

Analytical Data Package Prepared For

CH2M Hill Plateau Remediation

Radiochemical Analysis By

TestAmerica TARL

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

Data Package Contains _____ Pages

Report Nbr: 48759

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06210	S11-007	B2FY6	J1H050496-1	MLFN81AA	9MLFN810	1230078
		B2F3W6	J1H050496-2	MLFN91AA	9MLFN910	1230078
		B2FL91	J1H050498-1	MLFP01AA	9MLFP010	1230078
	W11-008	B2FL91	J1H050498-1	MLFP01AC	9MLFP010	1230080
		B2FL92	J1H050498-2	MLFP11AA	9MLFP110	1230078
		B2FL92	J1H050498-2	MLFP11AC	9MLFP110	1230080
S11-007	S11-007	B2FSB5	J1H050499-1	MLFP31AA	9MLFP310	1214238
		B2FSB6	J1H050499-2	MLFP41AA	9MLFP410	1230085
		B2FSB7	J1H050499-3	MLFP51AA	9MLFP510	1230085
	W11-008	B2FSB8	J1H050499-4	MLFP61AA	9MLFP610	1230085
		B2FL56	J1H090497-1	MLHLL1AA	9MLHLL10	1230080
		B2FL00	J1H090497-2	MLHMN1A	9MLHMN10	1230078
W11-008	W11-008	B2FL00	J1H090497-2	MLHMN1A	9MLHMN10	1230080
		B2FL16	J1H100413-1	MLH551AA	9MLH5510	1230080
		B2FL61	J1H100449-1	MLJM01AA	9MLJM010	1230078



Comments:

Report Nbr: 48759

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06210	W11-008	B2FL61	J1H100449-1	MLJM01AC	9MLJM010	1230080
		B2FL51	J1H100449-2	MLJM22AA	9MLJM220	1277187
I11-037	I11-039	B2FLD5	J1H100449-3	MLJM51AA	9MLJM510	1230080
		B2FK72	J1H110473-1	MLKL41AA	9MLKL410	1223177
I11-038	I11-038	B2FKN5	J1H110499-1	MLKR11AA	9MLKR110	1230082
		B2FKN5	J1H110499-1	MLKR11AC	9MLKR110	1230084
		B2FKN5	J1H110499-1	MLKR11AD	9MLKR110	1230078
		B2FKN5	J1H110499-1	MLKR11AE	9MLKR110	1230083
		B2FKN6	J1H110499-2	MLKTP1AA	9MLKTP10	1230082
		B2FKN6	J1H110499-2	MLKTP1AC	9MLKTP10	1230084
		B2FKN6	J1H110499-2	MLKTP1AD	9MLKTP10	1230078
		B2FKN6	J1H110499-2	MLKTP1AE	9MLKTP10	1230083
		B2FKL0	J1H120507-1	MLL7P1AA	9MLL7P10	1230078
		B2FKL1	J1H120507-2	MLL7Q1AA	9MLL7Q10	1230078
		B2FKC2	J1H150413-1	MLM7V1AA	9MLM7V10	1230078
		B2FKC3	J1H150413-2	MLM7W1A	9MLM7W10	1230078
		B2FKH2	J1H150413-3	MLM8H1AA	9MLM8H10	1230078
		B2FKJ0	J1H150413-4	MLM8J1AA	9MLM8J10	1230084
B2FKJ0	J1H150413-4	MLM8J1AC	9MLM8J10	1230078		
B2FKJ1	J1H150413-5	MLM8K1AA	9MLM8K10	1230084		
B2FKJ1	J1H150413-5	MLM8K1AC	9MLM8K10	1230078		

Comments:

OCTOBER 13, 2011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop - R3-60
Richland, WA 99352

TestAmerica Laboratories, Inc.

October 12, 2011

Attention: Scot Fitzgerald

SAF Number	:	S11-007, W11-008, I11-037, I11-038, I11-039
Date SDG Closed	:	August 11, 2011
Number of Samples	:	Twenty-four (24)
Sample Type	:	Water
SDG Number	:	W06210
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between August 3, 2011 and August 11, 2011 twenty-four water samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific IDs:

<u>CH2M ID#</u>	<u>TARL ID#</u>	<u>DATE OF RECEIPT</u>	<u>MATRIX</u>
B2F3Y6	MLFN8	8/3/11	WATER
B2F3W6	MLFN9	8/3/11	WATER
B2FL91	MLFP0	8/3/11	WATER
B2FL92	MLFP1	8/3/11	WATER
B2F5B5	MLFP3	8/4/11	WATER
B2F5B6	MLFP4	8/4/11	WATER
B2F5B7	MLFP5	8/4/11	WATER
B2F5B8	MLFP6	8/4/11	WATER
B2FL56	MLHLL	8/9/11	WATER
B2FL00	MLHMN	8/9/11	WATER
B2FL16	MLH55	8/8/11	WATER
B2FL61	MLJM0	8/10/11	WATER
B2FL51	MLJM2	8/10/11	WATER
B2FLD5	MLJM5	8/10/11	WATER

2800 George Washington Way Richland, WA 99354 tel 509.375.3131 fax 509.375.5590 www.testamericainc.com

CH2M Hill Plateau Remediation Company
 October 12, 2011

B2FK72	MLKL4	8/11/11	WATER
B2FKN5	MLKR1	8/10/11	WATER
B2FKN6	MLKTP	8/10/11	WATER
B2FKL0	MLL7P	8/11/11	WATER
B2FKL1	MLL7Q	8/11/11	WATER
B2FKC2	MLM7V	8/11/11	WATER
B2FKC3	MLM7W	8/11/11	WATER
B2FKH2	MLM8H	8/11/11	WATER
B2FKJ0	MLM8J	8/11/11	WATER
B2FKJ1	MLM8K	8/11/11	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

Neptunium-237 by method RL-ALP-013

Gamma Spectroscopy

Iodine-129 (LL) by method RL-GAM-002

Liquid Scintillation Counting

Selenium-79 by method RL-LSC-012

Technetium-99 by method RL-LSC-013

Mid Level Tritium by method RL-LSC-005

Carbon-14 by method RL-LSC-008

Laser Induced Phosphorimetry

Total Uranium by method RL-KPA-003

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

CH2M Hill Plateau Remediation Company
October 12, 2011

V. **Comments**

Alpha Spectroscopy

Neptunium-237 by method RL-ALP-013:

The LCS, batch blank, sample and sample duplicate (B2FKN5) results are within contractual requirements.

