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JAN 29 2009
EDMC

Analytical Data Package Prepared For

Fluor Hanford

Radiochemical Analysis By

TestAmerica TARL

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

Data Package Contains _____ Pages

Report Nbr: 39591

RECEIVED JULY 29, 2008

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05424	I08-037	B1V9R6	J8F050181-1	KPE1L1AA	9KPE1L10	8170557
		B1V9R6	J8F050181-1	KPE1L1AC	9KPE1L10	8170563
		B1V9R6	J8F050181-1	KPE1L1AD	9KPE1L10	8170553
		B1V9R6	J8F050181-1	KPE1L1AE	9KPE1L10	8170550
		B1V9R6	J8F050181-1	KPE1L1AF	9KPE1L10	8170556
		B1V9R6	J8F050181-1	KPE1L1AG	9KPE1L10	8170555
	S08-004	B1TWR9	J8F050186-1	KPE3V1AA	9KPE3V10	8170553
		B1TWR9	J8F050186-1	KPE3V2AC	9KPE3V20	8197204
		B1TX74	J8F050186-2	KPE3X1AA	9KPE3X10	8170562
		B1TX74	J8F050186-2	KPE3X1AC	9KPE3X10	8170560
		B1TX74	J8F050186-2	KPE3X1AD	9KPE3X10	8170561
		B1TX74	J8F050186-2	KPE3X1AE	9KPE3X10	8170552
	S08-005	B1TX74	J8F050186-2	KPE3X1AG	9KPE3X10	8170559
		B1TX74	J8F050186-2	KPE3X1AH	9KPE3X10	8170558
		B1V7H4	J8F050191-1	KPE4X1AA	9KPE4X10	8170550

Comments:

0080029

Report Nbr: 39591

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05424	I08-037	B1V9T3	J8F050195-1	KPE6D1AA	9KPE6D10	8170550
		B1V658	J8F050195-2	KPE6P1AA	9KPE6P10	8170563
		B1V658	J8F050195-2	KPE6P1AC	9KPE6P10	8170553
		B1V658	J8F050195-2	KPE6P1AD	9KPE6P10	8170550
		B1V658	J8F050195-2	KPE6P1AE	9KPE6P10	8170556
		B1V658	J8F050195-2	KPE6P1AF	9KPE6P10	8170555
		B1V657	J8F050195-3	KPE7T1AA	9KPE7T10	8170563
		B1V657	J8F050195-3	KPE7T1AC	9KPE7T10	8170553
		B1V657	J8F050195-3	KPE7T1AD	9KPE7T10	8170550
		B1V657	J8F050195-3	KPE7T1AG	9KPE7T10	8170555
		B1V657	J8F050195-3	KPE7T2AE	9KPE7T20	8197274
		B1V657	J8F050195-3	KPE7T2AF	9KPE7T20	8197204
	S08-005	B1V7V9	J8F050319-1	KPF2X1AA	9KPF2X10	8170553
		B1V7V9	J8F050319-1	KPF2X1AC	9KPF2X10	8170550
		B1V7V8	J8F050319-2	KPF3F1AA	9KPF3F10	8170553
		B1V7V8	J8F050319-2	KPF3F1AC	9KPF3F10	8170550
	W08-005	B1V8C6	J8F050322-1	KPF3R1AA	9KPF3R10	8170564
	I08-037	B1V695	J8F050327-1	KPF4V1AA	9KPF4V10	8170550
		B1V691	J8F050327-2	KPF461AA	9KPF4610	8170550
	S08-005	B1V7X5	J8F090190-1	KPLVT1AA	9KPLVT10	8170550
	I08-043	B1VKT9	J8F090197-1	KPLWM1AA	9KPLWM10	8170557
		B1VKT9	J8F090197-1	KPLWM1AC	9KPLWM10	8170563
		B1VKT9	J8F090197-1	KPLWM1AD	9KPLWM10	8170553
		B1VKT9	J8F090197-1	KPLWM1AE	9KPLWM10	8170550
		B1VKT9	J8F090197-1	KPLWM1A	9KPLWM10	8170555
		B1VKT9	J8F090197-1	KPLWM2AF	9KPLWM20	8197274

Comments:

Report Nbr: 39591

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05424	I08-043	B1VKV0	J8F090197-2	KPLWR1AA	9KPLWR10	8170557
		B1VKV0	J8F090197-2	KPLWR1AC	9KPLWR10	8170563
		B1VKV0	J8F090197-2	KPLWR1AD	9KPLWR10	8170553
		B1VKV0	J8F090197-2	KPLWR1AE	9KPLWR10	8170550
		B1VKV0	J8F090197-2	KPLWR1AF	9KPLWR10	8170556
		B1VKV0	J8F090197-2	KPLWR1AG	9KPLWR10	8170555
	W08-006	B1VR34	J8F100263-1	KPNCT1AA	9KPNCT10	8190389
	I08-038	B1V6C8	J8F100266-1	KPNDQ1AA	9KPNDQ10	8170550
		B1V6C9	J8F100266-2	KPND31AA	9KPND310	8170550
		B1V6C0	J8F100266-3	KPND61AA	9KPND610	8170550
	W08-006	B1VR96	J8F110338-1	KPQWR1AA	9KPQWR10	8190391

Comments:

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

July 28, 2008

Attention: Steve Trent

SAF Number	:	I08-037, S08-004, S08-005, W08-005, I08-043, W08-006, I08-038
Date SDG Closed	:	June 11, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05424
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between June 4, 2008 and June 11, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>DATE OF RECEIPT</u>	<u>MATRIX</u>
B1V9R6	JPE1L	6/04/08	WATER
BITWR9	KPE3V	6/04/08	WATER
BITX74	KPE3X	6/04/08	WATER
B1V7H4	KPE4X	6/04/08	WATER
B1V9T3	KPE6D	6/04/08	WATER
B1V658	KPE6P	6/04/08	WATER
B1V657	KPE7T	6/04/08	WATER
B1V7V9	KPF2X	6/05/08	WATER
B1V7V8	KPF3F	6/05/08	WATER
B1V8C6	KPF3R	6/05/08	WATER
B1V695	KPF4V	6/05/08	WATER
B1V691	KPF46	6/05/08	WATER
B1V7X5	KPLVT	6/09/08	WATER

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July 28, 2008

B1VKT9	KPLWM	6/09/08	WATER
B1VKV0	KPLWR	6/09/08	WATER
B1VR34	KPNCT	6/10/08	WATER
B1V6C8	KPNDQ	6/10/08	WATER
B1V6C9	KPND3	6/10/08	WATER
B1V6C0	KPND6	6/10/08	WATER
B1VR96	KPQWR	6/11/08	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039

Neptunium-237 by method RICH-RC-5009

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

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

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

Iodine-129 by method RICH-RC-5025

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

Carbon-14 by method RICH-RC-5022

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

Chemical Analysis

Total Coliform by method 9223

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

Uranium 234, 235 and 238 by method RICH-RC-5039:

The LCS, batch blank, sample and sample duplicate (B1V657) results are within contractual requirements.

Neptunium-237 by method RICH-RC-5009:

The LCS, batch blank, sample and sample duplicate (B1VKV0) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

Samples B1TX74 and B1TX74 DUP were analyzed with reduced aliquots based on weight screens. Except as noted, the LCS, batch blank, samples and sample duplicate (B1TX74) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1TX74) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The samples were traced with an incorrect tracer. The samples were reanalyzed. Except as noted, the LCS, batch blank, samples and sample duplicate (B1V657) results are within contractual requirements.

Gamma Spectroscopy

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

There was insufficient volume for a duplicate. Sample B1V7V9 was recounted on a different detector for the duplicate (B1V7V9 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B1V7V9) results are within contractual requirements.

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

The LCS, batch blank, samples and sample duplicate (B1V6C8) results are within contractual requirements.

Iodine-129 by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1TX74) results are within contractual requirements.

Fluor Hanford
July 28, 2008

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043:

Samples B1V657 and B1VKT9 were reanalyzed due to low tracer yields. There is no LCS for selenium-79. Except as noted, the batch blank, samples and sample duplicate (B1VKT9) results are within contractual requirements.

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

The LCS, batch blank, samples, sample duplicate (B1TX74), and sample matrix spike (B1TX74) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1TX74) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:

The LCS, batch blank, samples and sample duplicate (B1V658) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1TX74), and sample matrix spike (B1TX74) results are within contractual requirements.

Chemical Analysis

Total Coliform by method 9223

Batch: 8170564

The LCS, batch blank, sample and sample duplicate (B1V8C6) results are within contractual requirements.

Batch: 8190389

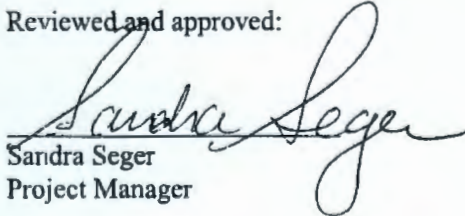
The LCS, batch blank, sample and sample duplicate (B1VR34) results are within contractual requirements.

Batch: 8190391

The LCS, batch blank, sample and sample duplicate (B1VR96) 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 900.02	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, $R = \text{constants} * f(x, y, z, \dots)$. The components (x, y, z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1, 2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or 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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgrndCnt}/\text{BkgrndCntMin}) / \text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. 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%. $MDC = (4.65 * \text{Sqrt}((\text{BkgrndCnt}/\text{BkgrndCntMin}) / \text{SCntMin}) + 2.71 / \text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol})) * \text{IngrFct}$. 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.

7/28/2008 2:55:59 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39591

File Name: h:\Reportdb\edd\Fead\Rad\W05424.Edd, h:\Reportdb\edd\Fead\Rad\39591.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE1L10	B1V9R6		MW6-SBB-A1	I08-037	W05424					06/04/2008 09:00				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170563	C-14	14762-75-5	1.86E+00	pCi/L	3.6E+00	4.3E+00	U	8.49E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 03:58	I
8170553	BE-7	13966-02-4	-2.90E+00	pCi/L	1.6E+01	1.6E+01	U	2.74E+01		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	CO-60	10198-40-0	-4.57E-02	pCi/L	1.7E+00	1.7E+00	U	3.14E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	CS-134	13967-70-9	1.14E+00	pCi/L	1.7E+00	1.7E+00	U	3.15E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	CS-137	10045-97-3	-3.64E-01	pCi/L	1.6E+00	1.6E+00	U	2.76E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	EU-152	14683-23-9	4.34E-01	pCi/L	4.4E+00	4.4E+00	U	7.58E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	EU-154	15585-10-1	-4.64E+00	pCi/L	5.0E+00	5.0E+00	U	7.99E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	EU-155	14391-16-3	2.93E+00	pCi/L	4.3E+00	4.3E+00	U	7.54E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	K-40	13966-00-2	-4.92E+01	pCi/L	4.9E+01	4.9E+01	U	1.01E+02		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	RU-106	13967-48-1	-2.45E+00	pCi/L	1.4E+01	1.4E+01	U	2.43E+01		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170553	SB-125	14234-35-6	1.21E+00	pCi/L	3.9E+00	3.9E+00	U	6.97E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:34	I
8170550	I-129L	15046-84-1	9.82E+00	pCi/L	1.2E+00	1.2E+00		4.08E-01	98.1	I129LL_SEP_LEPS	3.8813E+00	L	07/16/2008 21:48	I
8170557	NP-237	13994-20-2	2.68E-02	pCi/L	9.3E-02	9.3E-02	U	2.53E-01	89.7	NP237_LLE_PLAT	2.001E-01	L	06/26/2008 20:09	I
8170556	Se-79	15758-45-9	5.16E+00	pCi/L	4.3E+00	8.5E+00	U	1.01E+01	86.3	SE79_SEP_IE_LS	2.003E-01	L	07/03/2008 23:32	I
8170555	U-234	13966-29-5	1.15E+00	pCi/L	3.9E-01	4.3E-01		1.57E-01	90.1	UIISO_PLATE_AEA	2.0005E-01	L	06/26/2008 19:44	I
8170555	U-235	15117-96-1	1.96E-02	pCi/L	6.8E-02	6.8E-02	U	1.85E-01	90.1	UIISO_PLATE_AEA	2.0005E-01	L	06/26/2008 19:44	I
8170555	U-238	U-238	5.11E-01	pCi/L	2.6E-01	2.8E-01		1.85E-01	90.1	UIISO_PLATE_AEA	2.0005E-01	L	06/26/2008 19:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE3V10	B1TWR9		MW6-SBB-A1	S08-004	W05424					06/04/2008 12:40				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170553	BE-7	13966-02-4	-3.23E+00	pCi/L	1.6E+01	1.6E+01	U	2.70E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	CO-60	10198-40-0	-2.87E-01	pCi/L	2.1E+00	2.1E+00	U	3.83E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	CS-134	13967-70-9	5.11E-01	pCi/L	2.0E+00	2.0E+00	U	3.67E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	CS-137	10045-97-3	3.63E-01	pCi/L	1.8E+00	1.8E+00	U	3.23E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	EU-152	14683-23-9	3.09E+00	pCi/L	3.4E+00	3.4E+00	U	6.50E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	EU-154	15585-10-1	-4.38E+00	pCi/L	5.7E+00	5.7E+00	U	9.22E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	EU-155	14391-16-3	-2.60E-01	pCi/L	2.7E+00	2.7E+00	U	4.76E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	K-40	13966-00-2	1.84E+01	pCi/L	3.9E+01	3.9E+01	U	7.98E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I
8170553	RU-106	13967-48-1	2.07E+00	pCi/L	1.6E+01	1.6E+01	U	2.78E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I

TestAmerica

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

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:55:59 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39591

File Name: h:\Reportdb\ledd\Fead\VRad\W05424.Edd, h:\Reportdb\ledd\Fead\VRad\39591.Edd

8170553	SB-125	14234-35-6	-7.19E-01	pCi/L	4.0E+00	4.0E+00	U	7.09E+00	GAMMALL_GS	2.0002E+00	L	07/02/2008 13:35	I	
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE3V20	B1TWR9		MW6-SBB-A1	S08-004	W05424					06/04/2008 12:40				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8197204	SR-90	10098-97-2	2.61E-01	pCi/L	3.3E-01	3.3E-01	U	6.85E-01	77.9	SRISO_SEP_PRE	1.0004E+00	L	07/26/2008 07:00	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE3X10	B1TX74		MW6-SBB-A1	S08-004	W05424					06/04/2008 12:40				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170562	H-3	10028-17-8	7.78E+01	pCi/L	1.1E+02	1.2E+02	U	2.49E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/21/2008 06:21	I
8170560	ALPHA	12587-46-1	1.88E+00	pCi/L	1.3E+00	1.3E+00		1.50E+00	100.0	9310_ALPHABETA	1.725E-01	L	07/07/2008 14:14	I
8170561	BETA	12587-47-2	7.86E+00	pCi/L	1.9E+00	2.1E+00		2.99E+00	100.0	9310_ALPHABETA	2.002E-01	L	07/07/2008 16:32	I
8170552	I-129L	15046-84-1	-4.05E-01	pCi/L	1.0E+00	1.0E+00	U	1.80E+00	95.1	I129_SEP_LEPS_G	5.001E-01	L	07/14/2008 17:28	I
8170559	TC-99	14133-76-7	5.24E+00	pCi/L	4.1E+00	5.8E+00	U	9.56E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	06/25/2008 22:34	I
8170558	Uranium	7440-61-1	2.92E+00	ug/L	3.0E-01	3.0E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	07/21/2008 10:18	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE4X10	B1V7H4		MW6-SBB-A1	S08-005	W05424					06/04/2008 10:33				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	1.70E-01	pCi/L	1.8E-01	1.8E-01	U	3.15E-01	95.7	I129LL_SEP_LEPS	3.8892E+00	L	07/16/2008 21:50	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE6D10	B1V9T3		MW6-SBB-A1	I08-037	W05424					06/04/2008 12:49				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	9.39E-01	pCi/L	2.9E-01	2.9E-01	U	5.20E-01	93.5	I129LL_SEP_LEPS	3.9021E+00	L	07/16/2008 21:51	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPE6P10	B1V658		MW6-SBB-A1	I08-037	W05424					06/04/2008 08:25				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170563	C-14	14762-75-5	-3.67E-01	pCi/L	3.5E+00	4.2E+00	U	8.49E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 04:40	I
8170553	BE-7	13966-02-4	-2.37E+00	pCi/L	1.3E+01	1.3E+01	U	2.28E+01		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	CO-60	10198-40-0	1.43E+00	pCi/L	1.7E+00	1.7E+00	U	3.54E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	CS-134	13967-70-9	5.27E-01	pCi/L	1.7E+00	1.7E+00	U	3.13E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I

TestAmerica

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

2

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:55:59 PM

TestAmerica Report

Lab Code: TART

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39591

File Name: h:\Reportdb\edd\Fead\WRad\W05424.Edd, h:\Reportdb\edd\Fead\WRad\39591.Edd

