIELD LOGBOOK NO.

HNF-N-585-11

ACTUAL SAMPLE DEPTH

COA

122561ES20

PRICE CODE

7A

AIR QUALITY

DATA TURNAROUND

3 Days / 15 Days

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

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=Vegetation
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

TYPE OF CONTAINER

P

NO. OF CONTAINER(S)

1

VOLUME

1000mL

SAMPLE ANALYSIS

Gross Alpha (Gross alpha)
Gross Beta (Gross beta)

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

✓ B1W895 KRWP WATER
✓ B1W896 KRWPQ WATER
✓ B1W897 KRWR WATER
✓ B1W898 KAWPT WATER
✓ B1W899 KRWPX WATER

7/18/8 1252
7/18/8 1245
7/18/8 1333
7/18/8 1239
7/18/8 1304

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

Mo/FA

7/18/8-1500

MO 413 R1

7/18/8-1500

J8G210164

Mo 413 R1

7/21/08 0800

J Herrick J. Herrick

7/21/08 0800

W05444

J. Herrick J. Herrick

7/21/08 1135

J. L. LANE TAL

7/21/08 1135

DUE 72408

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

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

TESTAMERICA

Fluor Hanford Inc.

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F06-027-201

PAGE 3 OF 4

COLLECTOR

Mwiler

SAMPLING LOCATION

100-NR-2 Inj.#4/Day 0 - Post-Inject

ICE CHEST NO.

COMPANY CONTACT

FABRE, RJ

TELEPHONE NO.

373-2774

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE

7A

DATA TURNAROUND

3 Days / 15 Days

PROJECT DESIGNATION

100-N Apatite Barrier Performance Monitoring

SAF NO.

F06-027

AIR QUALITY

FIELD LOGBOOK NO.

HNF-N-585-11

ACTUAL SAMPLE DEPTH

COA

122561ES20

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=Vegetation
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)

PRESERVATION

HNO3 to pH <2

TYPE OF CONTAINER

P

NO. OF CONTAINER(S)

1

VOLUME

1000mL

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

Gross Alpha
(Gross alpha)
Gross Beta
(Gross beta)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
✓ B1W8B0	KRWPO WATER	7/18/08	1232	✓						
✓ B1WB53	KRWPI WATER	7/18/08	1341	✓						
✓ B1WB54	KRWP2 WATER	7/18/08	1349	✓						
✓ B1WC88	KRWP3 WATER	7/18/08	1312	✓						
✓ B1WC89	KRW4 WATER	7/18/08	1352	✓						

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/ STORED IN	DATE/TIME
<i>S. Mowbray</i>	7/18/08 1500	MO 413 R-1	7/18/08 1500
MO 413 R1	7/21/08 0800	<i>J. Herrick</i>	7/21/08 0800
<i>J. Herrick</i>	7/21/08 1135	<i>R. W. LANE TAL</i>	7/21/08 1135
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

J8GZ10164
W05444
DUE 72408

LABORATORY SECTION RECEIVED BY

TITLE DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD

DISPOSED BY DATE/TIME

COLLECTOR

Musaker

SAMPLING LOCATION

100-NR-2 Inj. #4/Day 0 - Post-Inject

ICE CHEST NO.

SHIPPED TO

TestAmerica Incorporated, Richland

MATRIX*

A=Air
DL=Drum
Liquids
DS=Drum
Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
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

COMPANY CONTACT

FABRE, RJ

TELEPHONE NO.

373-2774

PROJECT COORDINATOR

TRENT, SJ

PROJECT DESIGNATION

100-N Apatite Barrier Performance Monitoring

FIELD LOGBOOK NO.

HNF-N-585-11

ACTUAL SAMPLE DEPTH

OFFSITE PROPERTY NO.

SAF NO.
F06-027

COA

122561ES20

PRICE CODE 7A

AIR QUALITY

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

DATA
TURNAROUND
3 Days / 15
Days

BILL OF LADING/AIR BILL NO.

PRESERVATION

HNO3 to pH
<2

TYPE OF CONTAINER

P

NO. OF CONTAINER(S)

1

VOLUME

1000mL

SAMPLE ANALYSIS

Gross Alpha
(Gross alpha)
Gross Beta
(Gross beta)

SAMPLE NO.