Gamma Spectroscopy

Iodine-129 (LL) by method RL-GAM-002:

Sample B2FL61 did not meet the CRDL due to a reduced aliquot size. The aliquot size was reduced because of the activity detected during the screening process. Except as noted, the LCS, batch blank, samples and sample duplicate (B2F3Y6) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by method RL-LSC-013:

The matrix spike recovery was high in the original batch. TARL was instructed to reanalyze the sample and matrix spike (refer to SIR NUM SDR11-417). Sample B2FL51 and matrix spike sample B2FL51 were reanalyzed with reduced aliquots. These samples did not meet the CRDL due to the reduced aliquots. The sample results exceed the MDA. Except as noted, the LCS, batch blank, samples, sample duplicate (B2FL61), and sample matrix spike (B2FL51) results are within contractual requirements.

Selenium-79 by method RL-LSC-012:

There is no LCS for selenium-79. Except as noted, batch blank, samples and sample duplicate (B2FKN6) results are within contractual requirements.

Mid Level Tritium by method RL-LSC-005:

TestAmerica Richland proposed to report W06210 without the mid level tritium results. The client accepted the proposed resolution (SIR NUM: SDR11-399) on September 6, 2011. The mid level tritium results completed before the report for W06210 was sent. Therefore the final report for W06210 will include the mid level tritium results.

To save counting time on the detector SDGs W06203I, W06209I and W06210 were analyzed together. On the 6/29/11 bi-weekly phone the client gave TARL permission to batch SDGs together. An SIR regarding this issue is not included in this report per client instructions (refer to the 7/21/11 email included in this report).

Except as noted, the LCS, batch blank, sample and sample duplicate (B2BTC5) results are within contractual requirements.

Carbon-14 by method RL-LSC-008:

The LCS, batch blank, samples and sample duplicate (B2FKJ0) results are within contractual requirements.

Total Uranium

Total Uranium by method RL-KPA-003:

The LCS, batch blank, samples, sample duplicate (B2F5B6), and sample matrix spike (B2F5B7) results are within contractual requirements.

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CH2M Hill Plateau Remediation Company
October 12, 2011

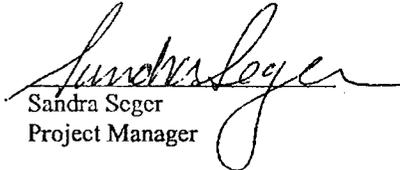
Chemical Analysis

Hexavalent Chromium by EPA method 7196A

The LCS, batch blank, samples, sample duplicate (B2FK72), sample matrix spike (B2FK72), and matrix spike duplicate (B2FK72) 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 Segger
Project Manager

OCTOBER 13, 2011

SAMPLE ISSUE RESOLUTION

SIR NUM SDR11-399
REV NUM 0
DATE INITIATED 9/6/2011

SAMPLE EVENT INFORMATION

SAF NUM(S) S11-007, S11-003
OPERABLE UNIT(S) NONE
PROJECT(S) SURV11
SAMPLE EVENT TITLE(S) SURV11
LABORATORY TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES 5
SAMPLE NUMBERS B2BT66, B2BTC5, B2F5B3, B2F5B4, B2F5B5
SAMPLE MATRIX WATER
COLLECTION DATE 7/26/2011 - 8/4/2011
SDG NUM W06203, W06210, W06209

ISSUE BACKGROUND

CLASS Laboratory Issue
TYPE Other Laboratory Issue (Specify)
DESCRIPTION The mid-level tritium samples will not be counted by the SDGs' due dates. This is due to the number of mid-level tritium samples received and the 1500-minute count time per sample.

DISPOSITION

DESCRIPTION Report SDGs without the mid-level tritium results. The mid-level tritium results will be reported in supplemental data packages W06203I, W06209I, and W06210I. The samples may be batched with samples analyzed for mid-level tritium in other SDGs; a note in the case narrative will reflect this.

JUSTIFICATION Accept proposed disposition: J.G. Douglas

Submitted by: Sandra Seger Date: 9/6/2011
Accepted by: J.G. Douglas Date: 9/6/2011

OCTOBER 13, 2011

SIRs W06209 (Cr6 Received Out of Temp) & W06203,09,10 (Mid Level Tritium)

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Seger, Sandra

From: Douglas, James G (Jim) [James_G_Jim_Douglas@RL.gov]
Sent: Wednesday, September 07, 2011 11:20 AM
To: Seger, Sandra
Cc: ^CPP Sample Management; ^CPP SDM Login; Bauer, Roy G; Elliott, Wanda S; Evans, Robert T; Fitzgerald, Scot L; Huggins, Stewart L; Luke, Scott N; Neely, Michael; Radloff, Anna W; Todak, David; Waters-husted, Karen S
Subject: RE: SIR SDR11-399 SAFs S11-007, S11-003 - Final Copies (W06203,09,10 Mid Level Tritium)
Attachments: SDR11-399 TARL.rtf; SDR11-399 TARL.pdf

Sandra: Please use attached final copies. Thanks! Jim Douglas 373-7154

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Tuesday, September 06, 2011 9:52 AM
To: ^CPP Sample Management
Cc: Champoux, Sara J; Douglas, James G (Jim)
Subject: SIRs W06209 (Cr6 Received Out of Temp) & W06203,09,10 (Mid Level Tritium)

<<W06209_SIR.doc>> <<W06203_W06209_W06210_Mid Level H3_SIR.doc>>

9/7/2011

OCTOBER 13, 2011

Need SIRs for mid level Tritium Batches with Multiple SDGs

Page 1 of 1

Seger, Sandra

From: Champoux, Sara J [Sara_J_Changpoux@RL.gov]
Sent: Thursday, July 21, 2011 2:59 PM
To: Seger, Sandra; ^CPP Sample Management
Subject: RE: Need SIRs for mid level Tritium Batches with Multiple SDGs

Please send as few SIRs as possible. It is much easier to process one as opposed to five.