8170553	CS-137	10045-97-3	-1.76E-02	pCi/L	1.3E+00	1.3E+00	U	2.40E+00	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	EU-152	14683-23-9	-7.91E-01	pCi/L	3.5E+00	3.5E+00	U	6.21E+00	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	EU-154	15585-10-1	7.43E-01	pCi/L	4.0E+00	4.0E+00	U	7.85E+00	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	EU-155	14391-16-3	3.51E-01	pCi/L	2.7E+00	2.7E+00	U	4.64E+00	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	K-40	13966-00-2	9.16E+00	pCi/L	2.1E+01	2.1E+01	U	4.32E+01	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	RU-106	13967-48-1	-9.27E+00	pCi/L	1.3E+01	1.3E+01	U	2.15E+01	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170553	SB-125	14234-35-6	1.85E+00	pCi/L	3.3E+00	3.3E+00	U	6.19E+00	GAMMALL_GS	2.0001E+00	L	07/02/2008	13:36	I
8170550	I-129L	15046-84-1	-7.41E-02	pCi/L	1.3E-01	1.3E-01	U	2.33E-01 96.5	I129LL_SEP_LEPS	3.9022E+00	L	07/17/2008	05:23	I
8170556	Se-79	15758-45-9	3.73E+00	pCi/L	5.1E+00	9.9E+00	U	1.21E+01 72.0	SE79_SEP_IE_LS	2.002E-01	L	07/04/2008	00:25	I
8170555	U-234	13966-29-5	1.44E-01	pCi/L	1.4E-01	1.4E-01	U	1.77E-01 108.3	UIISO_PLATE_AEA	2.00E-01	L	06/26/2008	19:44	I
8170555	U-235	15117-96-1	3.13E-02	pCi/L	6.4E-02	6.4E-02	U	1.50E-01 108.3	UIISO_PLATE_AEA	2.00E-01	L	06/26/2008	19:44	I
8170555	U-238	U-238	8.13E-02	pCi/L	1.1E-01	1.1E-01	U	1.77E-01 108.3	UIISO_PLATE_AEA	2.00E-01	L	06/26/2008	19:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KPE7T10	B1V657		MW6-SBB-A1	I08-037	W05424					06/04/2008 11:07				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170563	C-14	14762-75-5	-2.15E+00	pCi/L	3.4E+00	4.2E+00	U	8.49E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 06:05	I
8170553	BE-7	13966-02-4	6.77E-01	pCi/L	1.3E+01	1.3E+01	U	2.29E+01		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	CO-60	10198-40-0	6.08E-01	pCi/L	1.3E+00	1.3E+00	U	2.54E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	CS-134	13967-70-9	1.19E-01	pCi/L	1.3E+00	1.3E+00	U	2.43E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	CS-137	10045-97-3	-8.60E-01	pCi/L	1.3E+00	1.3E+00	U	2.22E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	EU-152	14683-23-9	-3.12E-01	pCi/L	3.5E+00	3.5E+00	U	6.04E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	EU-154	15585-10-1	1.52E+00	pCi/L	3.9E+00	3.9E+00	U	7.47E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	EU-155	14391-16-3	-1.76E-01	pCi/L	3.0E+00	3.0E+00	U	5.27E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	K-40	13966-00-2	9.48E+00	pCi/L	2.0E+01	2.0E+01	U	2.22E+01		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	RU-106	13967-48-1	-6.98E+00	pCi/L	1.4E+01	1.4E+01	U	2.32E+01		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170553	SB-125	14234-35-6	3.66E-01	pCi/L	3.4E+00	3.4E+00	U	5.96E+00		GAMMALL_GS	2.0001E+00	L	07/02/2008 13:36	I
8170550	I-129L	15046-84-1	4.96E-01	pCi/L	4.1E-01	4.1E-01	U	4.49E-01 94.6		I129LL_SEP_LEPS	3.8725E+00	L	07/17/2008 05:24	I
8170555	U-234	13966-29-5	1.24E+01	pCi/L	1.2E+00	2.3E+00		2.68E-01 103.5		UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I
8170555	U-235	15117-96-1	5.45E-01	pCi/L	2.6E-01	2.8E-01		2.06E-01 103.5		UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I
8170555	U-238	U-238	1.13E+01	pCi/L	1.2E+00	2.2E+00		2.78E-01 103.5		UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
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TestAmerica

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

3

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:55:59 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39591

File Name: h:\Reportdb\edd\FeadIV\Rad\W05424.Edd, h:\Reportdb\edd\FeadIV\Rad\39591.Edd

9KPE7T20	B1V657	MW6-SBB-A1	I08-037	W05424	06/04/2008 11:07									
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8197274	Se-79	15758-45-9	-5.45E-01	pCi/L	5.7E+00	1.1E+01	U	1.37E+01	64.7	SE79_SEP_IE_LS	2.004E-01	L	07/25/2008 14:03	I
8197204	SR-90	10098-97-2	6.75E-02	pCi/L	2.2E-01	2.2E-01	U	4.80E-01	75.7	SRISO_SEP_PRE	1.0003E+00	L	07/26/2008 07:00	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPF2X10	B1V7V9		MW6-SBB-A1	S08-005	W05424					06/05/2008 07:50				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170553	BE-7	13966-02-4	-4.36E+00	pCi/L	1.7E+01	1.7E+01	U	3.00E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CO-60	10198-40-0	-1.99E+00	pCi/L	1.9E+00	1.9E+00	U	2.80E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CS-134	13967-70-9	-1.02E+00	pCi/L	1.7E+00	1.7E+00	U	2.79E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CS-137	10045-97-3	-8.74E-01	pCi/L	1.6E+00	1.6E+00	U	2.79E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-152	14683-23-9	-9.81E-01	pCi/L	4.2E+00	4.2E+00	U	7.25E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-154	15585-10-1	-3.92E+00	pCi/L	4.9E+00	4.9E+00	U	7.86E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-155	14391-16-3	1.43E+00	pCi/L	3.1E+00	3.1E+00	U	5.50E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	K-40	13966-00-2	-7.98E+01	pCi/L	3.7E+01	3.7E+01	U	6.57E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	RU-106	13967-48-1	8.49E+00	pCi/L	1.5E+01	1.5E+01	U	2.81E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	SB-125	14234-35-6	2.53E+00	pCi/L	4.0E+00	4.0E+00	U	7.50E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170550	I-129L	15046-84-1	7.99E-02	pCi/L	1.6E-01	1.6E-01	U	3.21E-01	75.7	I129LL SEP LEPS	3.8768E+00	L	07/17/2008 05:24	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPF3F10	B1V7V8		MW6-SBB-A1	S08-005	W05424					06/05/2008 11:14				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170553	BE-7	13966-02-4	8.89E+00	pCi/L	2.3E+01	2.3E+01	U	4.06E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CO-60	10198-40-0	2.80E+00	pCi/L	2.6E+00	2.6E+00	U	5.11E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CS-134	13967-70-9	4.42E-01	pCi/L	2.3E+00	2.3E+00	U	4.09E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	CS-137	10045-97-3	1.07E+00	pCi/L	2.2E+00	2.2E+00	U	4.00E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-152	14683-23-9	5.42E+00	pCi/L	5.6E+00	5.6E+00	U	1.01E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-154	15585-10-1	-1.29E+00	pCi/L	6.1E+00	6.1E+00	U	1.08E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	EU-155	14391-16-3	-4.02E-01	pCi/L	4.0E+00	4.0E+00	U	6.82E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	K-40	13966-00-2	-3.94E+01	pCi/L	5.1E+01	5.1E+01	U	1.02E+02		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	RU-106	13967-48-1	1.46E+01	pCi/L	1.9E+01	1.9E+01	U	3.50E+01		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I
8170553	SB-125	14234-35-6	8.87E-01	pCi/L	5.3E+00	5.3E+00	U	9.35E+00		GAMMALL_GS	2.0002E+00	L	07/02/2008 13:37	I

TestAmerica

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

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:56:00 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

Version: 05

Rpt Nbr: 39591

File Name: h:\Reportdb\edd\FeaIV\Rad\W05424.Edd, h:\Reportdb\edd\FeaIV\Rad\39591.Edd

8170550	I-129L	15046-84-1	3.99E+00	pCi/L	6.2E-01	6.2E-01		3.40E-01	90.3	I129LL_SEP_LEPS	3.8702E+00	L	07/17/2008 07:07	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KPF4610	B1V691		MW6-SBB-A1	I08-037	W05424					06/05/2008 09:44				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	7.78E-01	pCi/L	2.4E-01	2.4E-01	U	5.09E-01	94.9	I129LL_SEP_LEPS	3.882E+00	L	07/17/2008 07:08	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KPF4V10	B1V695		MW6-SBB-A1	I08-037	W05424					06/05/2008 10:29				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	2.33E-01	pCi/L	2.1E-01	2.1E-01	U	3.58E-01	95.7	I129LL_SEP_LEPS	3.895E+00	L	07/17/2008 07:08	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KPLVT10	B1V7X5		MW6-SBB-A1	S08-005	W05424					06/05/2008 10:56				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	5.96E-02	pCi/L	1.6E-01	1.6E-01	U	3.04E-01	89.2	I129LL_SEP_LEPS	3.8508E+00	L	07/17/2008 08:54	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9KPLWM10	B1VKT9		MW6-SBB-A1	I08-043	W05424					06/09/2008 10:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170563	C-14	14762-75-5	1.67E+00	pCi/L	3.6E+00	4.3E+00	U	8.49E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 06:48	I
8170553	BE-7	13966-02-4	5.52E-01	pCi/L	9.4E+00	9.4E+00	U	1.69E+01		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	CO-60	10198-40-0	-2.49E-01	pCi/L	1.2E+00	1.2E+00	U	2.25E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	CS-134	13967-70-9	9.42E-02	pCi/L	1.1E+00	1.1E+00	U	2.03E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	CS-137	10045-97-3	1.83E+00	pCi/L	1.1E+00	1.1E+00	U	2.30E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	EU-152	14683-23-9	2.87E+00	pCi/L	2.7E+00	2.7E+00	U	5.11E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	EU-154	15585-10-1	-2.51E+00	pCi/L	3.3E+00	3.3E+00	U	5.39E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	EU-155	14391-16-3	-6.28E-01	pCi/L	2.3E+00	2.3E+00	U	3.98E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	K-40	13966-00-2	8.14E-01	pCi/L	2.3E+01	2.3E+01	U	4.85E+01		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	RU-106	13967-48-1	-8.76E-01	pCi/L	8.7E+00	8.7E+00	U	1.56E+01		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170553	SB-125	14234-35-6	-1.84E+00	pCi/L	2.4E+00	2.4E+00	U	4.03E+00		GAMMALL_GS	2.0004E+00	L	07/02/2008 13:38	I
8170550	I-129L	15046-84-1	1.27E-01	pCi/L	1.5E-01	1.5E-01	U	3.06E-01	88.9	I129LL_SEP_LEPS	3.8995E+00	L	07/17/2008 08:55	I
8170557	NP-237	13994-20-2	-1.66E-02	pCi/L	8.6E-02	8.6E-02	U	2.34E-01	92.6	NP237_LLE_PLAT	2.002E-01	L	06/26/2008 20:09	I
8170555	U-234	13966-29-5	3.16E-01	pCi/L	2.0E-01	2.1E-01		1.54E-01	89.9	UIISO_PLATE_AEA	2.0004E-01	L	06/26/2008 19:44	I

TestAmerica

rptFeaRadSummaryEdd v3.48

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:56:00 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39591 File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

8170555	U-235	15117-96-1	0.00E+00	pCi/L	6.6E-02	6.6E-02	U	1.54E-01	89.9	UIISO_PLATE_AEA	2.0004E-01	L	06/26/2008	19:44	I
8170555	U-238	U-238	3.87E-01	pCi/L	2.2E-01	2.3E-01		1.54E-01	89.9	UIISO_PLATE_AEA	2.0004E-01	L	06/26/2008	19:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPLWM20	B1VKT9		MW6-SBB-A1	I08-043	W05424					06/09/2008 10:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8197274	Se-79	15758-45-9	1.07E+00	pCi/L	3.9E+00	7.7E+00	U	9.47E+00	94.1	SE79_SEP_IE_LS	2.001E-01	L	07/25/2008 14:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPLWR10	B1VKV0		MW6-SBB-A1	I08-043	W05424					06/09/2008 10:18				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170563	C-14	14762-75-5	1.11E+00	pCi/L	3.5E+00	4.3E+00	U	8.49E+00	100.0	C14_LSC	2.00E-01	L	06/24/2008 07:30	I
8170553	BE-7	13966-02-4	-6.64E+00	pCi/L	1.5E+01	1.5E+01	U	2.47E+01		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	CO-60	10198-40-0	7.92E-01	pCi/L	1.5E+00	1.5E+00	U	3.15E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	CS-134	13967-70-9	1.93E-02	pCi/L	1.7E+00	1.7E+00	U	3.14E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	CS-137	10045-97-3	-4.15E-02	pCi/L	1.6E+00	1.6E+00	U	2.87E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	EU-152	14683-23-9	-6.74E-01	pCi/L	4.3E+00	4.3E+00	U	7.55E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	EU-154	15585-10-1	1.15E+00	pCi/L	4.7E+00	4.7E+00	U	9.08E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	EU-155	14391-16-3	9.85E-01	pCi/L	3.1E+00	3.1E+00	U	5.48E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	K-40	13966-00-2	-5.84E+00	pCi/L	3.4E+01	3.4E+01	U	7.00E+01		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	RU-106	13967-48-1	-2.29E+01	pCi/L	1.6E+01	1.6E+01	U	2.36E+01		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170553	SB-125	14234-35-6	2.45E+00	pCi/L	3.8E+00	3.8E+00	U	7.06E+00		GAMMALL_GS	2.0003E+00	L	07/02/2008 13:39	I
8170550	I-129L	15046-84-1	-2.97E-03	pCi/L	1.2E-01	1.2E-01	U	2.28E-01	96.2	I129LL_SEP_LEPS	3.8915E+00	L	07/17/2008 08:56	I
8170557	NP-237	13994-20-2	-7.45E-03	pCi/L	7.6E-02	7.6E-02	U	1.78E-01	87.1	NP237_LLE_PLAT	2.00E-01	L	06/26/2008 20:09	I
8170556	Se-79	15758-45-9	4.26E+00	pCi/L	1.3E+01	2.5E+01	U	3.07E+01	28.4	SE79_SEP_IE_LS	2.003E-01	L	07/04/2008 03:57	I
8170555	U-234	13966-29-5	4.69E-01	pCi/L	2.6E-01	2.8E-01		1.75E-01	81.6	UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I
8170555	U-235	15117-96-1	3.66E-02	pCi/L	7.5E-02	7.5E-02	U	1.75E-01	81.6	UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I
8170555	U-238	U-238	3.96E-01	pCi/L	2.4E-01	2.5E-01		1.75E-01	81.6	UIISO_PLATE_AEA	2.0002E-01	L	06/26/2008 19:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9KPND310	B1V6C9		MW6-SBB-A1	I08-038	W05424					06/09/2008 10:24				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	1.47E+00	pCi/L	3.7E-01	3.7E-01	U	6.71E-01	82.7	I129LL_SEP_LEPS	3.8437E+00	L	07/17/2008 10:41	I

TestAmerica

rptFeadRadSummaryEdd v3.48

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

7/28/2008 2:56:00 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39591 File Name: h:\Reportdb\edd\Fead\IVRad\W05424.Edd, h:\Reportdb\edd\Fead\IVRad\39591.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9KPND610	B1V6C0		MW6-SBB-A1	108-038	W05424					06/09/2008 12:26				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	2.93E-01	pCi/L	1.8E-01	1.8E-01	U	3.68E-01	93.5	I129LL_SEP_LEPS	3.8712E+00	L	07/17/2008 12:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9KPNDQ10	B1V6C8		MW6-SBB-A1	108-038	W05424					06/09/2008 10:24				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8170550	I-129L	15046-84-1	1.44E+00	pCi/L	4.4E-01	4.4E-01	U	6.12E-01	97.8	I129LL_SEP_LEPS	3.9116E+00	L	07/17/2008 10:39	I

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP6501AB

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 11:07

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																AU		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170555 BLK	U-234 13966-29-5	-1.26E-02	pCi/L	6.6E-02 6.6E-02	U	1.78E-01	99.3		UIISO_PLATE_	2.0001E-01 L	06/26/2008 19:45				D						
8170555 BLK	U-235 15117-96-1	-6.31E-03	pCi/L	6.4E-02 6.4E-02	U	1.51E-01	99.3		UIISO_PLATE_	2.0001E-01 L	06/26/2008 19:45				D						
8170555 BLK	U-238 U-238	0.00E+00	pCi/L	6.4E-02 6.4E-02	U	1.51E-01	99.3		UIISO_PLATE_	2.0001E-01 L	06/26/2008 19:45				D						

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

/

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP6511AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/09/2008 10:18

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/09/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								AW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170556 BLK	Se-79 15758-45-9	1.00E+01	pCi/L	9.8E+00 5.0E+00	U	1.13E+01	77.4		SE79_SEP_IE	2.001E-01 L	07/04/2008 04:50				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample id: KP6521AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/09/2008 10:18

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/09/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170557 BLK	NP-237 13994-20-2	3.63E-02	pCi/L	1.3E-01 1.3E-01	U	3.42E-01	80.1		NP237_LLE_P	2.00E-01	06/26/2008 20:11				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP6531AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170558 BLK	Uranium 7440-61-1	0.00E+00	ug/L	0.0E+00 0.0E+00	U	8.25E-02			UTOT_KPA	2.54E-02 ML	07/21/2008 10:11				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KP6541AB

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170559	TC-99	3.63E+00	pCi/L	5.8E+00	U	9.57E+00	100.0		TC99_ETVDSK	1.253E-01	06/25/2008				D
BLK	14133-76-7			4.1E+00							22:34				

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05424.Edd, h:\Reportdb\edd\Fead\Rad\39591.Edd

Lab Sample Id: KP6551AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170560 BLK	ALPHA 12587-46-1	-5.18E-02	pCi/L	2.1E-01 2.1E-01	U	6.22E-01	100.0		9310_ALPHAB	2.003E-01 L	07/07/2008 14:14				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP6561AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	To/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170561 BLK	BETA 12587-47-2	1.06E+00	pCi/L	1.5E+00 1.5E+00	U	3.23E+00	100.0		9310_ALPHAB	2.003E-01	07/07/2008 16:32				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IVRad\W05424.Edd, h:\Reportdb\edd\Fead\IVRad\39591.Edd

Lab Sample Id: KP6571AB

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BI	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170562 BLK	H-3 10028-17-8	1.58E+01	pCi/L	1.2E+02 1.0E+02	U	2.53E+02	100.0		906.0_H3_LSC	5.00E-03	06/21/2008 00:53				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KP6571DX

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType			
		MW6-SBB-A19981									BK	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170562	H-3	3.84E+01	pCi/L	1.2E+02	U	2.63E+02	100.0		906.0_H3_LSC	5.00E-03	06/21/2008				D
BLK	10028-17-8			1.1E+02						L	03:37				

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP6581AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 08:25

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170563	C-14	-3.08E+00	pCi/L	4.1E+00	U	8.49E+00	100.0		C14_LSC	2.00E-01	06/24/2008				D
BLK	14762-75-5			3.4E+00						L	02:32				