MATRIX*

SAMPLE DATE

SAMPLE TIME

B1WC90 KRWPS WATER
B1WC91 KRWPA WATER

7/18/8 1318
7/18/8 1324

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

J. Musaker
RELINQUISHED BY/REMOVED FROM

7/18/8 1500

MO413 R1

7/18/8 1500

MO 413 R1

7/21/08 0800

J. Herrick

7/21/08 0800

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

J. Herrick
RELINQUISHED BY/REMOVED FROM

7/21/08 1135

R. LANE TAL

7/21/08 1135

J8G210164

W05444

DUE 72408

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

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



Sample Check-in List

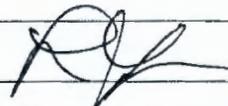
Date/Time Received: 72108 1135 GM Screen Result 0.1K

Client: PGW SDG #: W05444 NA [] SAF #: F06-027 NA []

Work Order Number: J8GZ10164 Chain of Custody # F06-027-201

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: 17
- 7. Sample holding times exceeded? NA Yes [] No []
- 8. Samples have:
____ Tape
 Custody Seals
____ Hazard Labels
 Appropriate Sample Labels
- 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 HNO₃ 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 Mgr nager _____ Date _____

TESTAMERICA

7/23/2008 8:24:32 AM

Sample Preparation/Analysis

Balance Id:1119381299

108302, Fluor Hanford Inc
Hanford Inc

Fluor

AZ Gross Alpha PrpRC5014

PRIORITY

Pipet #: _____

AnalyDueDate: 07/24/2008

W05444

S7 Gross Alpha by GPC using Am-241 curve

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8203411

WATER

pCi/L

PM, Quote: SS, 80253

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8203411 AZS7, 8203412 BCS8,

Prep Tech: ,BockT / APA / SA

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRWN9-1-AA J8G210164-1-SAMP 07/18/2008 12:05 AmtRec: LP #Containers: 1	9.80g,in									
2 KRWN9-1-AD-X J8G210164-1-DUP 07/18/2008 12:05 AmtRec: LP #Containers: 1	9.90g,in									
3 KRWPG-1-AA J8G210164-2-SAMP 07/18/2008 11:58 AmtRec: LP #Containers: 1	23.50g,in									
4 KRWPK-1-AA J8G210164-3-SAMP 07/18/2008 11:52 AmtRec: LP #Containers: 1	8.10g,in									
5 KRWPL-1-AA J8G210164-4-SAMP 07/18/2008 12:24 AmtRec: LP #Containers: 1	7.80g,in									
6 KRWPN-1-AA J8G210164-5-SAMP 07/18/2008 12:14 AmtRec: LP #Containers: 1	11.10g,in									
7 KRWPP-1-AA J8G210164-6-SAMP 07/18/2008 12:52 AmtRec: LP #Containers: 1	6.60g,in									

Handwritten notes and corrections in the table rows:

- Row 1: 1.5, 40.0, 200, 10A, 1722, 7/23/0800
- Row 2: 39.3, 10B
- Row 3: 38.7, 10C
- Row 4: 41.5, 10D
- Row 5: 38.8, 10E
- Row 6: 40.2, 10F
- Row 7: 47.5, 11A

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TESTAMERICA

7/23/2008 8:24:32 AM

Sample Preparation/Analysis

Balance Id:1119381299

108302, Fluor Hanford Inc
Hanford Inc

, Fluor

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

Pipet #: _____

AnalyDueDate: 07/24/2008

Sep1 DT/Tm Tech:

Batch: 8203411 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 80253

Sep2 DT/Tm Tech:

Prep Tech: ,BockT



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KRWPQ-1-AA J8G210164-7-SAMP 07/18/2008 12:45 AmtRec: LP #Containers: 1	7.50g,in						11B	1722		7/23/0800
9 KRWPR-1-AA J8G210164-8-SAMP 07/18/2008 13:33 AmtRec: LP #Containers: 1	9.80g,in						11C			
10 KRWPT-1-AA J8G210164-9-SAMP 07/18/2008 12:39 AmtRec: LP #Containers: 1	7.90g,in						11D			
11 KRWPX-1-AA J8G210164-10-SAMP 07/18/2008 13:04 AmtRec: LP #Containers: 1	11.10g,in						12A			
12 KRWP0-1-AA J8G210164-11-SAMP 07/18/2008 12:32 AmtRec: LP #Containers: 1	10.90g,in						12B			
13 KRWP1-1-AA J8G210164-12-SAMP 07/18/2008 13:41 AmtRec: LP #Containers: 1	13.30g,in						12C			
14 KRWP2-1-AA J8G210164-13-SAMP 07/18/2008 13:49 AmtRec: LP #Containers: 1	16.60g,in						10F	2110		