Sara J. Champoux
Chemist
Soil and Groundwater Remediation Project
Analytical Support
(509) 373-5290

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Thursday, July 21, 2011 2:02 PM
To: ^CPP Sample Management
Cc: Champoux, Sara J
Subject: Need SIRs for mid level Tritium Batches with Multiple SDGs

Sara,

TARL was given permission (during the 6/29/11 bi-weekly phone call)to batch SDGs together. This only applies to mid level tritium samples. We did not discuss SIRs.

Batching SDGs together will be discussed in the case narratives . Do SIRs need to be included? If yes do you want me to send one SIR that covers all the SDGs or a SIR for each batch? SDGs W06167, W06174, W06164 and W06161 are ready to be reported.

Thanks,
Sandra Seger
Project Manager

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Sara Champoux called on 7/21/11 at 3:22 P.M.
Phone call was in regards to batching SDGs together. Her instructions were as follows:
Do not send SIRs for batching SDGs together. Discuss batching in case narratives. State that SDGs were batched together to save counting time and that TARL was given permission to do this on this on the 6/29/11 bi-weekly phone call.
SKS 7/21/11

7/21/2011

SAMPLE ISSUE RESOLUTION

SIR NUM SDR11-417
REV NUM 0
DATE INITIATED 9/22/2011

SAMPLE EVENT INFORMATION

SAF NUM(S) W11-008
OPERABLE UNIT(S) NONE
PROJECT(S) RCRA11
SAMPLE EVENT TITLE(S) RCRA11
LABORATORY TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES 8
SAMPLE NUMBERS B2FL00, B2FL16, B2FL51, B2FL56, B2FL61, B2FL91, B2FL92, B2FLD5
SAMPLE MATRIX WATER
COLLECTION DATE 8/2/2011 - 8/9/2011
SDG NUM W06210

ISSUE BACKGROUND

CLASS Laboratory Issue
TYPE Quality Control Failure

DESCRIPTION The Tc99 sample matrix spike (B2FL51 MS) has a high recovery of 209%. TARL suspects the recovery is out of limits due to the high activity (12,700 pCi/L) present in sample B2FL51. The batch blank, LCS and duplicate are acceptable. All the samples in the batch except B2FL91 have activities greater than the CRDL of 15 pCi/L. The sample activities (pCi/L) are:

- B2FL91 - 7.08
- B2FL92 - 4650
- B2FL56 - 21800
- B2FL00 - 213
- B2FL16 - 6510
- B2FL61 - 13900
- B2FL51 - 12700
- B2FLD5 - 32000

DISPOSITION

DESCRIPTION Proposed Disposition:
 (1) Report results and note matrix spike failure in the case narrative.
 or
 (2) Reanalyze the sample (B2FL51) and matrix spike (B2FL51 MS).

JUSTIFICATION Accepted Disposition: Accept proposed disposition #2: reanalyze sample and matrix spike; note re-run in the case narrative.

Submitted by: Sandra Seger / TARL Date: 9/22/2011
 Accepted by: Karen Waters-Husted / CHPRC Date: 9/26/2011

OCTOBER 13, 2011

Page 1 of 1

Seger, Sandra

From: Douglas, James G (Jim) [James_G_Jim_Douglas@RL.gov]
Sent: Tuesday, October 04, 2011 2:08 PM
To: Seger, Sandra
Cc: ^CPP Sample Management; ^CPP SDM Login; Fitzgerald, Scot L; Huggins, Stewart L; Waters-husted, Karen S; Trent, Stephen J; Sumner, Laine C
Subject: SIR SDR11-417 SAF W11-008 - Final Copies (W06210 Tc99 MS has High Recovery)
Attachments: SDR11-417 TARL.rtf; SDR11-417 TARL.pdf

Sandra: Please use the attached final copies.

My apologies for the late delivery of this SIR; I missed Karen's email of 9/24 directing to reanalyze the sample and MS.

Jim Douglas 373-7154
Chemist
Analytical Support Group
Soil and Groundwater Remediation Project
CHPRC

10/4/2011

TestAmerica

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Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	TestAmerica Richland's SOP No.
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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%. $MDC = (4.65 * \text{Sqrt}((\text{BkgndCnt}/\text{BkgndCntMin}) / \text{SCntMin}) + 2.71 / \text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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.