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP65R1AB

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/09/2008 10:24

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/10/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
MW6-SBB-A19981									BO	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170550 BLK	I-129L 15046-84-1	-3.09E-02	pCi/L	1.2E-01 1.2E-01	U	2.16E-01	94.3		I129LL_SEP_L	3.9911E+00 L	07/17/2008 12:27				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP65V1AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170552	I-129L	5.63E-01	pCi/L	1.1E+00	U	2.07E+00	95.7		I129_SEP_LEP	5.002E-01	07/14/2008				D
BLK	15046-84-1			1.1E+00						L	17:28				

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KP65W1AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/05/2008 07:50

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/05/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BS	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170553	BE-7	-4.53E+00	pCi/L	1.7E+01	U	3.00E+01			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	13966-02-4			1.7E+01						L	13:40				
8170553	CO-60	1.57E-01	pCi/L	1.9E+00	U	3.59E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	10198-40-0			1.9E+00						L	13:40				
8170553	CS-134	-1.37E+00	pCi/L	1.7E+00	U	2.79E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	13967-70-9			1.7E+00						L	13:40				
8170553	CS-137	1.59E-01	pCi/L	1.8E+00	U	3.25E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	10045-97-3			1.8E+00						L	13:40				
8170553	EU-152	-3.80E-01	pCi/L	4.4E+00	U	7.70E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	14683-23-9			4.4E+00						L	13:40				
8170553	EU-154	-6.92E-01	pCi/L	5.0E+00	U	9.08E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	15585-10-1			5.0E+00						L	13:40				
8170553	EU-155	-2.02E+00	pCi/L	3.0E+00	U	4.90E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	14391-16-3			3.0E+00						L	13:40				
8170553	K-40	-8.48E+01	pCi/L	3.8E+01	U	7.22E+01			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	13966-00-2			3.8E+01						L	13:40				
8170553	RU-106	-3.86E+00	pCi/L	1.3E+01	U	2.33E+01			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	13967-48-1			1.3E+01						L	13:40				
8170553	SB-125	2.43E+00	pCi/L	4.6E+00	U	8.36E+00			GAMMALL_GS	2.0001E+00	07/02/2008				D
BLK	14234-35-6			4.6E+00						L	13:40				

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KRH8V1AB

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 11:07

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								CJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8197274 BLK	Se-79 15758-45-9	-4.92E+00	pCi/L	7.6E+00 4.0E+00	U	1.00E+01	88.6		SE79_SEP_IE	2.002E-01 L	07/25/2008 16:42				D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KRHXT1AB

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BLK

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
	MW6-SBB-A19981													CK	H
8197204	SR-90	-1.78E-01	pCi/L	2.6E-01	U	6.12E-01	66.1		SRISO_SEP_P	1.0002E+00	07/26/2008				D
BLK	10098-97-2			2.3E-01						L	07:00				

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP6501CS

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 11:07

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																AV		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170555	U-234	8.79E+00	pCi/L	1.7E+00		1.64E-01	96.4	8.66E+00	UIISO_PLATE_	2.0002E-01	06/26/2008			75	D						
BS	13966-29-5			1.0E+00				101.5		L	19:45			125							
8170555	U-235	3.30E-01	pCi/L	2.1E-01		1.83E-01	96.4	3.95E-01	UIISO_PLATE_	2.0002E-01	06/26/2008			75	D						
BS	15117-96-1			2.0E-01				83.5		L	19:45			125							
8170555	U-238	8.04E+00	pCi/L	1.6E+00		1.39E-01	96.4	9.07E+00	UIISO_PLATE_	2.0002E-01	06/26/2008			75	D						
BS	U-238			9.7E-01				88.6		L	19:45			125							

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05424.Edd, h:\Reportdb\edd\Fead\Rad\39591.Edd

Lab Sample Id: KP6521CS

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/09/2008 10:18

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/09/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr		Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp		
		MW6-SBB-A19981										AY	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170557	NP-237	8.91E+00	pCi/L	1.9E+00		2.34E-01	80.2	9.40E+00	NP237_LLE_P	2.001E-01	06/26/2008			75	D
BS	13994-20-2			1.3E+00				94.8		L	20:11			125	
															SK5765/08

SKS7/28/08

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP6531CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BA		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170558 BS	Uranium 7440-61-1	3.65E+01	ug/L	4.3E+00 4.3E+00		8.42E-02		3.63E+01 100.5	UTOT_KPA	2.49E-02	07/21/2008 10:15			75 125	D						

TestAmerica

rptFeadRadEdd v3.68

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

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05424.Edd, h:\Reportdb\edd\FeadIV\Rad\39591.Edd

Lab Sample Id: KP6531DS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp			
		MW6-SBB-A19981									BB	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170558	Uranium	3.29E+00	ug/L	3.4E-01		8.32E-02		3.58E+00	UTOT_KPA	2.52E-02	07/21/2008			75	D
BS	7440-61-1			3.4E-01				91.9		ML	10:16			125	

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KP6541CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BD	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170559	TC-99	5.08E+02	pCi/L	3.5E+01		9.57E+00	100.0	5.45E+02	TC99_ETVDSK	1.253E-01	06/25/2008			75	D
BS	14133-76-7			1.3E+01				93.3		L	22:34			125	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\W05424.Edd, h:\Reportdb\ledd\Fead\W05424.Edd, h:\Reportdb\ledd\Fead\W05424.Edd, h:\Reportdb\ledd\Fead\W05424.Edd

Lab Sample Id: KP6551CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										BF	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170560	ALPHA	1.86E+01	pCi/L	4.8E+00		8.63E-01	100.0	2.25E+01	9310_ALPHAB	2.003E-01	07/07/2008			70	D
BS	12587-46-1			2.9E+00				82.5		L	18:09			130	

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KP6561CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType			
		MW6-SBB-A19981									BH	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170561	BETA	2.42E+01	pCi/L	4.1E+00		2.65E+00	100.0	2.28E+01	9310_ALPHAB	1.998E-01	07/07/2008			70	D
BS	12587-47-2			2.5E+00				106.1		L	16:32			130	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\VRad\W05424.Edd, h:\Reportdb\eddd\Fead\VRad\39591.Edd

Lab Sample Id: KP6571CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170562 BS	H-3 10028-17-8	2.26E+03	pCi/L	2.1E+02 1.7E+02		2.51E+02	100.0	2.71E+03 83.5	906.0_H3_LSC	5.00E-03 L	06/21/2008 02:15			75 125	D

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KP6571EM

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BL		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170562 BS	H-3 10028-17-8	2.24E+03	pCi/L	2.1E+02 1.8E+02		2.62E+02	100.0	2.71E+03 82.7	906.0_H3_LSC	5.00E-03 L	06/21/2008 04:59			75 125	D						

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP6581CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 08:25

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp			
		MW6-SBB-A19981									BN	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170563	C-14	4.12E+01	pCi/L	5.8E+00		8.49E+00	100.0	4.50E+01	C14_LSC	2.00E-01	06/24/2008			70	D
BS	14762-75-5			4.7E+00				91.4		L	03:15			130	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\Fead\I\Rad\W05424.Edd, h:\Reportdb\eddd\Fead\I\Rad\39591.Edd

Lab Sample Id: KP65R1CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/09/2008 10:24

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/10/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170550	I-129L	1.02E+01	pCi/L	1.3E+00	4.31E-01	94.7	9.89E+00	I129LL_SEP_L	3.9366E+00	07/17/2008			70	D
BS	15046-84-1			1.3E+00			103.4		L	12:27			130	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\FeadIV\Rad\W05424.Edd, h:\Reportdb\eddd\FeadIV\Rad\39591.Edd

Lab Sample Id: KP65V1CS

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170552	I-129L	4.87E+01	pCi/L	7.0E+00	2.70E+00	92.7	4.60E+01	I129_SEP_LEP	5.00E-01	07/14/2008			70	D
BS	15046-84-1			7.0E+00			105.9		L	19:14			130	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05424.Edd, h:\Reportdb\edd\Fead\IV\Rad\39591.Edd

Lab Sample Id: KP65W1CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/05/2008 07:50

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/05/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BT	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170553	CO-60	4.77E+01	pCi/L	7.9E+00		3.16E+00		3.90E+01	GAMMALL_GS	2.0003E+00	07/02/2008			75	D
BS	10198-40-0			7.9E+00				122.3		L	17:05			125	
8170553	CS-137	5.65E+01	pCi/L	8.6E+00		3.59E+00		5.24E+01	GAMMALL_GS	2.0003E+00	07/02/2008			70	D
BS	10045-97-3			8.6E+00				107.8		L	17:05			130	
8170553	EU-152	8.40E+01	pCi/L	1.5E+01		9.15E+00		7.79E+01	GAMMALL_GS	2.0003E+00	07/02/2008			70	D
BS	14683-23-9			1.5E+01				107.8		L	17:05			130	

Monday, July 28, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05424.Edd, h:\Reportdb\edd\FeadIV\Rad\39591.Edd

Lab Sample Id: KRHXT1CS

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										CL	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8197204	SR-90	1.56E+01	pCi/L	2.4E+00		7.69E-01	71.1	1.41E+01	SRISO_SEP_P	1.0005E+00	07/26/2008			70	D
BS	10098-97-2			9.2E-01				110.8		L	07:00			130	

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE3X1JR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
S08-004	MW6-SBB-A19981														
8170552	I-129L	4.12E-01	pCi/L	1.1E+00	U	2.07E+00	92.7		I129_SEP_LEP	5.005E-01	07/14/2008	23689.	1.1		D
DUP	15046-84-1	-4.05E-01		1.1E+00						L	17:28	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE3X1LR

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
S08-004	MW6-SBB-A19981														
8170558	Uranium	3.06E+00	ug/L	3.1E-01		8.35E-02			UTOT_KPA	2.51E-02	07/21/2008	4.8	0.6		D
DUP	7440-61-1	2.92E+00		3.1E-01						ML	10:24	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KPE3X1NR

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
S08-004	MW6-SBB-A19981														
8170559	TC-99	2.88E+00	pCi/L	5.7E+00	U	9.58E+00	100.0		TC99_ETVDSK	1.25E-01	06/25/2008	58.4	0.6		D
DUP	14133-76-7	5.24E+00		4.1E+00						L	22:34	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE3X1PR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
S08-004	MW6-SBB-A19981								BZ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170560 DUP	ALPHA 12587-46-1	1.16E+00 1.88E+00	pCi/L	1.1E+00 1.1E+00	U	1.55E+00	100.0		9310_ALPHAB	1.723E-01 L	07/07/2008 14:14	47.8 20.0	0.9 3		D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE3X1QR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp	
S08-004		MW6-SBB-A19981											CA	H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170561	BETA	7.04E+00	pCi/L	2.0E+00		2.97E+00	100.0		9310_ALPHAB	2.00E-01	07/07/2008	11.1	0.6		D
DUP	12587-47-2	7.86E+00		1.8E+00						L	16:32	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample id: KPE3X1RR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RType		
S08-004		MW6-SBB-A19981										CB	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170562	H-3	1.17E+02	pCi/L	1.2E+02	U	2.49E+02	100.0		906.0_H3_LSC	5.00E-03	06/21/2008	39.9	0.5		D
DUP	10028-17-8	7.78E+01		1.1E+02						L	07:43	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05424.Edd, h:\Reportdb\edd\FeadIV\Rad\39591.Edd

Lab Sample Id: KPE6P1GR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 08:25

Client Id: B1V658

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr		SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp		
I08-037		MW6-SBB-A19981										CC	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170563	C-14	-1.66E+00	pCi/L	4.2E+00	U	8.49E+00	100.0		C14_LSC	2.00E-01	06/24/2008	0.0	0.4		D
DUP	14762-75-5	-3.67E-01		3.4E+00						L	05:23	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KPE7T1HR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 11:07

Client Id: B1V657

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
I08-037		MW6-SBB-A19981																CD		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170555	U-234	1.26E+01	pCi/L	2.4E+00		2.79E-01	99.7		UIISO_PLATE_	2.0003E-01	06/26/2008	2.1	0.2		D						
DUP	13966-29-5	1.24E+01		1.2E+00						L	19:44	20.0	3								
8170555	U-235	5.04E-01	pCi/L	2.6E-01		1.44E-01	99.7		UIISO_PLATE_	2.0003E-01	06/26/2008	7.8	0.2		D						
DUP	15117-96-1	5.45E-01		2.5E-01						L	19:44	20.0	3								
8170555	U-238	1.28E+01	pCi/L	2.4E+00		2.06E-01	99.7		UIISO_PLATE_	2.0003E-01	06/26/2008	12.2	0.9		D						
DUP	U-238	1.13E+01		1.2E+00						L	19:44	20.0	3								

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE7T1JR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 11:07

Client Id: B1V657

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
I08-037	MW6-SBB-A19981								CE	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8197204	SR-90	-1.90E-01	pCi/L	4.0E-01	U	8.93E-01	72.7		SRISO_SEP_P	1.0001E+00	07/26/2008	0.0	0.9		D
DUP	10098-97-2	6.75E-02		4.0E-01						L	07:00	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05424.Edd, h:\Reportdb\edd\FeadIV\Rad\39591.Edd

Lab Sample Id: KPF2X1DR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/05/2008 07:50

Client Id: B1V7V9

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/05/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S08-005		MW6-SBB-A19981																CF		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8170553	EU-154	1.66E+00	pCi/L	4.5E+00	U	8.92E+00			GAMMA_GS	2.0002E+00	07/02/2008	0.0	1.8		D						
DUP	15585-10-1	-3.92E+00		4.5E+00						L	17:03	20.0	3								
8170553	EU-155	-1.28E+00	pCi/L	3.2E+00	U	5.41E+00			GAMMA_GS	2.0002E+00	07/02/2008	3697.1	1.2		D						
DUP	14391-16-3	1.43E+00		3.2E+00						L	17:03	20.0	3								
8170553	K-40	-8.91E+00	pCi/L	3.4E+01	U	6.96E+01			GAMMA_GS	2.0002E+00	07/02/2008	0.0	2.9		D						
DUP	13966-00-2	-7.98E+01		3.4E+01						L	17:03	20.0	3								
8170553	RU-106	1.37E+01	pCi/L	1.4E+01	U	2.74E+01			GAMMA_GS	2.0002E+00	07/02/2008	47.1	0.5		D						
DUP	13967-48-1	8.49E+00		1.4E+01						L	17:03	20.0	3								
8170553	SB-125	-3.94E+00	pCi/L	4.1E+00	U	6.56E+00			GAMMA_GS	2.0002E+00	07/02/2008	0.0	2.2		D						
DUP	14234-35-6	2.53E+00		4.1E+00						L	17:03	20.0	3								
8170553	BE-7	2.43E+00	pCi/L	1.7E+01	U	3.04E+01			GAMMALL_GS	2.0002E+00	07/02/2008	0.0	0.6		D						
DUP	13966-02-4	-4.36E+00		1.7E+01						L	17:03	20.0	3								
8170553	CO-60	1.10E+00	pCi/L	1.5E+00	U	3.24E+00			GAMMALL_GS	2.0002E+00	07/02/2008	0.0	2.8		D						
DUP	10198-40-0	-1.99E+00		1.5E+00						L	17:03	20.0	3								
8170553	CS-134	-1.01E+00	pCi/L	1.6E+00	U	2.68E+00			GAMMALL_GS	2.0002E+00	07/02/2008	0.0	0.		D						
DUP	13967-70-9	-1.02E+00		1.6E+00						L	17:03	20.0	3								
8170553	CS-137	-2.08E-01	pCi/L	1.5E+00	U	2.66E+00			GAMMALL_GS	2.0002E+00	07/02/2008	0.0	0.6		D						
DUP	10045-97-3	-8.74E-01		1.5E+00						L	17:03	20.0	3								
8170553	EU-152	2.56E-01	pCi/L	4.1E+00	U	7.30E+00			GAMMALL_GS	2.0002E+00	07/02/2008	0.0	0.4		D						
DUP	14683-23-9	-9.81E-01		4.1E+00						L	17:03	20.0	3								

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KPLWM2HR

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/09/2008 10:18

Client Id: B1VKT9

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/09/2008

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
I08-043		MW6-SBB-A19981																CG		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
8197274	Se-79	6.45E+00	pCi/L	8.3E+00	U	9.65E+00	92.4		SE79_SEP_IE	2.00E-01	07/25/2008	143.3	0.9		D						
DUP	15758-45-9	1.07E+00		4.2E+00						L	15:49	20.0	3								

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05424.Edd, h:\Reportdb\edd\Fead\VRad\39591.Edd

Lab Sample Id: KPLWR1HR

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/09/2008 10:18

Client Id: B1VKV0

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/09/2008

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp	
I08-043		MW6-SBB-A19981											CH	H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170557	NP-237	0.00E+00	pCi/L	1.0E-01	U	2.39E-01	76.4		NP237_LLE_P	2.004E-01	06/26/2008	0.0	0.1		D
DUP	13994-20-2	-7.45E-03		1.0E-01						L	20:10	20.0	3		

Monday, July 28, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPNDQ1CR

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/09/2008 10:24

Client Id: B1V6C8

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 06/10/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
I08-038	MW6-SBB-A19981														
8170550	I-129L	1.22E+00	pCi/L	3.9E-01	U	5.91E-01	91.4		I129LL_SEP_L	3.877E+00	07/17/2008	16.3	0.8		D
DUP	15046-84-1	1.44E+00		3.9E-01						L	10:41	20.0	3		

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd, h:\Reportdb\edd\Fead\W05424.Edd

Lab Sample Id: KPE3X1KW

Sdg/Rept Nbr: W05424

39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
S08-004	MW6-SBB-A19981												BV H	
8170558 MS	Uranium 7440-61-1	3.73E+01	ug/L	4.8E+00 4.8E+00	8.35E-02		3.59E+01 103.9	UTOT_KPA	2.51E-02 ML	07/21/2008 10:23			60 140	D

TestAmerica

rptFeadRadEdd v3.68

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

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, July 28, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05424.Edd, h:\Reportdb\edd\Fead\I\Rad\39591.Edd