Handwritten annotations in the table include: 1.5, 45.5, 200, 45.7, 44.6, 44.5, 33.0, 42.0, 35.1, 11B, 11C, 11D, 12A, 12B, 12C, 10F, 1722, 2110, and 7/23/0800. Arrows point from these values to the corresponding rows in the table.

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TESTAMERICA

7/23/2008 8:24:33 AM **Sample Preparation/Analysis** Balance Id:1119381299
 108302, Fluor Hanford Inc, Fluor AZ Gross Alpha PrpRC5014 Pipet #: _____
 Hanford Inc S7 Gross Alpha by GPC using Am-241 curve Sep1 DT/Tm Tech: _____
AnalyDueDate: 07/24/2008 5I CLIENT: HANFORD Sep2 DT/Tm Tech: _____

Batch: 8203411 WATER pCi/L PM, Quote: SS, 80253 Prep Tech: BockT
 SEQ Batch, Test: None



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 KRWP3-1-AA J8G210164-14-SAMP 07/18/2008 13:12	20.20g,in									
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 1.5 37.7 200 10E 2110 7/23/0802 </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: LP #Containers: 1 Scr: Alpha: Beta: </div>										
16 KRWP4-1-AA J8G210164-15-SAMP 07/18/2008 13:56	15.90g,in									
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 31.4 10D </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: LP #Containers: 1 Scr: Alpha: Beta: </div>										
17 KRWP5-1-AA J8G210164-16-SAMP 07/18/2008 13:18	14.00g,in									
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 40.0 10C </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: LP #Containers: 1 Scr: Alpha: Beta: </div>										
18 KRWP9-1-AA J8G210164-17-SAMP 07/18/2008 13:24	200.00g,in									
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 10.0 50 7/23/08 12A 1844 7/23/0802 </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: LP #Containers: 1 Scr: Alpha: Beta: </div>										
19 KRWRJ-1-AA-B J8G210000-411-BLK 07/18/2008 12:05	200.00g,in									
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 0.3 200 10B 2110 7/23/0802 </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: #Containers: 1 Scr: Alpha: Beta: </div>										
20 KRWRJ-1-AC-C J8G210000-411-LCS 07/18/2008 12:05	200.00g,in		ASD4532 07/16/08.pd							
<div style="display: flex; justify-content: space-between; font-family: cursive;"> 0.4 10A </div>										
<div style="display: flex; justify-content: space-between;"> AmtRec: #Containers: 1 Scr: Alpha: Beta: </div>										

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TESTAMERICA

7/23/2008 8:24:33 AM

Sample Preparation/Analysis

Balance Id:1119381299

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

Pipet #: _____

AnalyDueDate: 07/24/2008

Sep1 DT/Tm Tech: _____

Batch: 8203411
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: ,BockT



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

Comments:

All Clients for Batch:

108302, Fluor Hanford Inc

Fluor Hanford Inc

, SS , 80253

KRWN91AA-SAMP Constituent List:

ALPHA	RDL:3.00E+00	pCi/L	LCL:	UCL:	RPD:
KRWRJ1AA-BLK:					
ALPHA	RDL:3.00E+00	pCi/L	LCL:	UCL:	RPD:
KRWRJ1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20
KRWN91AA-SAMP Calc Info:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRWRJ1AA-BLK:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRWRJ1AC-LCS:					
Uncert Level (#s):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