10/12/2011 1:48:10 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 48759 File Name: h:\Reportdb\edd\Feed\VRad\W06210.Edd, h:\Reportdb\edd\Feed\VRad\48759.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:
9MLFN810	B2F3Y6		MW6-SBB-A1	S11-007	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1230078	I-129	15046-84-1	1.81E+00	pCi/L	3.1E-01	3.1E-01	2.14E-01	86.5	1129LL_SEP_LEPS	3.7331E+00
										Unit
										08/02/2011 12:52
										Unit
										09/01/2011 22:35
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFN910	B2F3W6		MW6-SBB-A1	S11-007	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1230078	I-129	15046-84-1	2.77E+00	pCi/L	4.3E-01	4.3E-01	1.97E-01	85.1	1129LL_SEP_LEPS	3.8108E+00
										Unit
										08/02/2011 11:42
										Unit
										09/02/2011 02:37
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFP010	B2FL91		MW6-SBB-A1	W11-008	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1230078	I-129	15046-84-1	-6.82E-02	pCi/L	1.4E-01	1.4E-01	2.35E-01	85.4	1129LL_SEP_LEPS	3.7069E+00
										Unit
										08/02/2011 07:45
										Unit
										09/13/2011 10:26
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFP110	B2FL92		MW6-SBB-A1	W11-008	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1230078	I-129	15046-84-1	2.81E+00	pCi/L	6.0E-01	6.0E-01	2.99E-01	79.5	1129LL_SEP_LEPS	3.753E+00
										Unit
										08/02/2011 09:12
										Unit
										09/02/2011 06:01
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFP310	B2F5B5		MW6-SBB-A1	S11-007	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1214238	H-3	10028-17-8	3.01E+02	pCi/L	1.8E+01	4.5E+01	2.78E+01	100.0	906.0ML_H3_LSC	1.0018E-02
										Unit
										08/04/2011 10:30
										Unit
										09/09/2011 08:12
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFP410	B2F5B6		MW6-SBB-A1	S11-007	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
1230085	Uranium	7440-61-1	3.03E+02	ug/L	3.6E+01	3.6E+01	8.42E-02		UTOT_KPA	2.49E-02
										Unit
										08/04/2011 10:30
										Unit
										09/26/2011 10:21
										Act

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLFP510	B2F5B7		MW6-SBB-A1	S11-007	W06210					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Qual	MDA	TrcYield	Method	Alq Size
										Unit
										08/04/2011 10:30
										Unit
										09/26/2011 10:21
										Act

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

10/12/2011 1:48:10 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 48759 File Name: h:\Reportdb\edd\Fead\RadW06210.Edd, h:\Reportdb\edd\Fead\Rad48759.Edd

Batch	1230085	Uranium	CAS#	7440-61-1	Result	3.02E+02	Unit	ug/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	3.6E+01	MDA	8.35E-02	TrcYield	UTOT_KPA	Method	UTOT_KPA	Alq Size	2.51E-02	Unit	ML	Analy Date/Time	09/26/2011 10:35	Act
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Lab Sample Id:	9MLFP610	B2F5B8	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	3.6E+01	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/04/2011 10:30	Collection Date:	
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Batch	1230085	Uranium	CAS#	7440-61-1	Result	3.07E+02	Unit	ug/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	3.6E+01	MDA	8.19E-02	TrcYield	UTOT_KPA	Method	UTOT_KPA	Alq Size	2.56E-02	Unit	ML	Analy Date/Time	09/26/2011 10:52	Act
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Lab Sample Id:	9MLH5510	B2FL16	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	3.6E+02	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/04/2011 13:37	Collection Date:	
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Batch	1230080	TC-99	CAS#	14133-76-7	Result	6.51E+03	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	3.6E+02	MDA	9.98E+00	TrcYield	TC99_SEP_LSC	Method	TC99_SEP_LSC	Alq Size	1.257E-01	Unit	L	Analy Date/Time	09/13/2011 14:36	Act
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Lab Sample Id:	9MLHLL10	B2FL56	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.2E+03	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/08/2011 09:37	Collection Date:	
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Batch	1230080	TC-99	CAS#	14133-76-7	Result	2.18E+04	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.7E+01	MDA	9.89E+00	TrcYield	TC99_SEP_LSC	Method	TC99_SEP_LSC	Alq Size	1.247E-01	Unit	L	Analy Date/Time	09/13/2011 12:31	Act
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Lab Sample Id:	9MLHMN10	B2FL00	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.7E+01	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/08/2011 10:25	Collection Date:	
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Batch	1230078	I-129	CAS#	15046-84-1	Result	3.62E+00	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	5.3E-01	MDA	2.70E-01	TrcYield	1129LL_SEP_LEPS	Method	1129LL_SEP_LEPS	Alq Size	3.7425E+00	Unit	L	Analy Date/Time	09/02/2011 09:25	Act
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Batch	1230080	TC-99	CAS#	14133-76-7	Result	2.13E+02	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.7E+01	MDA	9.91E+00	TrcYield	TC99_SEP_LSC	Method	TC99_SEP_LSC	Alq Size	1.26E-01	Unit	L	Analy Date/Time	09/13/2011 13:34	Act
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Lab Sample Id:	9MLJM010	B2FL61	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	7.7E+02	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/09/2011 09:51	Collection Date:	
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Batch	1230078	I-129	CAS#	15046-84-1	Result	4.25E+00	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	2.7E+00	MDA	2.04E+00	TrcYield	1129LL_SEP_LEPS	Method	1129LL_SEP_LEPS	Alq Size	3.503E-01	Unit	L	Analy Date/Time	09/02/2011 09:26	Act
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Batch	1230080	TC-99	CAS#	14133-76-7	Result	1.39E+04	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	7.7E+02	MDA	1.26E+01	TrcYield	TC99_SEP_LSC	Method	TC99_SEP_LSC	Alq Size	1.014E-01	Unit	L	Analy Date/Time	09/13/2011 15:39	Act
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Lab Sample Id:	9MLJM220	B2FL51	Client Id:		Test User		Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.3E+02	Moisture/Solids%**		Distilled Volume		Sample On Date:	08/09/2011 10:30	Collection Date:	
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Batch	1277187	TC-99	CAS#	14133-76-7	Result	2.38E+04	Unit	pCi/L	Contract Nbr	MMW6-SBB-A1	Sdg Nbr	W06210	QC Type	TotU 2S	Qual	1.3E+03	MDA	2.31E+01	TrcYield	TC99_SEP_LSC	Method	TC99_SEP_LSC	Alq Size	5.16E-02	Unit	L	Analy Date/Time	10/07/2011 03:25	Act
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U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