Lab Sample Id: KPE3X1MW

Sdg/Rept Nbr: W05424 39591

Collection Date: 06/04/2008 12:40

Client Id: B1TX74

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%*:

QC Type: MS

Received Date: 06/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-004	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8170559 MS	TC-99 14133-76-7	3.42E+03	pCi/L	2.1E+02 3.2E+01		9.58E+00	100.0	3.60E+03 95.1	TC99_ETVDSK	1.251E-01 L	06/25/2008 22:34			60 140	D

RQC050

TestAmerica Laboratories, Inc.
WET CHEM BATCHSHEETRun Date: 7/08/08
Time: 14:50:38

TestAmerica Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE
-----------------	------------------	----	------------------	-----------------	----------------	----------------	-------------------------

METHOD: IZ COLIFORM BY METHOD 9223
 QC BATCH #: 8170564
 PREP DATE: 6/18/08
 COMP DATE: 6/18/08
 USER: WAGARR

INITIALS:

PREP

ANAL

DATA ENTRY:

INITIALS

DATE

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:
KPF3R-1-AA	J-8F050322-001	XX I 88 IZ 5I	E	6/6/08	B1V8C6
KPF3R-1-AC	J-8F050322-001-X	XX I 88 IZ 5I	E		B1V8C6 DUP
KP659-1-AA	J-8F180000-564-B	XX I 88 IZ 5I			INTRA-LAB BLANK
KP659-1-AC	J-8F180000-564-C	XX I 88 IZ 5I			INTRA-LAB CHECK

Control Limits

(0-0)

<1 COL/100mL

↓
14.8 ↓

RQC050

TestAmerica Laboratories, Inc.
WET CHEM BATCHSHEETRun Date: 7/08/08
Time: 14:49:31

TestAmerica Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE
-----------------	------------------	----	------------------	-----------------	----------------	----------------	-------------------------

METHOD: IZ COLIFORM BY METHOD 9223
 QC BATCH #: 8190389
 PREP DATE: 7/08/08
 COMP DATE: 6/18/08
 USER: WAGARR

INITIALS: Dm
 PREP
 ANAL

DATA ENTRY:
 INITIALS
 DATE

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:
KPNCT-1-AA	J-8F100263-001	XX I 88 IZ 5I	E	6/11/08	B1VR34
KPNCT-1-AC	J-8F100263-001-X	XX I 88 IZ 5I	E		B1VR34 DUP
KQ7F9-1-AA	J-8G080000-389-B	XX I 88 IZ 5I			INTRA-LAB BLANK
KQ7F9-1-AC	J-8G080000-389-C	XX I 88 IZ 5I			INTRA-LAB CHECK

<1 COL/100mL
 ↓
 18.7 ↓

Control Limits

(0-0)

RQC050

TestAmerica Laboratories, Inc.
WET CHEM BATCHSHEETRun Date: 7/08/08
Time: 14:50:01

TestAmerica Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE
-----------------	------------------	----	------------------	-----------------	----------------	----------------	-------------------------

METHOD: IZ COLIFORM BY METHOD 9223

QC BATCH #: 8190391

PREP DATE: 7/08/08

COMP DATE: 6/18/08

USER: WAGARR

INITIALS:

PREP

ANAL

DATA ENTRY:

INITIALS

DATE

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:
KPQWR-1-AA	J-8F110338-001	XX I 88 IZ 5I	E	6/12/08	B1VR96
KPQWR-1-AC	J-8F110338-001-X	XX I 88 IZ 5I	E		B1VR96 DUP
KQ7GE-1-AA	J-8G080000-391-B	XX I 88 IZ 5I			INTRA-LAB BLANK
KQ7GE-1-AC	J-8G080000-391-C	XX I 88 IZ 5I			INTRA-LAB CHECK

Control Limits

(0-0)

< 1 COL/100mL
↓
13.5
↓

Lot No., Due Date: J8F050181, J8F050195, J8F090197; 07/28/2008

Client, Site: 384868; PGW 615 HANFORD HANFORD

QC Batch No., Method Test: 8170555; RUIISO Uiso by ALP

SDG, Matrix: W05424; 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



Date

6/27/08

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 9170555

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: Erich Job Date: 6/30/8

Lot No., Due Date: J8F050181, J8F090197; 07/28/2008
 Client, Site: 384868: PGW 615 HANFORD HANFORD
 QC Batch No., Method Test: 8170557; RNP237 Np-237 w/tracer
 SDG, Matrix: W05424: 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

Date

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170857

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: Erick Ford Date: 6/27/18

Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170560; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05424; 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

Date

7-8-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170560

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

Comments on any "No" response: _____

Second Level Review: Jodie Date: 7/10/08

Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170561; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W05424; 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

Date

7-8-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170561

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: _____

Date: 7/10/08

Lot No., Due Date: J8F050186, J8F050195; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8197204; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05424; WATER

1.0 COC

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

2.0 QC Batch

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

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

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

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

3.0 QC & Samples

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

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

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

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

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

4.0 Raw Data

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

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

4.3 Were Yields entered correctly? Yes No N/A

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

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

5.0 Other

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

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

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

5.4 Was transcription checked? Yes No N/A

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

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

6.0 Comments on any No response:

Please see NCM # 10-12736

First Level Review

John North

Date

7-28-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8197204

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 Num

Second Level Review: Erika Jod Date: 7/28/18

Clouseau Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-12736	Classification: Anomaly
NCM Initiated By: John Norton	Status: GLREVIEW
Date Opened: 07/28/2008	Production Area: Environmental - Prep
Date Closed:	Tests: Sr-85/90 by GPC-7
	Lot #'s (Sample #'s): J8F050186 (1), J8F050195 (3), J8F180000 (554),
	QC Batches: 8170554,
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
John Norton	07/28/2008	Originally analyzed as batch # 8170554, these samples were traced with an incorrect tracer.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
John Norton	07/28/2008	The samples were re-analyzed.

Client Notification Summary

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

Quality Assurance Verification

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

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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Lot No., Due Date: J8F050181, J8F050186, J8F050195, J8F050319, J8F090197; 07/28/2008
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 8170553; RGAMMA Gamma by GER
SDG, Matrix: W05424; WATER

1.0 COC

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

☒
2.0 QC Batch

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

☒

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

☒

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

☒

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

☒
3.0 QC & Samples

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

☒

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

☒

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

☒

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

☒

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

☒
4.0 Raw Data

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

☒

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

☒

4.3 Were Yields entered correctly? Yes No N/A

☒

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

☒

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

☒
5.0 Other

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

☒

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

☒

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

☒

5.4 Was transcription checked? Yes No N/A

☒

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


☒

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

☒

6.0 Comments on any No response:

Please see NCM # 10-12669

First Level Review

Date

7-15-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 170553

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: _____

Date: 7/15/08

Clouseau Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-12669	Classification: Anomaly
NCM Initiated By: John Norton	Status: GLREVIEW
Date Opened: 07/15/2008	Production Area: Environmental - Prep
Date Closed:	Tests: Gamma by GER
	Lot #'s (Sample #'s): J8F050181 (1), J8F050186 (1), J8F050195 (2,3), J8F050319 (1,2), J8F090197 (1,2), J8F180000 (553),
	QC Batches: 8170553,
Nonconformance: Dups not within acceptance limits	
Subcategory: Insufficient Volume for sample analysis	

Problem Description / Root Cause

Name	Date	Description
John Norton	07/15/2008	The volume of sample provided was not sufficient for the creation of a duplicate gamma sample.

Corrective Action

Name	Date	Corrective Action
John Norton	07/15/2008	The sample was re-counted on a different detector in order to provide a duplicate.

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: J8F050181,J8F050191,J8F050195,J8F050319,J8F050327,J8F090190,J8F090197,J8F100266;
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170550; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05424; 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
Date

TAL Richland

QAS_RADCALCv4.8.83

TESTAMERICA

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170550

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 [Signature] Date: 7/23/8

Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170552; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05424; 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

✓

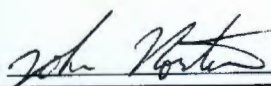
5.6 Are worksheet entries complete and correct?

Yes No N/A

✓

6.0 Comments on any No response:

First Level Review



Date

7-16-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170552

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: _____

Date: 7/16/08

Lot No., Due Date: J8F050195, J8F090197; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8197274; RSE79 Se-79 by LSC
SDG, Matrix: # 8170556 SICS 7/28/08
W05424; WATER

1.0 COC

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

2.0 QC Batch

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

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

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

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

3.0 QC & Samples

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

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

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

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

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

4.0 Raw Data

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

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

4.3 Were Yields entered correctly? Yes No N/A

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

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

5.0 Other

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

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

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

5.4 Was transcription checked? Yes No N/A

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

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

6.0 Comments on any No response:

Please see NCM # 10-12743

First Level Review

Date

7-28-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8197274 & 8170556

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 A Date: 7/28/08

Clouseau Nonconformance Memo



NCM #: 10-12743	Classification: Anomaly
NCM Initiated By: John Norton	Status: GLREVIEW
Date Opened: 07/28/2008	Production Area: Environmental - Sep
Date Closed:	Tests: None
	Lot #'s (Sample #'s): J8F050195 (3), J8F090197 (1),
	QC Batches: None.,
Nonconformance: Tracer yield out of limits	
Subcategory: Unknown	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
John Norton	07/28/2008	Originally analyzed in batch # 8170556, these samples failed due to low tracer yields.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
John Norton	07/28/2008	The samples were re-analyzed in batch #8197274 for acceptable results.

Client Notification Summary

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

Quality Assurance Verification

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

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170559; RTC99 Tc-99 by LSC
SDG, Matrix: W05424; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	OK	✓		
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	OK	✓		
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	No Matrix Blanks (MBIs) found in Batch!			✓
8.12	Method Blank(s) < QAS Limit Value (No S Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	RPD > UCL : 20.0=> KPE3X1AN TC-99 58.0 (RPD)			✓
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	No Matrix Spikes (MLCS) found in Batch!			✓
8.16	MS within Control Limits.	Yes	No	N/A
	OK	✓		
8.17	Tracer within Control Limits.	Yes	No	N/A
	No Tracers found in Batch!			✓
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	No Tracers found in Batch!			✓
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	OK	✓		
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Limit Specified!			✓
8.22	Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Positive Results	✓		
	OK Calc_IDL Not Calculated			
8.23	Result <= Action Level, when Defined.	Yes	No	N/A
	OK; No Action Level Found => TC-99	✓		
	OK; No Callin Level Found => TC-99			
8.24	Result + 3s >=0, Not Too Negative.	Yes	No	N/A
	OK	✓		
8.25	Counting Spectrum are within FWHM Limits.	Yes	No	N/A
	No FWHM found in Batch Data!			✓

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

First Level Review

Ara Antonson

Date

10/26/08

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Page 2

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170559

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 O'Neil Date: 6/30/18

Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170562; RTRITIUM H-3 by LSC
SDG, Matrix: W05424; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	Analysis Volume => KPE3X1AA 5.00<10.00 Q:VB		✓	
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	Count Geometry => KP6571AF SVP15/5<>SVP10/10		✓	
	KP6571AG SVP15/5<>SVP10/10			
	KP6571AA SVP15/5<>SVP10/10			
	KP6571AC SVP15/5<>SVP10/10			
	KP6571AD SVP15/5<>SVP10/10			
	KP6571AE SVP15/5<>SVP10/10			
	KPE3X1AA SVP15/5<>SVP10/10			
	KPE3X1AR SVP15/5<>SVP10/10 Q:VC			
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments.			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	RPD > UCL : 20.0=> KPE3X1AR H-3 40.0 (RPD)		✓	
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.16	MS within Control Limits.	Yes	No	N/A
	No Matrix Spike Samples (MS) found in Batch!			✓
8.17	Tracer within Control Limits.	Yes	No	N/A
	No Tracers found in Batch!			✓
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	No Tracers found in Batch!			✓
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	OK	✓		
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Limit Specified!			✓
8.22	Result < Mdc, Activity Not Detected, U Flag.	Yes	No	N/A
	No Positive Results	✓		
	OK Calc_IDL Not Calculated			
8.23	Result <= Action Level, when Defined.	Yes	No	N/A
	OK; No Action Level Found => H-3	✓		

OK; No Callin Level Found => H-3

8.24 Result + 3s >=0, Not Too Negative.

Yes No N/A

☒

OK

8.25 Counting Spectrum are within FWHM Limits.

Yes No N/A

☒

No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations.

Yes No N/A

☒

8.27 Correct Count Library Used.

Yes No N/A

☒

No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)

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 version)

Yes No N/A

☒

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate.

Yes No N/A

☒

OK

First Level Review

Lisa Austensen

Date

U/30/08

TAL Richland

OAS_RADCALCv4.8.33

TESTAMERICA

Page 2

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170562

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 Jones*

Date: 6/30/18

Lot No., Due Date: J8F050181, J8F050195, J8F090197; 07/28/2008

Client, Site: 384868; PGW 615 HANFORD HANFORD

QC Batch No., Method Test: 8170563; RC14 C-14 by LSC

SDG, Matrix: W05424; 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

✓

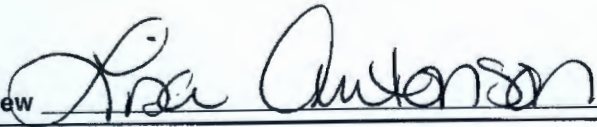
5.6 Are worksheet entries complete and correct?

Yes No N/A

✓

6.0 Comments on any No response:

First Level Review



Date

6/28/08

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170563

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: 6/25/8

Lot No., Due Date: J8F050186; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170558; RUNAT UNat by KPA
SDG, Matrix: W05424; WATER

1.0 COC

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

2.0 QC Batch

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

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

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

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

3.0 QC & Samples

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

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

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

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

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

4.0 Raw Data

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

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

4.3 Were Yields entered correctly? Yes No N/A

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

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

5.0 Other

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

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

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

5.4 Was transcription checked? Yes No N/A

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

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

6.0 Comments on any No response:

First Level Review

John Norton

Date

7-21-8

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170558

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 J. [Signature] Date: 7/23/8

Lot No., Due Date: J8F050322; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8170564;
SDG, Matrix: W05424; 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

Date

TAL Richland

QAS_RADCALCv4.8.33

TESTAMERICA

Page 1

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8170564

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: Eino Jrd Date: 7/23/8

Lot No., Due Date: J8F100263; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8190389;
SDG, Matrix: W05424; 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

Date

7/22/08

Data Review Checklist

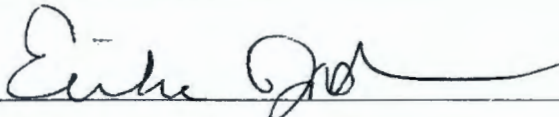
RADIOCHEMISTRY

Second Level Review

Batch Number: 8190389

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:  Date: 7/13/8

Lot No., Due Date: J8F110338; 07/28/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8190391;
SDG, Matrix: W05424; 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 ✓

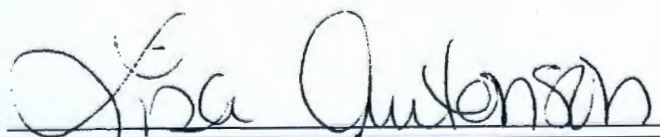
5.4 Was transcription checked? Yes No N/A ✓

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



Date

7/22/08

AL Richland

PAS_RADCALCv4.8.33

TESTAMERICA

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8190391

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: *Mike Jod* Date: 7/23/8

TESTAMERICA	FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-037-70
	J8F050181 W05424 DUE 71808 KPEIL		Page 1 of 1	
Collector Scott E. Hamaker	Contact/Requester	Telephone No.	MSIN	FAX
SAF No. 108-037	Sampling Origin	Purchase Order/Charge Code		
Project Title 2UPL MAY 2008	HNF-N-506-15	Ice Chest No.	GW3-007 Temp.	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

[illegible]

Relinquished By Scott E. Hamaker	Print <i>Scott Hamaker</i>	Sign <i>6/4/08 1430</i>	Date/Time <i>6/4/08 1430</i>	Received By R. L. LANE	Print TAL	Sign <i>6/4/08 1430</i>	Date/Time <i>6/4/08 1430</i>	Matrix *	
Relinquished By		Date/Time		Received By		Date/Time		S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By		Date/Time		Received By		Date/Time			
Relinquished By		Date/Time		Received By		Date/Time			
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time	



Sample Check-in List

Date/Time Received: 6408 1430 GM Screen Result 0.1K

Client: PCW SDG #: W05424 NA [] SAF #: I08-037 NA []

Work Order Number: J8F050181 Chain of Custody # I08-037-70

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 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: [Signature] Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

TEST SITE FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8F050186 W05424 DUE 718 08		C.O.C. # S08-004-121	
			Page 1 of 1	
Collector Scott E. Hamaker	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX
SAF No. S08-004	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. APRIL 2008	HANF-N-506-15	Ice Chest No. G103-007 Temp.		
Shipped To (Lab) TestAmerica Incorporated, Richland		Bill of Lading/Air Bill No.		
Protocol SURV	Method of Shipment Govt. Vehicle	Offsite Property No.		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		Priority: 45 Days		
		SPECIAL INSTRUCTIONS Site-Wide Generator Knowledge Information Form applies.	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix * S = Soil DS = Drum Solid SF = Sediment DI. = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L. = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6408 1430 GM Screen Result 0.1K

Client: PAW SDG #: W05424 NA [] SAF #: 508-004 NA []

Work Order Number: 18F050186 Chain of Custody # 508-004-121

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: 2
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
☒ Tape Hazard Labels
☒ Custody Seals Appropriate Sample Labels
9. Samples are:
☒ In Good Condition Leaking
☐ Broken 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: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

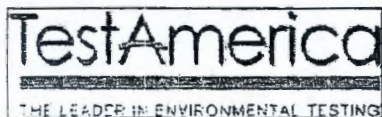
[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S08-005-24	
		J8F050191 W05424 DUE 71808 KPE4X		Page 1 of 1	
Collector Scott E. Hamaker		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. S08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title SURV. MAY 2008		HNF-N-506-15		Ice Chest No. GW3-007 Temp.	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Site-Wide Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	