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7/24/2008 10:40:42 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/25/2007, 7/29/2008, Batch: '8203411', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8203411				
AC	Rev1C	BockT	7/23/2008 7:36:10	
SC		wagarr	IsBatched 7/21/2008 2:11:02 PM	ICOC_RADCALC v4.8.32
SC		BockT	InPrep 7/23/2008 7:36:10 AM	RL-GPC-001 REV 0
SC		AshworthA	Prep2C 7/23/2008 1:40:33 PM	GPC-001 REVISION 0
SC		ClarkR	InCnt1 7/23/2008 1:45:08 PM	RL-CI-006 REVISION 0
SC		DAWKINSO	CalcC 7/23/2008 9:50:33 PM	RL-CI-006 REVISION 0
SC		nortonj	Rev1C 7/24/2008 10:40:35 AM	RICH-RC-0002 REV 8
AC		AshworthA	7/23/2008 1:40:33 PM	
AC		ClarkR	7/23/2008 1:45:08 PM	
AC		DAWKINSO	7/23/2008 9:50:33 PM	
AC		nortonj	7/24/2008 10:40:35	

AC: Accepting Entry; SC: Status Change

TAL Richland
Richland Wa.

TESTAMERICA

7/23/2008 8:56:48 AM

Sample Preparation/Analysis

PRIORITY

Balance Id:1119381299

108302, Fluor Hanford Inc , Fluor
Hanford Inc

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

Pipet #: _____

AnalyDueDate: 07/24/2008 *W05444*

Sep1 DT/Tm Tech:

Batch: 8203412 WATER pCi/L PM, Quote: SS , 80253
SEQ Batch, Test: None All Tests: 8203411 AZS7, 8203412 BCS8,

Sep2 DT/Tm Tech:

Prep Tech: *BockT/APA/SH*



Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KRWN9-1-AC J8G210164-1-SAMP 07/18/2008 12:05 AmtRec: LP #Containers: 1	17.00g,in									
					<i>1.5</i>	<i>102.6</i>	<i>200</i>	<i>26A</i>	<i>1709</i>	<i>7/23/08 SK</i>
2 KRWPG-1-AC J8G210164-2-SAMP 07/18/2008 11:58 AmtRec: LP #Containers: 1	40.30g,in									
					<i>97.1</i>		<i>26B</i>			
3 KRWPG-1-AD-X J8G210164-2-DUP 07/18/2008 11:58 AmtRec: LP #Containers: 1	40.30g,in									
					<i>94.3</i>		<i>26C</i>			
4 KRWPK-1-AC J8G210164-3-SAMP 07/18/2008 11:52 AmtRec: LP #Containers: 1	13.40g,in									
					<i>96.5</i>		<i>26D</i>			
5 KRWPL-1-AC J8G210164-4-SAMP 07/18/2008 12:24 AmtRec: LP #Containers: 1	12.30g,in									
					<i>88.5</i>		<i>27A</i>			
6 KRWPN-1-AC J8G210164-5-SAMP 07/18/2008 12:14 AmtRec: LP #Containers: 1	14.10g,in									
					<i>73.5</i>		<i>27B</i>			
7 KRWPP-1-AC J8G210164-6-SAMP 07/18/2008 12:52 AmtRec: LP #Containers: 1	10.40g,in									
					<i>102.8</i>	<i>↓</i>	<i>27C</i>	<i>↓</i>		<i>h</i>

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TESTAMERICA

7/23/2008 8:56:49 AM

Sample Preparation/Analysis

Balance Id:1119381299

108302, Fluor Hanford Inc
Hanford Inc

, Fluor

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

Pipet #: _____

AnalyDueDate: 07/24/2008

Sep1 DT/Tm Tech:

Batch: 8203412 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 80253

Sep2 DT/Tm Tech:

Prep Tech: ,BockT



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KRWPQ-1-AC J8G210164-7-SAMP 07/18/2008 12:45 AmtRec: LP #Containers: 1	11.60g,in					200	27D	1709		7/23/0802
9 KRWPR-1-AC J8G210164-8-SAMP 07/18/2008 13:33 AmtRec: LP #Containers: 1	15.10g,in				97.7		28B			
10 KRWPT-1-AC J8G210164-9-SAMP 07/18/2008 12:39 AmtRec: LP #Containers: 1	10.40g,in				75.5		28C			
11 KRWPX-1-AC J8G210164-10-SAMP 07/18/2008 13:04 AmtRec: LP #Containers: 1	13.30g,in				72.6		28D	5		
12 KRWP0-1-AC J8G210164-11-SAMP 07/18/2008 12:32 AmtRec: LP #Containers: 1	16.80g,in				57.6		31A	1720		
13 KRWP1-1-AC J8G210164-12-SAMP 07/18/2008 13:41 AmtRec: LP #Containers: 1	20.80g,in				99.1		31B			
14 KRWP2-1-AC J8G210164-13-SAMP 07/18/2008 13:49 AmtRec: LP #Containers: 1	26.30g,in				71.7		31D			