10/12/2011 1:48:10 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 48759 File Name: h:\Reportdb\edd\Feed\W06210.Edd, h:\Reportdb\edd\Feed\W06210.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:
9MLJM510 B2FLD5			MW6-SBB-A1	W11-008	W06210					08/09/2011 12:40
Batch Analyte:	CAS#		Result	Unit	CntU 2S	TotU 2S	MDA	TrcYield	Method	Alq Size
1230080 TC-99	14133-76-7		3.20E+04	pCi/L	9.8E+01	1.8E+03	1.00E+01	100.0	TC99_SEP_LSC	1.263E-01

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLKR110 B2FKN5			MW6-SBB-A1	111-039	W06210					08/09/2011 07:30
Batch Analyte:	CAS#		Result	Unit	CntU 2S	TotU 2S	MDA	TrcYield	Method	Alq Size
1230084 C-14	14762-75-5		1.64E+00	pCi/L	3.4E+00	4.0E+00	8.01E+00	100.0	C14_LSC	2.00E-01
1230078 I-129	15046-84-1		2.11E-02	pCi/L	1.3E-01	1.3E-01	2.27E-01	90.8	I129LL_SEP_LEPS	3.7701E+00
1230082 NP-237	13994-20-2		4.27E-02	pCi/L	8.7E-02	8.8E-02	2.05E-01	83.7	NP237_LLE_PLAT	1.999E-01
1230083 Se-79	15758-45-9		-7.11E+00	pCi/L	6.4E+00	7.6E+00	1.62E+01	53.3	SE79_SEP_IE_LS	2.021E-01

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLKTP10 B2FKN6			MW6-SBB-A1	111-039	W06210					08/09/2011 10:19
Batch Analyte:	CAS#		Result	Unit	CntU 2S	TotU 2S	MDA	TrcYield	Method	Alq Size
1230084 C-14	14762-75-5		4.50E+00	pCi/L	3.5E+00	4.1E+00	8.01E+00	100.0	C14_LSC	2.00E-01
1230078 I-129	15046-84-1		-1.68E-02	pCi/L	8.6E-02	8.6E-02	1.55E-01	81.4	I129LL_SEP_LEPS	3.8289E+00
1230082 NP-237	13994-20-2		-1.85E-02	pCi/L	9.6E-02	9.6E-02	2.61E-01	91.4	NP237_LLE_PLAT	1.997E-01
1230083 Se-79	15758-45-9		-1.82E+00	pCi/L	5.0E+00	5.8E+00	1.22E+01	71.9	SE79_SEP_IE_LS	1.998E-01

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLL7P10 B2FKL0			MW6-SBB-A1	111-039	W06210					08/10/2011 08:59
Batch Analyte:	CAS#		Result	Unit	CntU 2S	TotU 2S	MDA	TrcYield	Method	Alq Size
1230078 I-129	15046-84-1		2.51E+00	pCi/L	4.8E-01	4.8E-01	2.49E-01	90.8	I129LL_SEP_LEPS	3.6313E+00

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLL7Q10 B2FKL1			MW6-SBB-A1	111-039	W06210					08/10/2011 08:59
Batch Analyte:	CAS#		Result	Unit	CntU 2S	TotU 2S	MDA	TrcYield	Method	Alq Size
1230078 I-129	15046-84-1		2.59E+00	pCi/L	4.2E-01	4.2E-01	2.09E-01	88.6	I129LL_SEP_LEPS	3.6356E+00

Lab Sample Id:	Client Id:	Test User:	Contract Nbr:	SAF Nbr:	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume:	Sample On Date:	Collection Date:
9MLM7V10 B2FKC2			MW6-SBB-A1	111-038	W06210					08/10/2011 11:07

TestAmerica
 rptFeedRadSummaryEdd 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.

10/12/2011 1:48:10 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 48759 File Name: h:\Reportdb\edd\Feed\IVRad\W06210.Edd, h:\Reportdb\edd\Feed\IVRad\48759.Edd

Batch	Analys	CAS#	Result	Unit	SAF Nbr	Sdg Nbr	QC Type	Moisture/ Solids%*	Distilled Volume	Method	Alq Size	Unit	Analy Date/Time	Act
1230078	I-129	15046-84-1	3.90E-01	pCi/L	111-038	W06210	U	3.02E-01	84.9	1129LL_SEP_LEPS	3.6941E+00	L	09/03/2011 03:36	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:
9MLM7W10 B2FKC3			MW6-SBB-A1	111-038	W06210				08/10/2011 11:07	

Batch	Analys	CAS#	Result	Unit	SAF Nbr	Sdg Nbr	QC Type	Moisture/ Solids%*	Distilled Volume	Method	Alq Size	Unit	Analy Date/Time	Act
1230078	I-129	15046-84-1	3.42E-01	pCi/L	111-038	W06210	U	2.90E-01	82.2	1129LL_SEP_LEPS	3.7393E+00	L	09/03/2011 03:36	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:
9MLM8H10 B2FKH2			MW6-SBB-A1	111-038	W06210				08/10/2011 12:49	

Batch	Analys	CAS#	Result	Unit	SAF Nbr	Sdg Nbr	QC Type	Moisture/ Solids%*	Distilled Volume	Method	Alq Size	Unit	Analy Date/Time	Act
1230078	I-129	15046-84-1	5.46E-02	pCi/L	111-038	W06210	U	2.17E-01	79.5	1129LL_SEP_LEPS	3.8383E+00	L	09/03/2011 06:59	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:
9MLM8J10 B2FKJ0			MW6-SBB-A1	111-038	W06210				08/10/2011 07:30	