Sample Check-in List

Date/Time Received: 6408 1430 GM Screen Result 0.11C

Client: PGW SDG #: W05424 NA [] SAF #: 508-005 NA []

Work Order Number: 18F050191 Chain of Custody # 508-005-24

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 Hazard Labels
☒ Custody Seals ☒ 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: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8F050195 W05424 DUE 71808 KPE6D		C.O.C. # 108-037-75	
Collector R. Emingsworth		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. 108-037		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title 2UPL MAY 2008		Method of Shipment HNF-N-566-16		Ice Chest No. Temp. BWS-CC7	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By R. Ellingsworth	Print <i>R. Ellingsworth</i>	Sign <i>[Signature]</i>	Date/Time JUN 04 2008 <i>1430</i>	Received By <i>[Signature]</i>	Print WLANE TAL	Sign <i>[Signature]</i>	Date/Time JUN 04 2008 <i>1430</i>	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-037-6	
J8F050195 W05424 DUE 71808 KPEGP				Page 1 of 1	
Collector R. Ellingsworth	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX	
SAF No. 108-037	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title 2UPL MAY 2008	HAF - N-506-16	Ice Chest No. BWS-007	Temp.		
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol SURV	Priority: 45 Days	Offsite Property No.			
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies.			
		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By	Print N. Ellingsworth	Sign <i>[Signature]</i>	Date/Time 1430 JUN 14 2008	Received By	Print R. LANE TAL	Sign <i>[Signature]</i>	Date/Time 1430 JUN 14 2008	Matrix *	
Relinquished By			Date/Time	Received By			Date/Time	S = Soil SP = Sediment SO = Solid SL = Shale W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WL = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	
								Date/Time	



Sample Check-in List

Date/Time Received: 6408 1430 GM Screen Result 0.1K
Client: PLW SDG #: W05424 NA [] SAF #: I08-037 NA []
Work Order Number: J8F050195 Chain of Custody # I08-037-5,-6,-75

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []

6. Number of samples in shipping container: 3

7. Sample holding times exceeded? NA ☒ Yes [] No []

8. Samples have:

☒ Tape
☒ Custody Seals

☒ Hazard 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: RJR Date: 6408

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST <i>J8F050319 W05424 Due 07/21/08</i>		C.O.C. # S08-005-167 Page <u>1</u> of <u>1</u>	
Collector R. Ellingsworth		Contact/Requester Steve Trent		Telephone No. 509-373-5869 MSIN FAX 	
SAF No. S08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code 	
Project Title SURV MAY 2008		HNF-N-SOL-11		Ice Chest No. Temp. 	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No. 	
Protocol SURV		Priority: 45 Days		Offsite Property No. 	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Site-Wide Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By R. Ellingsworth	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUN 05 2008 1305	Received By <i>[Signature]</i>	Print L. W. LANE	Sign TAL	Date/Time JUN 05 2008 1305	Matrix *	
Relinquished By	Date/Time			Received By	Date/Time			S = Soil SE = Sediment SO = Solid SL = Shdve W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WL = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time			Received By	Date/Time				
Relinquished By	Date/Time			Received By	Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time	

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST <i>J8F050319 W05424 Due 07.21.08</i>		C.O.C. # S08-005-166	
Collector R. Ellingsworth		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. S08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title SURV MAY 2008		Method of Shipment HAZ - N - SOL - Ho		Ice Chest No. Temp. AW-1	
Shipped To (Lab) TestAmerica Incorporated Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Site-Wide Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By H. Ellingsworth	Print <i>[Signature]</i>	Date/Time JUN 05 2008 1305	Received By <i>[Signature]</i>	Print JULIANE TAL	Sign <i>[Signature]</i>	Date/Time JUN 05 2008 1305	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time	S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air		DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine LI = Liquid V = Vegetation X = Other		
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time



Sample Check-in List

Date/Time Received: 06-05-08 1305 GM Screen Result 01
Client: PGW SDG #: W05424 NA [] SAF #: 508-005 NA []
Work Order Number: J8F050319 Chain of Custody # 508-005-167, 166

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: 2
7. Sample holding times exceeded? NA [☒] Yes [] No []
8. Samples have:
____ Tape _____ Hazard Labels
____ Custody Seals _____ Appropriate Sample Labels
9. Samples are:
____ In Good Condition _____ Leaking
____ Broken _____ Have Air Bubbles
(Only for samples requiring no head space)
10. Sample pH taken? NA [] pH < 2 [☒] pH > 2 [☒] pH > 9 [] Amount HNO₃ Added None
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No [☒]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 06-05-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST <i>J8F050322 W05424 Due 07-21-08</i>		C.O.C. # W08-005-434	
Collector R. Ellingsworth		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. W08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title RCRA MAY 2008		<i>HNF-N-506 116</i>		Ice Chest No. Temp. <i>CW</i>	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Site-Wide Generator Knowledge Information Form applies.		

[illegible]

Relinquished By R. Ellingsworth	Print <i>[Signature]</i>	Sign	Date/Time JUN 15 2008	Received By <i>[Signature]</i>	Print LYLANE TAL	Sign	Date/Time JUN 15 2008	Matrix *	
Relinquished By	Date/Time	Received By	Date/Time					S = Soil SF = Sediment SO = Solid SL = Shale W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By		Date/Time	



Sample Check-in List

Date/Time Received: 06-05-08 1305 GM Screen Result .01
Client: P6W SDG #: W05424 NA [] SAF #: W08-005 NA []
Work Order Number: J8F050322 Chain of Custody # W08-005-434
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 _____ Hazard Labels
_____ Custody Seals _____ ☒ Appropriate Sample Labels
9. Samples are:
_____ ☒ In Good Condition _____ Leaking
_____ Broken _____ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH < 2 [] pH > 2 [☒] pH > 9 [] Amount HNO₃ Added NONE
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [] No [☒]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 06-05-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

911

[illegible]



Sample Check-in List

Date/Time Received: 06-05-08 1305 GM Screen Result .07
Client: POW SDG #: W05424 NA | SAF #: I08-037 NA |
Work Order Number: J8F050327 Chain of Custody # I08-037-61, 53
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: 2
7. Sample holding times exceeded? NA [☒] Yes [] No []
8. Samples have:
_____ Tape _____ Hazard Labels
_____ Custody Seals ☒ Appropriate Sample Labels
9. Samples are:
_____ ☒ In Good Condition _____ Leaking
_____ Broken _____ Have Air Bubbles
(Only for samples requiring no head space.)
10. Sample pH taken? NA [] pH<2 [] pH>2 [☒] pH>9 [] Amount HNO₃ Added None
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: LP Date: 6/5/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S08-005-182	
		J8F090190 W05424 DUE 72408 KPLVT		Page 1 of 1	
Collector R. D. Julian		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. S08-005		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title SURV MAY 2008		HNF-N-506-12		Ice Chest No. CLASS-5 Temp.	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol SURV		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Site-Wide Generator Knowledge Information Form applies.		

[illegible]

Relinquished By RASHEPARD	Print RASHEPARD	Sign <i>[Signature]</i>	Date/Time 0930 6/9/2008	Received By RASHEPARD	Print RASHEPARD	Sign <i>[Signature]</i>	Date/Time 0930 6/9/2008	Matrix *	
Relinquished By RASHEPARD	Print RASHEPARD	Sign <i>[Signature]</i>	Date/Time 1430 6/9/08	Received By RJR	Print LVLONE TAL	Sign <i>[Signature]</i>	Date/Time 6908	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By	
								Date/Time	



Sample Check-in List

Date/Time Received: 6908 1430 GM Screen Result 0.1K

Client: PLW SDG #: W05424 NA [] SAF #: 508-005 NA []

Work Order Number: J8F090190 Chain of Custody # 508-005-182

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 []

5. Number of samples in shipping container: 1

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: [Signature] Date: 6908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

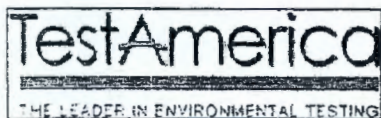
[] No action necessary, process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-043-11	
J8F090197 W05424 DUE 72408 KPLWM				Page 1 of 1	
Collector KE Hamilton	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN	FAX	
SAF No. 108-043	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title 2UPL JUNE 2008	HNF-N-506-15	Ice Chest No.	6WS/022	Temp.	
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol SURV	Priority: 45 Days	Offsite Property No.			
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time	Matrix *
KE Hamilton	KE Hamilton	[Signature]	JUN 09 2008 1420	R. R. LANE	TAL	[Signature]	6908 1420	S = Soil SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solid DL = Drum Liquid T = Tissue WI = Wine LI = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)					Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6908 1420 GM Screen Result 0.1K

Client: PGW SDG #: W05424 NA [] SAF #: I08-043 NA []

Work Order Number: J8F090197 Chain of Custody # I08-043-11, -12

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: 2

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: 6908

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

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[illegible]



Sample Check-in List

Date/Time Received: 61008 1320 GM Screen Result 0.1K

Client: PGW SDG #: W05424 NA [] SAF #: W08-006 NA []

Work Order Number: J8F100263 Chain of Custody # W08-006-36

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 _____ Hazard Labels
☒ Custody Seals _____ Appropriate Sample Labels
9. Samples are:
☒ In Good Condition _____ Leaking
_____ Broken _____ 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: 61008

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-038-16	
J8F100Z66 W05424 DUE 7 25 08 KPNDQ				Page 1 of 1	
Collector Fluor Hanford D R BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869	MSIN FAX		
SAF No. 108-038	Sampling Origin Hanford Site	Purchase Order/Charge Code			
Project Title 2ZPL MAY 2008	Method of Shipment HNF 506-12	Ice Chest No. GWS-021	Temp. 24.4		
Shipped To (Lab) Test America Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.			
Protocol CERCLA	Priority: 45 Days	Offsite Property No.			
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies.		Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

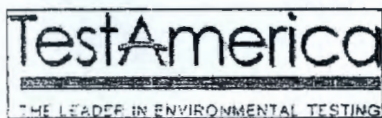
[illegible]

Relinquished By Print BREXINGTON	Signature <i>[Signature]</i>	Date/Time 6/10/08 1320	Received By Print Dan Sparks	Signature <i>[Signature]</i>	Date/Time 6/10/08 1320	Matrix * S = Soil DS = Drum Solid SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By <i>[Signature]</i>	Date/Time 1320	Received By Signature <i>[Signature]</i>	Date/Time 6/10/08 1320			
Relinquished By <i>[Signature]</i>	Date/Time 6/10/08	Received By Signature JPR	Date/Time 6/10/08 1320			
Relinquished By	Date/Time	Received By	Date/Time			
Relinquished By	Date/Time	Received By	Date/Time			
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By	Date/Time	

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 108-038-10	
Fluor Hanford Collector S R BREWINGTON		J8F100266 W05424 DUE 72508 KPND6		Page <u>1</u> of <u>1</u>	
SAF No. 108-038		Contact/Requester Steve Trent		Telephone No. MSIN 509-373-5869	
Project Title 2ZPL MAY 2008		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment ANF-N-506-12 Goyt Vehicle		Ice Chest No. Temp. CHWS-001	
Protocol CERCLA		Priority: 45 Days		Bill of Lading/Air Bill No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

Relinquished By	Print OR Grayle	Sign [Signature]	Date/Time 6/10/08 1200	Received By	Print Dan Sparks	Sign [Signature]	Date/Time 6/10/08 1200	Matrix *	
Relinquished By	Print Dan Sparks	Sign [Signature]	Date/Time 6/10/08 1320	Received By	Print D.R. LANE	Sign TAL	Date/Time 6/10/08 1320	S - Soil SF - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air	DS - Drum Solid DL - Drum Liquid T - Tissue WI - Wine L - Liquid V - Vegetation X - Other
Relinquished By			Date/Time	Received By			Date/Time		
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6 10 08 1320 GM Screen Result 0.1K
Client: PGW SDG #: W05424 NA [] SAF #: I08-038 NA []
Work Order Number: J8F100266 Chain of Custody # I08-038-10,-16,-17

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [] Yes ☒ No []
2. Custody Seals dated and signed? NA [] Yes ☒ No []
3. Chain of Custody record present? NA [] Yes ☒ No []
4. Cooler Temperature: _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet [] Dry []
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA ☒ Yes [] No []
8. Samples have:
☒ Tape Hazard Labels
☒ Custody Seals Appropriate Sample Labels
9. Samples are:
☒ In Good Condition Leaking
☐ Broken 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: 6 10 08

Client Sample ID	Analysis Requested	Condition	Comments/Action


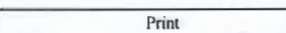



Client Informed on _____ by _____ Person Contacted _____

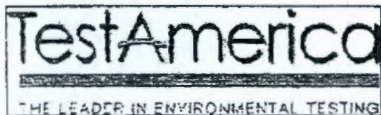
[] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W08-006-64	
		J8F110338 W05424 Due 72508 KPQWR		Page 1 of 1	
Collector Roy Sick...		Contact/Requester Steve Trent		Telephone No. MSIN FAX 509-373-5869	
SAF No. W08-006		Sampling Origin Hanford Site		Purchase Order/Charge Code	
Project Title RCRA JUNE 2008		HNF-N-506-15		Ice Chest No. Temp.	
Shipped To (Lab) TestAmerica Incorporated Richland		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No.	
Protocol RCRA		Priority: 45 Days		Offsite Property No.	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			SPECIAL INSTRUCTIONS Hold Time Site-Wide Generator Knowledge Information Form applies.		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By Roy Sickle	Print 	Date/Time 6/11/08 105	Received By Dan Sparks	Print 	Sign 	Date/Time 6/11/08 125	Matrix * S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By Dan Sparks		Date/Time 6/11/08 1250	Received By RH LILANE TAL			Date/Time 6/11/08	
Relinquished By		Date/Time	Received By			Date/Time	
Relinquished By		Date/Time	Received By			Date/Time	
Relinquished By		Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)					Disposed By	Date/Time



Sample Check-in List

Date/Time Received: 6/10/08 1250 GM Screen Result 0.1K

Client: PGW SDG #: W05424 NA [] SAF #: W08-006 NA []

Work Order Number: J8F110338 Chain of Custody # W08-006-64

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 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: [Signature] Date: 6/10/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

6/24/2008 6:36:20 AM

Sample Preparation/Analysis

Balance Id:1120373922

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab7Y Uiso PrpRC5016/5086, SepRC5067(5039)
SR Uranium-234,235,238 by Alpha Spec

Pipet #: _____

AnalyDueDate: 07/28/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8170555 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

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 KPE1L-1-AG			200.05g,in	200.05g	UITC19751	200				
J8F050181-1-SAMP					04/17/08,pd 06/15/01,r					
06/04/2008 09:00			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr:	Alpha: 8.40E-04 uCi/Sa	Beta: -4.47E-04 uCi/Sa	
2 KPE6P-1-AF			200.00g,in	200.00g	UITC19752					
J8F050195-2-SAMP					04/17/08,pd 06/15/01,r					
06/04/2008 08:25			AmtRec: VIAL20,5XLP,3X4LP	#Containers: 9			Scr:	Alpha: 2.19E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
3 KPE7T-1-AG			200.02g,in	200.02g	UITC19870					
J8F050195-3-SAMP					05/20/08,pd 06/15/01,r					
06/04/2008 11:07			AmtRec: VIAL20,8XLP,3X4LP	#Containers: 12			Scr:	Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa	
4 KPE7T-1-AH-X			200.03g,in	200.03g	UITC19882					
J8F050195-3-DUP					05/20/08,pd 06/15/01,r					
06/04/2008 11:07			AmtRec: VIAL20,8XLP,3X4LP	#Containers: 12			Scr:	Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa	
5 KPLWM-1-AG			200.04g,in	200.04g	UITC19883					
J8F090197-1-SAMP					05/20/08,pd 06/15/01,r					
06/09/2008 10:18			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr:	Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
6 KPLWR-1-AG			200.02g,in	200.02g	UITC19884					
J8F090197-2-SAMP					05/20/08,pd 06/15/01,r					
06/09/2008 10:18			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr:	Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
7 KP650-1-AA-B			200.01g,in	200.01g	UITC19885					
J8F180000-555-BLK					05/20/08,pd 06/15/01,r					
06/04/2008 11:07			AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:	

TESTAMERICA

6/24/2008 6:36:22 AM

Sample Preparation/Analysis

Balance Id:1120373922

7Y Uiso PrpRC5016/5086, SepRC5067(5039)

Pipet #:

SR Uranium-234,235,238 by Alpha Spec

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

AnalyDueDate: 07/28/2008

Sep2 DT/Tm Tech:

Batch: 8170555

pCi/L

SEQ Batch, Test: None

Prep Tech: ,WoodT



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KP650-1-AC-C			200.02g,in	200.02g	UISG1653	300				
J8F180000-555-LCS					04/23/08,pd 06/15/01,r					
06/04/2008 11:07			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:

Comments:

pH < 2.0 6/24/08 J8W

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE111AG-SAMP Constituent List:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KP6501AA-BLK:											
U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KP6501AC-LCS:											
U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Uranium	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KPE111AG-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KP6501AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KP6501AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

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 2

ISV - Insufficient Volume for Analysis

WO Cnt: 8
Prep_SamplePrep v4.8.32

133

6/27/2008 10:34:47 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/28/2007, 7/2/2008, Batch: '8170555', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170555				
AC	Rev1C	WoodT	6/24/2008 6:20:25	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		WoodT	InPrep	6/24/2008 6:20:25 AM
SC		WoodT	Prep1C	6/24/2008 6:36:34 AM
SC		AshworthA	Prep2C	6/24/2008 2:48:18 PM
SC		AshworthA	Sep1C	6/25/2008 5:11:18 PM
SC		AshworthA	Sep2C	6/26/2008 4:59:50 PM
SC		DAWKINSO	InCnt1	6/26/2008 5:39:09 PM
SC		BlackCL	CalcC	6/27/2008 6:14:35 AM
SC		whelands	Rev1C	6/27/2008 10:34:35 AM
AC		WoodT		6/24/2008 6:36:34
AC		AshworthA		6/24/2008 2:48:18 PM
AC		AshworthA		6/25/2008 5:11:18 PM
AC		AshworthA		6/26/2008 4:59:50 PM
AC		DAWKINSO		6/26/2008 5:39:09 PM
AC		BlackCL		6/27/2008 6:14:35
AC		whelands		6/27/2008 10:34:35