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TESTAMERICA

7/23/2008 8:56:49 AM

Sample Preparation/Analysis

Balance Id:1119381299

108302, Fluor Hanford Inc
Hanford Inc

, Fluor

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

Pipet #: _____

AnalyDueDate: 07/24/2008

Sep1 DT/Tm Tech:

Batch: 8203412 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 80253

Sep2 DT/Tm Tech:

Prep Tech: ,BockT

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 KRWP3-1-AC J8G210164-14-SAMP 07/18/2008 13:12 AmtRec: LP #Containers: 1	34.80g,in									
16 KRWP4-1-AC J8G210164-15-SAMP 07/18/2008 13:56 AmtRec: LP #Containers: 1	25.50g,in									
17 KRWP5-1-AC J8G210164-16-SAMP 07/18/2008 13:18 AmtRec: LP #Containers: 1	23.00g,in									
18 KRWP9-1-AC J8G210164-17-SAMP 07/18/2008 13:24 AmtRec: LP #Containers: 1	200.00g,in									
19 KRWRM-1-AA-B J8G210000-412-BLK 07/18/2008 11:58 AmtRec: #Containers: 1	200.00g,in									
20 KRWRM-1-AC-C J8G210000-412-LCS 07/18/2008 11:58 AmtRec: #Containers: 1	200.00g,in		BESB3302 07/16/08,pd 07/14/08							



Handwritten notes and arrows in the table rows:

- Row 15: 1.5, 102.0, 200, 32 A, 1720, 7/23/0800
- Row 16: 83.4, 32 B
- Row 17: 96.1, 32 C
- Row 18: 24.5, 100, 7/23/08 APA, 31A, 1913
- Row 19: 200, 32 D, 1720, 7/23/0800
- Row 20: 0.1, 28C, 2051

5I

TESTAMERICA

7/23/2008 8:56:49 AM

Sample Preparation/Analysis

Balance Id:1119381299

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

Pipet #: _____

AnalyDueDate: 07/24/2008

Sep1 DT/Tm Tech:

Batch: 8203412
 SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech: ,BockT



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

Comments:

All Clients for Batch:

108302, Fluor Hanford Inc Fluor Hanford Inc , SS , 80253

KRWN91AC-SAMP Constituent List:

BETA	RDL:4.00E+00	pCi/L	LCL:	UCL:	RPD:
KRWRM1AA-BLK:					
BETA	RDL:4.00E+00	pCi/L	LCL:	UCL:	RPD:
KRWRM1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KRWN91AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRWRM1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRWRM1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

56

7/24/2008 10:44:17 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/25/2007, 7/29/2008, Batch: '8203412', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
8203412					
AC		Rev1C	BockT	7/23/2008 8:32:38	
SC			wagarr	IsBatched 7/21/2008 2:11:02 PM	ICOC_RADCALC v4.8.32
SC			BockT	InPrep 7/23/2008 8:32:38 AM	ri-gpc-001 rev 0
SC			AshworthA	Prep2C 7/23/2008 1:40:40 PM	GPC-001 REVISION 0
SC			ClarkR	InCnt1 7/23/2008 1:44:05 PM	RL-CI-006 REVISION 0
SC			DAWKINSO	CalcC 7/23/2008 9:50:28 PM	RL-CI-006 REVISION 0
SC			nortonj	Rev1C 7/24/2008 10:44:11 AM	RICH-RC-0002 REV 8
AC			AshworthA	7/23/2008 1:40:40 PM	
AC			ClarkR	7/23/2008 1:44:05 PM	
AC			DAWKINSO	7/23/2008 9:50:28 PM	
AC			nortonj	7/24/2008 10:44:11	

AC: Accepting Entry, SC: Status Change

TAL Richland
Richland Wa.