Batch	Analys	CAS#	Result	Unit	SAF Nbr	Sdg Nbr	QC Type	Moisture/ Solids%*	Distilled Volume	Method	Alq Size	Unit	Analy Date/Time	Act
1230084	C-14	14762-75-5	3.83E+00	pCi/L	111-038	W06210	U	8.01E+00	100.0	C14_LSC	2.00E-01	L	09/08/2011 18:46	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:
9MLM8K10 B2FKJ1			MW6-SBB-A1	111-038	W06210				08/10/2011 11:09	

Batch	Analys	CAS#	Result	Unit	SAF Nbr	Sdg Nbr	QC Type	Moisture/ Solids%*	Distilled Volume	Method	Alq Size	Unit	Analy Date/Time	Act
1230078	I-129	15046-84-1	5.25E+00	pCi/L	111-038	W06210	U	2.61E-01	88.9	1129LL_SEP_LEPS	3.9137E+00	L	09/03/2011 10:24	I

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

TestAmerica

rptFeedRadSummaryEdd v3.48

Wednesday, October 12, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MLRT51AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/04/2011 10:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/04/2011

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	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS R
1230085 BLK	Uranium 7440-61-1	1.41E-01	1.5E-02 1.5E-02		8.42E-02			UTOT_KPA	2.49E-02 ML	09/26/2011 10:08			LCL/UCL Typ D

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

TestAmerica
 rptFeadRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MLRTQ1AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 09:51
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/10/2011

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	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	RPD/ UCL	RER/ UCL	LCS LCU/CL	Typ
1230080	TC-99	9.46E+00	pCi/L	5.8E+00	U	1.00E+01	100.0		TC99_SEP_LS	1.25E-01				D
BLK	14133-76-7			4.4E+00						L				

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.

Wednesday, October 12, 2011 Lab Code: TARL
 FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

TestAmerica QC Blank Report

Lab Sample Id: MLRTR1AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 07:30
 Client Id: NA Matrix: WATER WATER Sample On Date: 08/10/2011
 Moisture/Solids%*: QC Type: BLK Received Date: 08/10/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW8-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCLUCL	R Typ
1230082 BLK	NP-237 13994-20-2	0.00E+00	pCi/L	9.5E-02	9.5E-02	U	2.23E-01	89.2		NP237_LLE_P	2.005E-01	09/14/2011 13:44				D

TestAmerica 5
 rptFeadRadEdd v3.68

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

Wednesday, October 12, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feed\IVRad\W06210.Edd, h:\Reportdb\edd\Feed\IVRad\48759.Edd

Lab Sample Id: MLR11AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 10:19
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/10/2011

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

Batch # /	Analyt/	Result/	Tot/Cnt	Qu-	Tracer	Spk Cond/	Analy	Aliq	Date/Time	RPD/	RER/	LCS	R
Qc Type	CAS#	Orig Rst	Uncert 2S	al	MDC	%Rec	Method	Size/	Analyzed	UCL	UCL	LCL/UCL	Typ
1230083	Se-79	-1.26E+00	6.9E+00	U	1.44E+01	60.7	SE79_SEP_IE_	2.005E-01	09/02/2011				D
BLK	15758-45-9		5.9E+00					L	09:12				

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

TestAmerica
 rptFeedRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feed\VRad\W06210.Edd, h:\Reportdb\edd\Feed\VRad\48759.Edd

Lab Sample Id: MLRTW1AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/10/2011 07:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/11/2011

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

Batch # /	Analyt/	Result/	Tracer	Spk Concl	Analy	Aliq	Date/Time	RPD/	RER/	LCS	R
Qc Type	CAS#	Orig Rst	Yield	%Rec	Method	Size/	Analyzed	UCL	UCL	LCL/UCL	Typ
1230084	C-14	3.59E+00	U	8.01E+00	C14_LSC	2.00E-01	09/08/2011				D
BLK	14762-75-5					L	20:55				

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

TestAmerica
 rptFeedRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\led\Fead\W06210.Edd, h:\Reportdb\led\Fead\W06210.Edd, h:\Reportdb\led\Fead\W06210.Edd

Lab Sample Id: MMX741AB Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 10:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BLK Received Date: 08/10/2011

SAF Nbr	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Crit Uncert 2S	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
1277187	TC-99	6.15E+00	pCi/L	5.6E+00	U	9.37E+00	100.0	TC99_SEP_LS	1.275E-01	10/07/2011	L	D
BLK	14133-76-7			4.1E+00						05:31		
											BU	H

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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Wednesday, October 12, 2011

TestAmerica QC Control Sample Report

Lab Code: TARRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MLCWE1CS Sdg/Rept Nbr: W06203 48759 Collection Date: 07/27/2011 09:57
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 07/28/2011

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tof/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
1214238	H-3	8.51E+03	pCi/L	9.4E+02		2.61E+01	100.0	9.07E+03	906.0ML_H3_L	1.00E-02	09/09/2011			70	D
BS	10028-17-8			6.6E+01				93.8		L	08:12			130	

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

TestAmerica
 rpt\FeadRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\ledd\Fead\VRad\W06210.Edd, h:\Reportdb\ledd\Fead\VRad\48759.Edd

Lab Sample Id: MLRT51CS Sdg/Rept Nbr: W06210 48759 Collection Date: 08/04/2011 10:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/04/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	F Suffix	R Typ
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/TTime Analyzed	RPD/ UCL	RER/ UCL	LCS LCUJCL	R Typ
1230085 BS	Uranium 7440-61-1	3.53E+01	ug/L	4.2E+00 4.2E+00		8.35E-02		3.64E+01 96.8	UTOT_KPA	2.51E-02 ML	09/26/2011 10:10			70	D

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

TestAmerica
 rpt\FeadRadEdd v3.68

Wednesday, October 12, 2011 Lab Code: TARL
 FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MLRT51DS Sdg/Rept Nbr: W06210 Collection Date: 08/04/2011 10:30
 Client Id: NA Matrix: WATER Sample On Date: 08/04/2011
 Moisture/Solids%*: QC Type: BS Received Date: 08/04/2011