AC: Accepting Entry, SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 8

ICOCFractions v4.8.33

6/24/2008 4:20:14 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabK0 Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
SI CLIENT: HANFORDPipet #: DRMAnalyDueDate: 07/28/2008 W05424Sep1 DT/Tm Tech: 6/26/08 10:45 AMBatch: 8170557 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

Prep Tech: HarrisD

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:
128 1 KPE1L-1-AA			200.10g,in	200.10g	NPTA7084			200				
J8F050181-1-SAMP					06/24/08,pd 06/01/01,r							
06/04/2008 09:00			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr:	Alpha: 8.40E-04 uCi/Sa	Beta: -4.47E-04 uCi/Sa	
130 2 KPLWM-1-AA			200.20g,in	200.20g	NPTA7085							
J8F090197-1-SAMP					06/24/08,pd 06/01/01,r							
06/09/2008 10:18			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr:	Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
43 3 KPLWR-1-AA			200.00g,in	200.00g	NPTA7086							
J8F090197-2-SAMP					06/24/08,pd 06/01/01,r							
06/09/2008 10:18			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr:	Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
44 4 KPLWR-1-AH-X			200.40g,in	200.40g	NPTA7087							
J8F090197-2-DUP					06/24/08,pd 06/01/01,r							
06/09/2008 10:18			AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr:	Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
131 5 KP652-1-AA-B			200.00g,in	200.00g	NPTA7088							
J8F180000-557-BLK					06/24/08,pd 06/01/01,r							
06/09/2008 10:18			AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
132 6 KP652-1-AC-C			200.10g,in	200.10g	NPSE0473							
J8F180000-557-LCS					05/15/08,pd 06/01/01,r							
06/09/2008 10:18			AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

6/24/2008 4:20:16 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech: _____

Batch: 8170557
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: HarrisD



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:
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Comments:

PH20 Out 6/24/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE1L1AA-SAMP Constituent List:

Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KP6521AA-BLK:
Np-237 RDL:0.6 pCi/L LCL: UCL: RPD:
KP6521AC-LCS:

KPE1L1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6521AA-BLK:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6521AC-LCS:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/27/2008 4:01:10 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/28/2007, 7/2/2008, Batch: '8170557', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170557				
AC	Rev1C	HarrisD	6/24/2008 4:14:56 PM	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		HarrisD	InPrep	6/24/2008 4:14:56 PM
SC		HarrisD	Prep1C	6/24/2008 4:20:17 PM
SC		ManisD	Sep2C	6/26/2008 5:36:29 PM
SC		DAWKINSO	InCnt	6/26/2008 6:33:36 PM
SC		ClarkR	CalcC	6/27/2008 12:11:00 PM
SC		whelands	Rev1C	6/27/2008 4:01:06 PM
AC		HarrisD	6/24/2008 4:20:17 PM	ICOC_RADCALC v4.8.32
AC		ManisD	6/26/2008 5:36:29 PM	RL-PRP-004 REVISION 0
AC		DAWKINSO	6/26/2008 6:33:36 PM	RL-PRP-004 REVISION 0
AC		ClarkR	6/27/2008 12:11:00	RL-ALP-016 REV 0
AC		whelands	6/27/2008 4:01:06 PM	RL-CI-008 REVISION 0
				RL-CI-008 REVISION 0
				RICH-RC-0002 REV 8

AC: Accepting Entry, SC: Status Change

TAL Richland
Richland Wa.

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Grp Rec Cnt:6
ICOCFractions v4.8.33

6/27/2008 10:49:05 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014

S7 Gross Alpha by GPC using Am-241 curve

SI CLIENT: HANFORD

Pipet #: *245*AnalyDueDate: 07/28/2008 *WJ5424*

Sep1 DT/Tm Tech:

Batch: 8170560 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD/*Back*

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 KPE3X-1-AC	172.50g,in			1.5	50	101	1479	7/2/08		
J8F050186-2-SAMP				38.7						
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: 2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
2 KPE3X-1-AP-X	172.30g,in						10E			
J8F050186-2-DUP				39.1						
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: 2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
3 KP655-1-AA-B	200.30g,in						10F			
J8F180000-560-BLK				0.9						
06/04/2008 12:40		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
4 KP655-1-AC-C	200.30g,in		ASD4503							
J8F180000-560-LCS			05/27/08,pd	0.8			12A	1835	7/2/08	
06/04/2008 12:40		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

Comments:

PH22.0 Aliquot reduced due to ut screens Oct 6/27/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE3X1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KP6551AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
KP6551AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KPE3X1AC-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.32

TESTAMERICA

6/27/2008 10:49:07 AM

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014

Pipet #: _____

S7 Gross Alpha by GPC using Am-241 curve

Sep1 DT/Tm Tech: _____

5I CLIENT: HANFORD

AnalyDueDate: 07/28/2008

Batch: 8170560

pCi/L

Sep2 DT/Tm Tech: _____

SEQ Batch, Test: None

Prep Tech: ,HarrisD



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

KP6551AA-BLK:

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

KP6551AC-LCS:

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

Approved By _____ Date: _____

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7/8/2008 2:37:30 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/9/2007, 7/13/2008, Batch: '8170560', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170560				
AC	Rev1C	HarrisD	6/27/2008 10:46:23	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		HarrisD	InPrep	6/27/2008 10:46:23 AM
SC		HarrisD	Prep1C	6/27/2008 10:49:08 AM
SC		BockJ	InPrep2	7/1/2008 11:13:10 AM
SC		BockJ	Prep2C	7/7/2008 1:16:18 PM
SC		ClarkR	InCnt1	7/7/2008 1:19:01 PM
SC		DAWKINSO	CalcC	7/7/2008 9:35:55 PM
SC		nortonj	Rev1C	7/8/2008 2:37:26 PM
AC		HarrisD	6/27/2008 10:49:08	
AC		BockJ	7/1/2008 11:13:10	
AC		BockJ	7/7/2008 1:16:18 PM	
AC		ClarkR	7/7/2008 1:19:01 PM	
AC		DAWKINSO	7/7/2008 9:35:55 PM	
AC		nortonj	7/8/2008 2:37:26 PM	

AC: Accepting Entry, SC: Status Change

TAL Richland

Richland Wa.

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Grp Rec Cnt: 7

ICOCFractions v4.8.33

6/27/2008 10:52:45 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabBC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: 245

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170561

WATER

pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD/Bell

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 KPE3X-1-AD	200.20g,in			1.5		100	32A	1721	7/7/0800	
J8F050186-2-SAMP					100.6					
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: -2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
2 KPE3X-1-AQ-X	200.00g,in									
J8F050186-2-DUP					100.0		32B			
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: -2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
3 KP656-1-AA-B	200.30g,in									
J8F180000-561-BLK					0		32D			
06/04/2008 12:40		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
4 KP656-1-AC-C	199.80g,in									
J8F180000-561-LCS		BESB3269			0.3		32C			
06/04/2008 12:40		05/27/08,pd	#Containers: 1				Scr:	Alpha:	Beta:	

Comments:

AK2.0 Date 6/27/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPE3X1AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
KP6561AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
KP6561AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

KPE3X1AD-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.32

TESTAMERICA

6/27/2008 10:52:46 AM

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014

Pipet #: _____

S8 Gross Beta by GPC using Sr/Y-90 curve

AnalyDueDate: 07/28/2008

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 8170561

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD



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:
--------------------------------------	-------------------	-----------------------------	------------------------	--------------	--------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6561AA-BLK:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6561AC-LCS:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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7/8/2008 3:30:23 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/9/2007, 7/13/2008, Batch: '8170561', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170561				
AC	Rev1C	HarrisD	6/27/2008 10:50:24	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		HarrisD	InPrep	6/27/2008 10:50:24 AM
SC		HarrisD	Prep1C	6/27/2008 10:52:47 AM
SC		BockJ	InPrep2	7/1/2008 11:13:17 AM
SC		BockJ	Prep2C	7/7/2008 1:16:38 PM
SC		ClarkR	InCnt1	7/7/2008 1:19:53 PM
SC		DAWKINSO	CalcC	7/7/2008 9:36:03 PM
SC		nortonj	Rev1C	7/8/2008 3:30:20 PM
AC		HarrisD		
AC		BockJ		
AC		BockJ		
AC		ClarkR		
AC		DAWKINSO		
AC		nortonj		

AC: Accepting Entry; SC: Status Change

TAL Richland
Richland Wa.

Page 1

Grp Rec Cnt: 7
ICOCFractions v4.8.33



RE-ANALYSIS REQUEST

DUE DATE 7-28

CUSTOMER PGW

ANALYSIS Sr

MATRIX H₂O

LOT NUMBER J8F050186, 050195

SAMPLE DELIVERY GROUP W05424

OLD BATCH NUMBER 8170554

NEW BATCH NUMBER 8197204

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) ALL		INCORRECT TRACER USED
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		
LAB QC ID		Assigned with new batch.

7/24/2008 1:19:29 PM

Sample Preparation/Analysis

Balance Id:1120482733,E32905

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
51 CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008





Sep1 DT/Tm Tech: 07/17/2008 16:07,ManisD

Batch: 8197204 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS, 57671

Sep2 DT/Tm Tech: 07/24/2008 09:02,ManisD

Prep Tech: ManisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE3V-2-AC J8F050186-1-SAMP 	1000.40g,in		SRTB16261 05/21/08,pd 05/22/07		1.0	22	100	SA JA	0143 0750	7/28/08 7/26/08	
07/17/2008 16:07,s1, 07/24/2008											
06/04/2008 12:40	AmtRec: VIAL20,3XLP,4LP		#Containers: 5		Scr:		Alpha: 2.39E-04 uCi/Sa		Beta: 4.45E-04 uCi/Sa		
2 KPE7T-1-AJ-X J8F050195-3-DUP 	1000.10g,in		SRTB16262 05/21/08,pd 05/22/07		1.0	21.8	100	3B JB	0143 0750	7/28/08 7/26/08	
07/17/2008 16:07,s1, 07/24/2008											
06/04/2008 11:07	AmtRec: VIAL20,8XLP,3X4LP		#Containers: 12		Scr:		Alpha: -7.63E-04 uCi/Sa		Beta: 1.71E-03 uCi/Sa		
3 KPE7T-2-AF J8F050195-3-SAMP 	1000.30g,in		SRTB16263 05/21/08,pd 05/22/07		1.0	21.6	100	3C JC	0143 0750	7/28/08 7/26/08	
07/17/2008 16:07,s1, 07/24/2008											
06/04/2008 11:07	AmtRec: VIAL20,8XLP,3X4LP		#Containers: 12		Scr:		Alpha: -7.63E-04 uCi/Sa		Beta: 1.71E-03 uCi/Sa		
4 KRHXT-1-AA-B J8G150000-204-BLK 	1000.20g,in		SRTB16264 05/21/08,pd 05/22/07		1.0	21.6	100	3D JD	0143 0750	7/28/08 7/26/08	
07/17/2008 16:07,s1, 07/24/2008											
06/04/2008 12:40	AmtRec:		#Containers: 1		Scr:		Alpha:		Beta:		
TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 4 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.32											

TESTAMERICA

7/24/2008 1:19:29 PM

Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

CL Sr-90 Prp/SepRC5006(5071)

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech: 07/17/2008 16:07,ManisD

Batch: 8197204

pCi/L

Sep2 DT/Tm Tech: 07/24/2008 09:02,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 KRHXT-1-AC-C		1000.50g,in	SRSG1484		1.0	21.1	100	Y/A	0445	7/25/08	
J8G150000-204-LCS			06/18/08,pd					4A	0.756	7/24/08	
07/17/2008 16:07,s1; 07/24/2008											
06/04/2008 12:40		Amt/Rec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE3V2AC-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
KRHXT1AA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
KRHXT1AC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

KPE3V2AC-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRHXT1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRHXT1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

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 2

ISV - Insufficient Volume for Analysis

WO Cnt: 5
Prep_SamplePrep v4.8.32

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7/28/2008 8:43:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/29/2007, 8/2/2008, Batch: '8197204', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8197204				
AC	Rev1C	HarrisD	7/15/2008 11:43:45	
SC		nortonj	IsBatched	7/15/2008 9:28:47 AM
SC		HarrisD	InPrep	7/15/2008 11:43:45 AM
SC		HarrisD	Prep1C	7/15/2008 11:49:55 AM
SC		ManisD	InSep1	7/16/2008 8:24:02 AM
SC		ManisD	Sep1C	7/17/2008 5:36:05 PM
SC		DAWKINSO	InCnt1	7/17/2008 5:52:13 PM
SC		BlackCL	Cnt1C	7/18/2008 5:50:44 AM
SC		ManisD	InSep2	7/22/2008 10:22:18 AM
SC		ManisD	Sep2C	7/24/2008 1:12:52 PM
SC		DAWKINSO	InCnt2	7/24/2008 3:09:44 PM
SC		ClarkR	CalcC	7/26/2008 9:22:51 AM
SC		nortonj	Rev1C	7/28/2008 8:42:54 AM
AC		HarrisD	7/15/2008 11:49:55	
AC		ManisD	7/16/2008 8:24:02	
AC		ManisD	7/17/2008 5:36:05 PM	
AC		DAWKINSO	7/17/2008 5:52:13 PM	
AC		BlackCL	7/18/2008 5:50:44	
AC		ManisD	7/22/2008 10:22:18	
AC		ManisD	7/24/2008 1:12:52 PM	
AC		DAWKINSO	7/24/2008 3:09:44 PM	
AC		ClarkR	7/26/2008 9:22:51	
AC		nortonj	7/28/2008 8:42:54	

ICOC_RADCALC v4.8.32
 RL-PRP-004 REVISION 0
 RL-PRP-004 REVISION 0
 RL-GPC-003 REV 0
 RL-GPC-003 REV 0
 RL-CI-007 REVISION 0
 RL-CI-007 REVISION 0
 RL-GPC-004 REV 0
 RL-GPC-004 REV 0
 RL-CI-006 REVISION 0
 RL-CI-006 REVISION 0
 RICH-RC-0002 REV 8

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

6/27/2008 12:25:24 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

AW Gamma PrpRC5017

TA Gamma by HPGE

SI CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170553

WATER

pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD/Boc

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 KPE1L-1-AD	2000.40g,in									
J8F050181-1-SAMP										
06/04/2008 09:00										
AmtRec: VIAL20,6XLP,3X4LP										
#Containers: 10										
2 KPE3V-1-AA	2000.20g,in									
J8F050186-1-SAMP										
06/04/2008 12:40										
AmtRec: VIAL20,3XLP,4LP										
#Containers: 5										
3 KPE6P-1-AC	2000.10g,in									
J8F050195-2-SAMP										
06/04/2008 08:25										
AmtRec: VIAL20,5XLP,3X4LP										
#Containers: 9										
4 KPE7T-1-AC	2000.10g,in									
J8F050195-3-SAMP										
06/04/2008 11:07										
AmtRec: VIAL20,8XLP,3X4LP										
#Containers: 12										
5 KPF2X-1-AA	2000.20g,in									
J8F050319-1-SAMP										
06/05/2008 07:50										
AmtRec: 20ML,3X4LP										
#Containers: 4										
6 KPF2X-1-AD-X										
J8F050319-1-DUP										
06/05/2008 07:50										
AmtRec: 20ML,3X4LP										
#Containers: 4										
7 KPF3F-1-AA	2000.20g,in									
J8F050319-2-SAMP										
06/05/2008 11:14										
AmtRec: 20ML,3X4LP										
#Containers: 4										

6/27/2008 12:25:26 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National LabAW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170553 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

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 KPLWM-1-AD	2000.40g,in									
J8F090197-1-SAMP										
06/09/2008 10:18		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr: Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
9 KPLWR-1-AD	2000.30g,in									
J8F090197-2-SAMP										
06/09/2008 10:18		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10					Scr: Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
10 KP65W-1-AA-B	2000.10g,in									
J8F180000-553-BLK										
06/05/2008 07:50		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
11 KP65W-1-AC-C	2000.30g,in	QCAG1484								
J8F180000-553-LCS		06/20/08,pd								
06/05/2008 07:50		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	

Comments: KPF2X-SAMP "Comments: isv for gamma dup. Please recount on a different detector. DLH 6/27/08"

All Clients for Batch:

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

KPE1L1AD-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

KP65W1AA-BLK:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 11
Prep_SamplePrep v4.8.32

6/27/2008 12:25:27 PM

Sample Preparation/Analysis

Balance Id:1120482733

AW Gamma PrpRC5017

Pipet #: _____

TA Gamma by HPGE

SI CLIENT: HANFORD

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170553

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD

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:	
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
KP65W1AC-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						

KPE1L1AD-SAMP Calc Info:

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

KP65W1AA-BLK:

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

KP65W1AC-LCS:

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

Approved By _____ Date: _____

7/15/2008 9:57:25 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/16/2007, 7/20/2008, Batch: '8170553', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170553				
AC	Rev1C	HarrisD	6/27/2008 12:11:32	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		HarrisD	InPrep	6/27/2008 12:11:32 PM
SC		HarrisD	Prep1C	6/27/2008 12:25:29 PM
SC		BockJ	InPrep2	6/30/2008 7:22:13 AM
SC		BockJ	Prep2C	7/2/2008 1:27:08 PM
SC		ClarkR	InCnt1	7/2/2008 1:29:58 PM
SC		DAWKINSO	CalcC	7/2/2008 10:09:02 PM
SC		nortonj	Rev1C	7/15/2008 9:57:00 AM
AC		HarrisD		
AC		BockJ		
AC		BockJ		
AC		ClarkR		
AC		DAWKINSO		
AC		nortonj		

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

6/30/2008 11:00:21 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170550

WATER

pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8170550 BNTB, 8170553 AWTB, 8170555 7YSR, 8170556 CYTM, 8170557 KOXW, 8170563 5SS3,

Prep Tech: HarrisD

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 KPE1L-1-AE J8F050181-1-SAMP 06/04/2008 09:00	3881.30g,in	ITA7371 06/16/08								
AmtRec: VIAL20,5XLP,3X4LP #Containers: 10				36.3	100	L2	2328	7/16/08	Alpha: 8.40E-04 uCi/Sa	Beta: -4.47E-04 uCi/Sa
2 KPE4X-1-AA J8F050191-1-SAMP 06/04/2008 10:33	3889.20g,in	ITA7372 06/16/08								
AmtRec: VIAL20,2X4LP #Containers: 3				35.4		L4	2330		Alpha: -1.55E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa
3 KPE6D-1-AA J8F050195-1-SAMP 06/04/2008 12:49	3902.10g,in	ITA7373 06/16/08								
AmtRec: VIAL20,2X4LP #Containers: 3				34.6		L5	2331		Alpha: 1.46E-03 uCi/Sa	Beta: -4.64E-04 uCi/Sa
4 KPE6P-1-AD J8F050195-2-SAMP 06/04/2008 08:25	3902.20g,in	ITA7374 06/16/08								
AmtRec: VIAL20,5XLP,3X4LP #Containers: 9				35.7		L2	0703	7/17/08	Alpha: 2.19E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa
5 KPE7T-1-AD J8F050195-3-SAMP 06/04/2008 11:07	3872.50g,in	ITA7375 06/16/08								
AmtRec: VIAL20,8XLP,3X4LP #Containers: 12				35.0		L4	0704		Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa
6 KPF2X-1-AC J8F050319-1-SAMP 06/05/2008 07:50	3876.80g,in	ITA7376 06/16/08								
AmtRec: 20ML,3X4LP #Containers: 4				28.0		L5	0704		Alpha: 6.01E-04 uCi/Sa	Beta: -6.96E-04 uCi/Sa
7 KPF3F-1-AC J8F050319-2-SAMP 06/05/2008 11:14	3870.20g,in	ITA7377 06/16/08								
AmtRec: 20ML,3X4LP #Containers: 4				33.4		L2	0848	7/19/08	Alpha: 7.29E-05 uCi/Sa	Beta: 1.03E-03 uCi/Sa

6/30/2008 11:00:23 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170550 WATER

pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 KPF4V-1-AA J8F050327-1-SAMP 06/05/2008 10:29	3895.00g,in	ITA7378 06/16/08								
AmtRec: 20ML,2X4LP #Containers: 3				35.4	100	L1	0548	7/17/08	Scr: Alpha: -4.14E-04 uCi/Sa	Beta: 5.97E-04 uCi/Sa
9 KPF46-1-AA J8F050327-2-SAMP 06/05/2008 09:44	3882.00g,in	ITA7379 06/16/08								
AmtRec: 20ML,2X4LP #Containers: 3				35.1		L5	0848		Scr: Alpha: 1.41E-03 uCi/Sa	Beta: 6.62E-05 uCi/Sa
10 KPLVT-1-AA J8F090190-1-SAMP 06/05/2008 10:56	3850.80g,in	ITA7380 06/16/08								
AmtRec: VIAL20,2X4LP #Containers: 3				33.0		L2	1034	7/17/08	Scr: Alpha: -2.43E-04 uCi/Sa	Beta: 9.50E-04 uCi/Sa
11 KPLWM-1-AE J8F090197-1-SAMP 06/09/2008 10:18	3899.50g,in	ITA7381 06/16/08								
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10				32.9		L4	1035		Scr: Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa
12 KPLWR-1-AE J8F090197-2-SAMP 06/09/2008 10:18	3891.50g,in	ITA7382 06/16/08								
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10				35.6		L5	1036		Scr: Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa
13 KPNDQ-1-AA J8F100266-1-SAMP 06/09/2008 10:24	3911.60g,in	ITA7383 06/16/08								
AmtRec: VIAL20,2X4LP #Containers: 3				36.2		L2	1219	7/17/08	Scr: Alpha: 1.63E-03 uCi/Sa	Beta: -1.11E-04 uCi/Sa
14 KPNDQ-1-AC-X J8F100266-1-DUP 06/09/2008 10:24	3877.00g,in	ITA7384 06/16/08								
AmtRec: VIAL20,2X4LP #Containers: 3				33.8		L4	1221		Scr: Alpha: 1.63E-03 uCi/Sa	Beta: -1.11E-04 uCi/Sa

TESTAMERICA

6/30/2008 11:00:25 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

SI CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170550 WATER pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: HarrisD

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 KPND3-1-AA	3843.70g,in	ITA7385	06/16/08							
J8F100266-2-SAMP										
06/09/2008 10:24		AmtRec: VIAL20,2X4LP	#Containers: 3					Scr: Alpha: 1.51E-03 uCi/Sa	Beta: 1.66E-03 uCi/Sa	
16 KPND6-1-AA	3871.20g,in	ITA7386	06/16/08							
J8F100266-3-SAMP										
06/09/2008 12:26		AmtRec: VIAL20,2X4LP	#Containers: 3					Scr: Alpha: -6.86E-04 uCi/Sa	Beta: 4.75E-03 uCi/Sa	1.5E-01L
17 KP65R-1-AA-B	3991.10g,in	ITA7387	06/16/08							
J8F180000-550-BLK										
06/09/2008 10:24		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	
18 KP65R-1-AC-C	3936.60g,in	ISD0856	04/22/08							
J8F180000-550-LCS										
06/09/2008 10:24		AmtRec:	#Containers: 1					Scr: Alpha:	Beta:	

Comments: KPF2X-SAMP "Comments: isv for gamma dup. Please recount on a different detector. DLH 6/27/08"

DLH 6/30/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPE1L1AE-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KP65R1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
KP65R1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

KPE1L1AE-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 18

Prep_SamplePrep v4.8.32

TESTAMERICA

6/30/2008 11:00:25 AM

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025

Pipet #: _____

TB Gamma by LEPD

5I CLIENT: HANFORD

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170550

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:
-------------------------------------	-------------------	-----------------------------	------------------------	--------------	--------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

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

KP65R1AA-BLK:

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

KP65R1AC-LCS:

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

Approved By _____ Date: _____

155

7/18/2008 11:49:05 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/19/2007, 7/23/2008, Batch: '8170550', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170550				
AC	Rev1C	HarrisD	6/30/2008 10:20:48	
SC		wagarr	IsBatched 6/19/2008 8:30:57 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 6/30/2008 10:20:48 AM	RL-PRP-004 REVISION 0
SC		HarrisD	Prep1C 6/30/2008 10:55:31 AM	RL-PRP-004 REVISION 0
SC		BostedD	Prep2C 7/16/2008 9:44:34 PM	RL-GAM-002 REVISION 0
SC		DAWKINSO	InCnt1 7/16/2008 9:50:55 PM	RL-CI-007 REVISION 0
SC		DAWKINSO	CalcC 7/17/2008 9:23:45 PM	RL-CI-007 REVISION 0
SC		nortonj	Rev1C 7/18/2008 11:48:55 AM	RICH-RC-0002 REV 8
AC		HarrisD	6/30/2008 10:55:31	
AC		BostedD	7/16/2008 9:44:34 PM	
AC		DAWKINSO	7/16/2008 9:50:55 PM	
AC		DAWKINSO	7/17/2008 9:23:45 PM	
AC		nortonj	7/18/2008 11:48:55	

AC: Accepting Entry, SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt:6

ICOCFractions v4.8.33

7/9/2008 10:21:51 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Batch: 8170552

WATER

pCi/L

PM, Quote: SS , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: HarrisD

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 KPE3X-1-AE J8F050186-2-SAMP 06/04/2008 12:40	500.10g,in	ITA7389 06/16/08		35.2	100	L4	1908	7/14/0800		
AmtRec: 2X500MLP,2XLP,2X4LP #Containers: 6										
2 KPE3X-1-AJ-X J8F050186-2-DUP 06/04/2008 12:40	500.50g,in	ITA7390 06/16/08		24.8		L5				
AmtRec: 2X500MLP,2XLP,2X4LP #Containers: 6										
3 KP65V-1-AA-B J8F180000-552-BLK 06/04/2008 12:40	500.20g,in	ITA7391 06/16/08		30.4		L2				
AmtRec: #Containers: 1										
4 KP65V-1-AC-C J8F180000-552-LCS 06/04/2008 12:40	500.00g,in	ISB0287 05/06/08		34.3		LH	2054			
AmtRec: #Containers: 1										

Comments:

QA 7/9/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE3X1AE-SAMP Constituent List:

I-129	RDL:5.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
KP65V1AA-BLK:					
I-129	RDL:5.00E+00	pCi/L	LCL:	UCL:	RPD:
KP65V1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

KPE3X1AE-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4
Prep_SamplePrep v4.8.32

TESTAMERICA

7/9/2008 10:21:52 AM

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025

Pipet #: _____

TB Gamma by LEPD

SI CLIENT: HANFORD

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170552

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,HarrisD

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:
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B						
KP65V1AA-BLK:										
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B						
KP65V1AC-LCS:										
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B						

Approved By _____ Date: _____

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7/15/2008 3:35 03 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/16/2007, 7/20/2008, Batch: '8170552', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170552				
AC	Rev1C	HarrisD	7/9/2008 10:10:34	
SC		wagarr	IsBatched 6/19/2008 8:30:57 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 7/9/2008 10:10:34 AM	RL-PRP-004 REVISION 0
SC		HarrisD	Prep1C 7/9/2008 10:21:53 AM	RL-PRP-004 REVISION 0
SC		BostedD	Prep2C 7/14/2008 4:48:53 PM	RL-GAM-002 REVISION 0
SC		AshworthA	Prep2C 7/14/2008 4:49:05 PM	RL-GAM-002 REVISION 0
SC		DAWKINSO	InCnt1 7/14/2008 5:31:49 PM	RL-CI-007 REVISION 0
SC		nortonj	Rev1C 7/15/2008 3:34:59 PM	RICH-RC-0002 REV 8
AC		HarrisD	7/9/2008 10:21:53	
AC		BostedD	7/14/2008 4:48:53 PM	
AC		AshworthA	7/14/2008 4:49:05 PM	
AC		DAWKINSO	7/14/2008 5:31:49 PM	
AC		nortonj	7/15/2008 3:34:59 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.33

TESTAMERICA

6/25/2008 6:59:05 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170556 WATER pCi/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8170550 BNTB, 8170553 AWTB, 8170555 7YSR, 8170556 CYTM, 8170557 KOXW, 8170563 5SS3.

Prep Tech: ,HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE1L-1-AF J8F050181-1-SAMP 06/04/2008 09:00	200.30g,in	SETA0272 06/24/08							
50									
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10							Scr: Alpha: 8.40E-04 uCi/Sa	Beta: -4.47E-04 uCi/Sa	
2 KPE6P-1-AE J8F050195-2-SAMP 06/04/2008 08:25	200.20g,in	SETA0273 06/24/08							
AmtRec: VIAL20,5XLP,3X4LP #Containers: 9							Scr: Alpha: 2.19E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
3 KPE7T-1-AE J8F050195-3-SAMP 06/04/2008 11:07	199.90g,in	SETA0274 06/24/08							
AmtRec: VIAL20,8XLP,3X4LP #Containers: 12							Scr: Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa	
4 KPLWM-1-AF J8F090197-1-SAMP 06/09/2008 10:18	200.00g,in	SETA0275 06/24/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10							Scr: Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
5 KPLWM-1-AH-X J8F090197-1-DUP 06/09/2008 10:18	200.20g,in	SETA0276 06/24/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10							Scr: Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
6 KPLWR-1-AF J8F090197-2-SAMP 06/09/2008 10:18	200.30g,in	SETA0277 06/24/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10							Scr: Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
7 KP651-1-AA-B J8F180000-556-BLK 06/09/2008 10:18	200.10g,in	SETA0278 06/24/08							
AmtRec: #Containers: 1							Scr: Alpha:	Beta:	

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6/25/2008 6:59:06 PM

Sample Preparation/Analysis

Balance Id:

CY Se-79 PrpRC5016, SepRC5043

Pipet #:

TM Selenium-79 by Liquid Scint

SI CLIENT: HANFORD

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170556

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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8 KP651-1-AC-BN

J8F180000-556-IBLK

06/09/2008 10:18

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

AK2.0 OUT 6/25/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPE1L1AF-SAMP Constituent List:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KP6511AA-BLK: Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KP6511AC-IBLK: Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

Se-79 RDL:3.00E+01 pCi/L LCL: UCL: RPD:

KPE1L1AF-SAMP Calc Info:

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

KP6511AA-BLK: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KP6511AC-IBLK: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By

Date:

TAL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 8

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.32

7/28/2008 2:17:56 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/29/2007, 8/2/2008, Batch: '8170556', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170556				
AC	Rev1C	HarrisD	6/25/2008 6:48:32 PM	
SC		wagarr	IsBatched 6/19/2008 8:30:57 AM	ICOC_RADCALC v4.8.32
SC		HarrisD	InPrep 6/25/2008 6:48:32 PM	RL-PRP-004 REVISION 0
SC		HarrisD	Prep1C 6/25/2008 6:56:45 PM	RL-PRP-004 REVISION 0
SC		ManisD	InSep1 7/2/2008 8:04:52 AM	LSC-012 REV 0
SC		BlackCL	InCnt1 7/3/2008 9:41:22 AM	RL-CI-005 REVISION 0
SC		BlackCL	CalcC 7/8/2008 9:44:15 AM	RL-CI-005 REVISION 0
SC		nortonj	Rev1C 7/28/2008 2:17:48 PM	RICH-RC-0002 REV 8
AC		HarrisD	6/25/2008 6:56:45 PM	
AC		ManisD	7/2/2008 8:04:52 AM	
AC		BlackCL	7/3/2008 9:41:22 AM	
AC		BlackCL	7/8/2008 9:44:15 AM	
AC		nortonj	7/28/2008 2:17:48 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.



RE-ANALYSIS REQUEST

DUE DATE 7-28

CUSTOMER PGW

ANALYSIS Se 79

MATRIX H₂O

LOT NUMBER J8F050181, 050195, 090197

SAMPLE DELIVERY GROUP WO 5424

OLD BATCH NUMBER 8170556

NEW BATCH NUMBER 8197274

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) KPE71AE		LOW TRACER YIELD
2) KPLWM		
3) KPLWM DUP		
4) BLK		
5) LCS		
6) N BLK		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		
LAB QC ID		Assigned with new batch.

RC-048, 12/07, Rev 8

7/15/2008 1:19:10 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabCY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8197274 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech: HarrisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE7T-2-AE J8F050195-3-SAMP 06/04/2008 11:07	200.40g,in	SETA0284 07/14/08							
					50				
AmtRec: VIAL20,6XLP,3X4LP #Containers: 12						Scr:	Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa	
2 KPLWM-2-AF J8F090197-1-SAMP 06/09/2008 10:18	200.10g,in	SETA0285 07/14/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10						Scr:	Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
3 KPLWM-2-AH-X J8F090197-1-DUP 06/09/2008 10:18	200.00g,in	SETA0286 07/14/08							
AmtRec: VIAL20,6XLP,3X4LP #Containers: 10						Scr:	Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
4 KRH8V-1-AA-B J8G150000-274-BLK 06/04/2008 11:07	200.20g,in	SETA0287 07/14/08							
AmtRec: #Containers: 1						Scr:	Alpha:	Beta:	
5 KRH8V-1-AC-C J8G150000-274-LCS 06/04/2008 11:07									
AmtRec: #Containers: 1						Scr:	Alpha:	Beta:	
6 KRH8V-1-AD-BN J8G150000-274-IBLK 06/04/2008 11:07									
AmtRec: #Containers: 1						Scr:	Alpha:	Beta:	

7/15/2008 1:19:15 PM

Sample Preparation/Analysis

Balance Id:

CY Se-79 PrpRC5016, SepRC5043

Pipet #: _____

TM Selenium-79 by Liquid Scint

Sep1 DT/Tm Tech:

AnalyDueDate: 07/28/2008

SI CLIENT: HANFORD

Sep2 DT/Tm Tech:

Batch: 8197274

pCi/L

Prep Tech:

SEQ Batch, Test: None



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

PH22.0 DUT 7/15/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE7T2AE-SAMP Constituent List:

KRH8V1AA-BLK:

KRH8V1AC-LCS:

KRH8V1AD-IBLK:

KPE7T2AE-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRH8V1AA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRH8V1AC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
KRH8V1AD-IBLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____

Date: _____

TAL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.32

7/28/2008 2:12:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/29/2007, 8/2/2008, Batch: '8197274', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8197274				
AC	Rev1C	HarrisD	7/15/2008 1:15:36 PM	
SC		nortonj	IsBatched	7/15/2008 10:46:39 AM
SC		HarrisD	InPrep	7/15/2008 1:15:36 PM
SC		HarrisD	Prep1C	7/15/2008 1:19:16 PM
SC		BlackCL	InCnt1	7/25/2008 7:32:50 AM
SC		ClarkR	CalcC	7/28/2008 1:05:58 PM
SC		nortonj	Rev1C	7/28/2008 2:12:00 PM
AC		HarrisD	7/15/2008 1:19:16 PM	
AC		BlackCL	7/25/2008 7:32:50	
AC		ClarkR	7/28/2008 1:05:58 PM	
AC		nortonj	7/28/2008 2:12:00 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.8.33

6/24/2008 4:05:46 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Batch: 8170559 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:
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1 KPE3X-1-AG

125.30g,in 125.30g

600

J8F050186-2-SAMP



06/04/2008 12:40

AmtRec: 2X500MLP,2XLP,2X4LP #Containers: 6

Scr: Alpha: -2.14E-03 uCi/Sa Beta: 2.40E-03 uCi/Sa

2 KPE3X-1-AM-S

125.10g,in 125.10g

TCSG2080

J8F050186-2-MS



06/04/2008 12:40

AmtRec: 2X500MLP,2XLP,2X4LP #Containers: 6

06/24/08,pd
01/10/06,r

Scr: Alpha: -2.14E-03 uCi/Sa Beta: 2.40E-03 uCi/Sa

3 KPE3X-1-AN-X

125.00g,in 125.00g

J8F050186-2-DUP



06/04/2008 12:40

AmtRec: 2X500MLP,2XLP,2X4LP #Containers: 6

Scr: Alpha: -2.14E-03 uCi/Sa Beta: 2.40E-03 uCi/Sa

4 KP654-1-AA-B

125.30g,in 125.30g

J8F180000-559-BLK



06/04/2008 12:40

AmtRec: #Containers: 1

Scr: Alpha: Beta:

5 KP654-1-AC-C

125.30g,in 125.30g

TCSE2228

J8F180000-559-LCS



06/04/2008 12:40

AmtRec: #Containers: 1

04/11/08,pd
01/10/06,r

Scr: Alpha: Beta:

6 KP654-1-AD-BN

J8F180000-559-IBLK



06/04/2008 12:40

AmtRec: #Containers: 1

Scr: Alpha: Beta:

6/24/2008 4:05:48 PM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170559
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



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

pH 2.0 out 6/24/08

All Clients for Batch:

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

KPE3X1AG-SAMP Constituent List:

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

KPE3X1AM-MS Constituent List:

KP6541AA-BLK:

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

KP6541AC-LCS:

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

KP6541AD-IBLK:

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

KPE3X1AG-SAMP Calc Info:

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

KPE3X1AM-MS Calc Info:

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

KP6541AA-BLK:

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

KP6541AC-LCS:

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

KP6541AD-IBLK:

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

Approved By

Date:

6/26/2008 4:01:38 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/27/2007, 7/1/2008, Batch: '8170559', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170559				
AC	Rev1C	HarrisD	6/24/2008 4:02:49 PM	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM
SC		HarrisD	InPrep	6/24/2008 4:02:49 PM
SC		HarrisD	Prep1C	6/24/2008 4:05:47 PM
SC		Barcotl	InPrep	6/25/2008 10:26:58 AM
SC		Barcotl	Prep1C	6/25/2008 10:27:34 AM
SC		BlackCL	InCnt1	6/25/2008 10:29:14 AM
SC		BlackCL	CalcC	6/26/2008 7:17:22 AM
SC		antonsonl	Rev1C	6/26/2008 4:01:15 PM
AC		HarrisD	6/24/2008 4:05:47 PM	
AC		Barcotl	6/25/2008 10:26:58	
AC		Barcotl	6/25/2008 10:27:34	
AC		BlackCL	6/25/2008 10:29:14	
AC		BlackCL	6/26/2008 7:17:22	
AC		antonsonl	6/26/2008 4:01:15 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.33

TESTAMERICA

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TESTAMERICA

6/19/2008 8:25:30 AM

Sample Preparation/Analysis

Balance Id:

12445

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabAR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
51 CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

Batch: 8170562 WATER

pCi/L

PM, Quote: SS, 57671

Sep1 DT/Tm Tech:

6-10 08 PM

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE3X-1-AA								
J8F050186-2-SAMP								
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP		#Containers: 6		Scr: Alpha: -2.14E-03 uCi/Sa		Beta: 2.40E-03 uCi/Sa
2 KPE3X-1-AR-X								
J8F050186-2-DUP								
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP		#Containers: 6		Scr: Alpha: -2.14E-03 uCi/Sa		Beta: 2.40E-03 uCi/Sa
3 KP657-1-AA-B								
J8F180000-562-BLK								
06/04/2008 12:40		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:
4 KP657-1-AC-C								
J8F180000-562-LCS								
06/04/2008 12:40		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:
5 KP657-1-AD-BX								
J8F180000-562-MBLK								
06/04/2008 12:40		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:
6 KP657-1-AE-CM								
J8F180000-562-MLCS								
06/04/2008 12:40		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:
7 KP657-1-AF-BN								
J8F180000-562-IBLK								
06/04/2008 12:40		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:

170

6/19/2008 8:25:30 AM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170562
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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8 KP657-1-AG-BN

J8F180000-562-IBLK



06/04/2008 12:40

Amt/Rec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS, 57671

KPE3X1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
KP6571AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
KP6571AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
KP6571AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
KP6571AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
KP6571AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
KP6571AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
KPE3X1AA-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
KP6571AA-BLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
KP6571AC-LCS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
KP6571AD-MBLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
KP6571AE-MLCS:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
KP6571AF-IBLK:					
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	

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

ISV - Insufficient Volume for Analysis

WO Cnt: 8

ICOC v4.8.32

TESTAMERICA

6/19/2008 8:25:30 AM

Sample Preparation/Analysis

Balance Id:

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

Pipet #:

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8170562
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Prep Tech:



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

KP6571AG-IBLK:

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

Approved By _____ Date: _____

172

6/30/2008 8:58:32 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/1/2007, 7/5/2008, Batch: '8170562', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170562				
AC	Rev1C	McDowellD	6/20/2008 8:47:42	
SC		wagarr	IsBatched 6/19/2008 8:30:57 AM	ICOC_RADCALC v4.8.32
SC		McDowellD	Sep1C 6/20/2008 8:47:42 AM	RL-LSC-005 REVISION 0
SC		BlackCL	CalcC 6/23/2008 6:10:32 AM	RL-CI-005 REVISION 0
SC		antonsonl	Rev1C 6/30/2008 8:58:07 AM	RICH-RC-0002 REV 8
AC		BlackCL	6/23/2008 6:10:32	
AC		antonsonl	6/30/2008 8:58:07	

AC: Accepting Entry, SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 3

ICOCFractions v4.8.33

TESTAMERICA

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TESTAMERICA

6/19/2008 8:25:30 AM

Sample Preparation/Analysis

Balance Id:

N/A

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

W05424

Sep1 DT/Tm Tech:

6-23-08 PM

Batch: 8170563 WATER

pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

Prep Tech:

SEQ Batch, Test: None



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE1L-1-AC								
J8F050181-1-SAMP								
06/04/2008 09:00		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 8.40E-04 uCi/Sa	Beta: -4.47E-04 uCi/Sa	
2 KPE6P-1-AA								
J8F050195-2-SAMP								
06/04/2008 08:25		AmtRec: VIAL20,5XLP,3X4LP	#Containers: 9			Scr: Alpha: 2.19E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
3 KPE6P-1-AG-X								
J8F050195-2-DUP								
06/04/2008 08:25		AmtRec: VIAL20,5XLP,3X4LP	#Containers: 9			Scr: Alpha: 2.19E-03 uCi/Sa	Beta: -2.49E-03 uCi/Sa	
4 KPE7T-1-AA								
J8F050195-3-SAMP								
06/04/2008 11:07		AmtRec: VIAL20,8XLP,3X4LP	#Containers: 12			Scr: Alpha: -7.63E-04 uCi/Sa	Beta: 1.71E-03 uCi/Sa	
5 KPLWM-1-AC								
J8F090197-1-SAMP								
06/09/2008 10:18		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 3.31E-03 uCi/Sa	Beta: 7.47E-04 uCi/Sa	
6 KPLWR-1-AC								
J8F090197-2-SAMP								
06/09/2008 10:18		AmtRec: VIAL20,6XLP,3X4LP	#Containers: 10			Scr: Alpha: 8.26E-04 uCi/Sa	Beta: 3.47E-04 uCi/Sa	
7 KP658-1-AA-B								
J8F180000-563-BLK								
06/04/2008 08:25		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

174

6/19/2008 8:25:31 AM

Sample Preparation/Analysis

Balance Id: *N/A*5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech: *6-23-08*Batch: 8170563
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech: _____

Prep Tech: _____



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

8 KP658-1-AC-C

J8F180000-563-LCS



06/04/2008 08:25

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

9 KP658-1-AD-BN

J8F180000-563-IBLK



06/04/2008 08:25

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE1L1AC-SAMP Constituent List:

C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20

KP6581AA-BLK:

C-14 RDL:2.00E+02 pCi/L LCL: UCL: RPD:

KP6581AC-LCS:

C-14 RDL:200 pCi/L LCL:70 UCL:130 RPD:20

KP6581AD-IBLK:

C-14 RDL:2.00E+02 pCi/L LCL: UCL: RPD:

KPE1L1AC-SAMP Calc Info:

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

KP6581AA-BLK:

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

KP6581AC-LCS:

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

KP6581AD-IBLK:

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

Approved By _____

Date: _____

6/25/2008 11:03 49 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/26/2007, 6/30/2008, Batch: '8170563', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
8170563				
AC	Rev1C	McDowellID	6/23/2008 8:49:54	
SC		wagarr	IsBatched	6/19/2008 8:30:57 AM ICOC_RADCALC v4.8.32
SC		McDowellID	InSep1	6/23/2008 8:49:54 AM RL-LSC-008 REVISION 0
SC		McDowellID	Sep1C	6/23/2008 2:14:06 PM RL-LSC-008 REVISION 0
SC		ClarkR	InCnt1	6/23/2008 2:28:43 PM RL-CI-005 REVISION 0
SC		ClarkR	CalcC	6/24/2008 8:52:56 AM RL-CI-005 REVISION 0
SC		antonsoni	Rev1C	6/25/2008 11:03:40 AM RICH-RC-0002 REV 8
AC		McDowellID	6/23/2008 2:14:06 PM	
AC		ClarkR	6/23/2008 2:28:43 PM	
AC		ClarkR	6/24/2008 8:52:56	
AC		antonsoni	6/25/2008 11:03:40	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.8.33

TESTAMERICA

6/27/2008 11:00:03 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015

Pipet #: _____

AnalyDueDate: 07/28/2008

SS Total Uranium by KPA

Sep1 DT/Tm Tech:

SI CLIENT: HANFORD

Batch: 8170558 WATER ug/L

PM, Quote: SS, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8170552 BNTB, 8170553 AWTA, 8170554 CLTL, 8170558 DHSS, 8170559 FPS5, 8170560 AZS7, 8170561
BCS8, 8170562 ARS6,

Prep Tech: ,HarrisD|Boys

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPE3X-1-AH	25.10g,in							
J8F050186-2-SAMP								
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6			Scr: Alpha: -2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
2 KPE3X-1-AK-S	25.10g,in		UNSF4249					
J8F050186-2-MS			05/22/08,pd					
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6			Scr: Alpha: -2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
3 KPE3X-1-AL-X	25.10g,in							
J8F050186-2-DUP								
06/04/2008 12:40		AmtRec: 2X500MLP,2XLP,2X4LP	#Containers: 6			Scr: Alpha: -2.14E-03 uCi/Sa	Beta: 2.40E-03 uCi/Sa	
4 KP653-1-AA-B	25.40g,in							
J8F180000-558-BLK								
06/04/2008 12:40		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
5 KP653-1-AC-C	24.90g,in		UNSF4250					
J8F180000-558-LCS			05/22/08,pd					
06/04/2008 12:40		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	
6 KP653-1-AD-C	25.20g,in		UNSC2528					
J8F180000-558-LCS			05/22/08,pd					
06/04/2008 12:40		AmtRec:	#Containers: 1			Scr: Alpha:	Beta:	

TESTAMERICA

6/27/2008 11:00:04 AM

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015

Pipet #:

SS Total Uranium by KPA

Sep1 DT/Tm Tech:

AnalyDueDate: 07/28/2008

5I CLIENT: HANFORD

Sep2 DT/Tm Tech:

Batch: 8170558

ug/L

Prep Tech: ,HarrisD

SEQ Batch, Test: None



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

PH220 OUT to 6/27/08
6/27/08

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPE3X1AH-SAMP Constituent List:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

KPE3X1AK-MS Constituent List:

KP6531AA-BLK:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

KP6531AC-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

KP6531AD-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

KPE3X1AH-SAMP Calc Info:

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

KPE3X1AK-MS Calc Info:

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

KP6531AA-BLK:

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

KP6531AC-LCS:

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

KP6531AD-LCS:

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

Approved By

Date:

TAL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.32

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7/21/2008 2:22:55 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/22/2007, 7/26/2008, Batch: '8170558', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
8170558					
AC		Rev1C	HarrisD	6/27/2008 10:54:13	
SC			wagarr	IsBatched 6/19/2008 8:30:57 AM	ICOC_RADCALC v4.8.32
SC			HarrisD	InPrep 6/27/2008 10:54:13 AM	RICH-RC-5014 REVISION 0
SC			HarrisD	Prep1C 6/27/2008 10:57:24 AM	RL-PRP-004 REVISION 0
SC			BockJ	InPrep2 7/15/2008 12:45:20 PM	RL-KPA-001 REVISION 0
SC			BockJ	Prep2C 7/18/2008 8:35:14 AM	RL-KPA-001 REVISION 0
SC			NelsonT	Cnt1C 7/21/2008 10:11:21 AM	RL-KPA-003 REVISION 0
SC			nortonj	Rev1C 7/21/2008 2:22:06 PM	RICH-RC-0002 REV 8
AC			HarrisD	6/27/2008 10:57:24	
AC			BockJ	7/15/2008 12:45:20	
AC			BockJ	7/18/2008 8:35:14	
AC			NelsonT	7/21/2008 10:11:21	
AC			nortonj	7/21/2008 2:22:06 PM	

AC: Accepting Entry; SC: Status Change

TAL Richland

Richland Wa.

TESTAMERICA

7/8/2008 3:07:47 PM

Sample Preparation/Analysis

Balance Id:

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 07/28/2008

WO 5424

Sep1 DT/Tm Tech:

Batch: 8170564

WATER

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8170564 88IZ,

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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1 KPF3R-1-AA

J8F050322-1-SAMP



06/05/2008 12:10

AmtRec: 20ML,500MLP

#Containers: 2

Scr:

Alpha: -8.40E-05 uCi/Sa

Beta: 4.83E-05 uCi/Sa

2 KPF3R-1-AC-X

J8F050322-1-DUP



06/05/2008 12:10

AmtRec: 20ML,500MLP

#Containers: 2

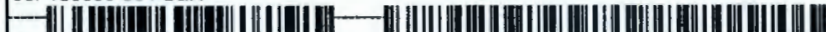
Scr:

Alpha: -8.40E-05 uCi/Sa

Beta: 4.83E-05 uCi/Sa

3 KP659-1-AA-B

J8F180000-564-BLK



06/11/2008 11:58

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

4 KP659-1-AC-C

J8F180000-564-LCS



06/11/2008 11:58

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPF3R1AA-SAMP Constituent List:

KP6591AA-BLK:

KP6591AC-LCS:

KPF3R1AA-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4

ICOC v4.8.32

ENTERED SCS 7/16/08

TESTAMERICA

7/8/2008 3:07:49 PM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Pipet #:

IZ COLIFORM BY METHOD 9223

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

AnalyDueDate: 07/28/2008

Sep2 DT/Tm Tech:

Batch: 8170564

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6591AA-BLK:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KP6591AC-LCS:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____

Date: _____

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TESTAMERICA

7/8/2008 3:07:49 PM

Sample Preparation/Analysis

Entered SKS 7/16/08

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223

Balance Id:

AnalyDueDate: 07/28/2008

5I CLIENT: HANFORD

Pipet #:

Batch: 8190389 WATER

PM, Quote: SS , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Toch:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPNCT-1-AA								
J8F100263-1-SAMP								
06/10/2008 10:15		AmtRec: VIAL20,500MLP		#Containers: 2		Scr: Alpha: 3.64E-05 uCi/Sa	Beta: 1.86E-04 uCi/Sa	
2 KPNCT-1-AC-X								
J8F100263-1-DUP								
06/10/2008 10:15		AmtRec: VIAL20,500MLP		#Containers: 2		Scr: Alpha: 3.64E-05 uCi/Sa	Beta: 1.86E-04 uCi/Sa	
3 KQ7F9-1-AA-B								
J8G080000-389-BLK								
06/10/2008 10:15		AmtRec:		#Containers: 1		Scr: Alpha:	Beta:	
4 KQ7F9-1-AC-C								
J8G080000-389-LCS								
06/10/2008 10:15		AmtRec:		#Containers: 1		Scr: Alpha:	Beta:	

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPNCT1AA-SAMP Constituent List:

KQ7F91AA-BLK:

KQ7F91AC-LCS:

KPNCT1AA-SAMP Calc Info:

TAL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 4

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

ICOC v4.8.32

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TESTAMERICA

7/8/2008 3:07:50 PM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION

Pipet #: _____

IZ COLIFORM BY METHOD 9223

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

AnalyDueDate: 07/28/2008

Sep2 DT/Tm Tech:

Batch: 8190389

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
KQ7F91AA-BLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
KQ7F91AC-LCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				

Approved By _____ Date: _____

183

TESTAMERICA

7/8/2008 3:07:50 PM

Sample Preparation/Analysis

ENTERED SRS 7/16/08

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223

Balance Id:

AnalytDueDate: 07/28/2008 W05124

5I CLIENT: HANFORD

Pipet #:

Batch: 8190391 WATER

PM, Quote: SS , 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KPQWR-1-AA								
J8F110338-1-SAMP								
06/11/2008 11:58		AmtRec: VIAL20,500MLP		#Containers: 2		Scr: Alpha: 5.94E-05 uCi/Sa		Beta: 6.14E-05 uCi/Sa
2 KPQWR-1-AC-X								
J8F110338-1-DUP								
06/11/2008 11:58		AmtRec: VIAL20,500MLP		#Containers: 2		Scr: Alpha: 5.94E-05 uCi/Sa		Beta: 6.14E-05 uCi/Sa
3 KQ7GE-1-AA-B								
J8G080000-391-BLK								
06/11/2008 11:58		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:
4 KQ7GE-1-AC-C								
J8G080000-391-LCS								
06/11/2008 11:58		AmtRec:		#Containers: 1		Scr: Alpha:		Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SS , 57671

KPQWR1AA-SAMP Constituent List:

KQ7GE1AA-BLK:

KQ7GE1AC-LCS:

KPQWR1AA-SAMP Calc Info:

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

ISV - Insufficient Volume for Analysis

WO Cnt: 4

ICOC v4.8.32

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TESTAMERICA

7/8/2008 3:07:50 PM

Sample Preparation/Analysis

Balance Id:

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/28/2008

Sep1 DT/Tm Tech:

Batch: 8190391

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:



Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KQ7GE1AA-BLK:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KQ7GE1AC-LCS:
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

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