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	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
1230085 BS	Uranium 7440-61-1	3.49E+00	ug/L	4.1E-01	4.1E-01		8.45E-02		3.65E+00 95.5	UTOT_KPA	2.48E-02 ML	09/26/2011 10:13			70 D	130

TestAmerica 11
 rpt\FeadRadEdd v3.68
 U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, October 12, 2011 Lab Code: TARL
TestAmerica QC Control Sample Report
 FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VARad\W06210.Edd, h:\Reportdb\edd\Fead\VARad\48759.Edd

Lab Sample Id: MLRTP1CS Sdg/Rept Nbr: W06210 48759 Collection Date: 08/02/2011 12:52
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/03/2011

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/UCL	R Typ
1230078	I-129	1.34E+01	pCi/L	1.6E+00		3.99E-01	80.7	1.15E+01	I129LL_SEP_L	3.4103E+00	09/05/2011			70	D
BS	15046-84-1			1.6E+00				116.0		L	07:43			130	

TestAmerica 12
 rpt\FeadRadEdd v3.68
 U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual - Analyte was found in the associated laboratory blank above the MDC.

Wednesday, October 12, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MLRTQ1CS Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 09:51
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/10/2011

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert: 2S	Qu- al	MDC	Tracer Yield	Spk Concl %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/ UCL	R Typ
1230080	TC-99	4.24E+02	pCi/L	2.9E+01	9.70E+00	100.0	5.43E+02	78.1	TC99_SEP_LS	1.25E-01	09/13/2011	70	70	70	D
BS	14133-76-7			1.2E+01						L	22:58			130	

SAF Nbr Contract Nbr MWG-SBB-A19981

Test User Case Nbr SAS Nbr Suffix Decant Distilled Volume

File Id

F Suffix R Typ BO H

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

TestAmerica
 rptFeadRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feed\VRad\W06210.Edd, h:\Reportdb\edd\Feed\VRad\48759.Edd

Lab Sample Id: MLRTW1CS Sdg/Rept Nbr: W06210 48759 Collection Date: 08/10/2011 07:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/11/2011

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl %Rec	Analyt Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
1230084	C-14	7.68E+03	pCi/L	4.4E+02	3.20E+02	100.0	7.30E+03	105.2	C14_LSC	5.00E-03	09/08/2011			70	D
BS	14762-75-5			3.0E+02						L	21:38			130	

SAF Nbr Contract Nbr
 MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

F Suffix

R Typ

TestAmerica rptFeedRadEdd v3.68 15

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

Wednesday, October 12, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MMX741CS Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 10:30
 Client Id: NA Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 08/10/2011

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert.2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/CL	Typ
1277187	TC-99	4.55E+02	pC/L	3.0E+01		9.53E+00	100.0	5.48E+02	TC99_SEP_LS	1.252E-01	10/07/2011			70	D
BS	14133-76-7			1.2E+01				83.1		L	06:34			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.

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Wednesday, October 12, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W06210.Edd, h:\Reportdb\edd\Fead\VRad\48759.Edd

Lab Sample Id: MK8091ER Sdg/Rept Nbr: W06203 48759 Collection Date: 07/27/2011 09:57
 Client Id: B2BTC5 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 07/28/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S11-003	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Toi/Cnt Uncert 2S	Unit	Spk Conc/ %Rec	Tracer Yield	Aliq Size/	Analy Method	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
1214238	H-3	2.28E+01	2.4E+01	pCi/L	100.0	100.0	1.0006E-02	906.0ML_H3_L	09/09/2011	27.8	0.4		D
DUP	10028-17-8	3.01E+01	1.3E+01	U	2.73E+01	100.0	L		08:12	20.0	3		

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

TestAmerica
 rptFeadRadEdd v3.68

Wednesday, October 12, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feed\VRad\W06210.Edd, h:\Reportdb\edd\Feed\VRad\48759.Edd

Lab Sample Id: MLFN81CR Sdg/Rept Nbr: W06210 48759 Collection Date: 08/02/2011 12:52
 Client Id: B2F3Y6 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/03/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S11-007	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	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
1230078	1-129	1.90E+00	pCi/L	3.9E-01		2.58E-01	86.8		1129LL_SEP_L	3.7321E+00	09/02/2011	4.8	0.3		D
DUP	15046-84-1	1.81E+00		3.9E-01						L	02:36	20.0	3		

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

TestAmerica
 rptFeedRadEdd v3.68

Wednesday, October 12, 2011 Lab Code: TARL
FormNbr: R VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\IVRad\W06210.Edd, h:\Reportdb\edd\Fead\IVRad\48759.Edd
FormatType: FEAD

Lab Sample Id: MLFP41CR **Sdg/Rept Nbr:** W06210 **48759** **Collection Date:** 08/04/2011 10:30
Client Id: B2F5B6 **Matrix:** WATER **WATER** **Sample On Date:**
Molsture/Solids%*: **QC Type:** DUP **Received Date:** 08/04/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S11-007	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/UC	R Typ
1230085	Uranium	3.05E+02	ug/L	3.6E+01		8.35E-02			UTOT_KPA	2.51E-02	09/26/2011	.5	0.1		D
DUP	7440-61-1	3.03E+02		3.6E+01						ML	10:27	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.

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Wednesday, October 12, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VARad\W06210.Edd, h:\Reportdb\edd\Fead\VARad\48759.Edd

Lab Sample Id: MLJM01DR Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 09:51
 Client Id: B2FL61 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/10/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W11-008	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/ TC99_SEP_LS	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/CL	Typ
1230080	TC-99	1.21E+04	pCi/L	6.7E+02		1.25E+01	100.0		TC99	9.92E-02	09/13/2011	14.0	3.8		D
DUP	14133-76-7	1.39E+04		6.8E+01						L	16:42	20.0	3		

TestAmerica rptFeadRadEdd v3.68 20

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

Wednesday, October 12, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W06210.Edd, h:\Reportdb\edd\Fead\Rad\48759.Edd

Lab Sample Id: MLKR11FR Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 07:30
 Client Id: B2FKN5 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%: QC Type: DUP Received Date: 08/10/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
111-039	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	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/ UCL	R Typ
1230082	NP-237	-8.14E-03	pCi/L	8.3E-02	U	1.95E-01	87.2		NP237_LLE_P	2.008E-01	09/14/2011	294.1	0.9		D
DUP	13994-20-2	4.27E-02		8.3E-02						L	13:43	20.0	3		

TestAmerica
 rpt\FeadRadEdd v3.68

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

Wednesday, October 12, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W06210.Edd, h:\Reportdb\edd\Fead\Rad\48759.Edd

Lab Sample Id: MLKTP1FR Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 10:19
 Client Id: B2FKN6 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/10/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
111-039	MW6-SBB-A19981								BG	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/CL	Typ
1230083	Se-79	-2.79E+00	pCi/L	6.3E+00	U	1.33E+01	65.2		SE79_SEP_IE_	2.009E-01	09/02/2011	0.0	0.2		D
DUP	15758-45-9	-1.82E+00		5.4E+00						L	08:19	20.0	3		

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

TestAmerica
 rptFeadRadEdd v3.68

Wednesday, October 12, 2011 Lab Codes: TARL
 FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\ledd\Fead\VRad\W06210.Edd, h:\Reportdb\ledd\Fead\VRad\48759.Edd

Lab Sample Id: MLM8J1DR Sdg/Rept Nbr: W06210 48759 Collection Date: 08/10/2011 07:30
 Client Id: B2FKJO Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 08/11/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
111-038	MW6-SBB-A19981									BH H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl %Rec	Analy Method	Alliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/ UCL	R Type
1230084	C-14	4.68E+00	pCi/L	4.1E+00	U	8.01E+00	100.0		C14_LSC	2.00E-01	09/08/2011	20.0	0.3		D
DUP	14762-75-5	3.83E+00		3.5E+00						L	19:29	20.0	3		

TestAmerica 23
 rpt\FeadRadEdd v3.68
 U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual - Analyte was found in the associated laboratory blank above the MDC.

Wednesday, October 12, 2011

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feed\VRad\W06210.Edd, h:\Reportdb\edd\Feed\VRad\48759.Edd

Lab Sample Id: MLFP51CW Sdg/Rept Nbr: W06210 48759 Collection Date: 08/04/2011 10:30
 Client Id: B2F5B7 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: MS Received Date: 08/04/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Surfix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S11-007	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert. 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
1230085	Uranium	3.82E+01	ug/L	5.4E+01	U	8.45E-02		3.69E+01	UTOT_KPA	2.48E-02	09/26/2011			60	D
MS	7440-61-1			5.4E+01				103.6		ML	10:46			140	

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

TestAmerica
 rpt\RadRadEdd v3.68

Wednesday, October 12, 2011 Lab Code: TARL
 FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\ledd\Fead\VRad\W06210.Edd, h:\Reportdb\ledd\Fead\VRad\48759.Edd

TestAmerica Qc Matrix Spike Report

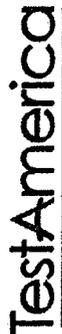
Lab Sample Id: MLJM22CW Sdg/Rept Nbr: W06210 48759 Collection Date: 08/09/2011 10:30
 Client Id: B2FL51 Matrix: WATER WATER Sample On Date: 08/10/2011
 Moisture/Solids%*: QC Type: MS MS Received Date: 08/10/2011

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
W11-008	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Toi/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	Typ
1277187 MS	TC-99 14133-76-7	6.66E+03	pCi/L	2.1E+03 1.5E+02	al	2.30E+01	100.0	8.76E+03 76.0	TC99_SEP_LS	5.18E-02 L	10/07/2011 04:28	UCL	UCL	60	D
														140	

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

TestAmerica
 rpt\FeadRadEdd v3.68



TA Richland
Hexavalent Chromium - Water

THE LEADER IN ENVIRONMENTAL TESTING

Analyst:	H.Rahavi	BATCH #	1223177
Start Date:	8/11/2011	SDG #	W06210
Start Time:	14:45	Matrix	Water
End Date:	8/11/2011	SOP Information	
End Time:	15:15	RL-WC-003	Revision 0
Analyst Signature:		MDL (mg/L)	0.0037
Date:	08/11/11	Instrument:	Hach DR2010
		Wavelength:	540
		R Squared	0.99973
		Slope:	1.84052
		Intercept:	0.01329

Calibration Curve Information		ICV Information:		LCS Information:		Matrix Spike Information:	
Amount	Conc. (mg/L)	ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec. / RPD
Blank	0.000	0.000	0.002	1	-0.0061	<MDL	
Std. 1	0.100	0.050	0.002	1	-0.0061	<MDL	
Std. 2	0.500	0.250	0.955	1	0.5117	0.512	102.33%
Std. 3	0.750	0.375	0.023	1	0.0053	0.005	104.26%
Std. 4	1.500	0.750	0.528	1	0.2797	-0.280	
Std. 5	2.000	1.000	0.527	1	0.2791	-0.279	
Standard Volume (mL):	2.000	1.000	0.024	1	0.0058	0.006	9.79%
Date of Curve:	8-11-11	1.000	0.000	1			

Dilution ID #	08/11/11	08/11/11	08/11/11	08/12/11	08/12/11	08/12/11	08/12/11			
Prep Date:	08/11/11	08/11/11	08/11/11	08/12/11	08/12/11	08/12/11	08/12/11			
Concentration (mg/L)	50	50	50	190	190	190	190			
Expiration Date:	08/11/11	08/11/11	08/11/11	08/12/11	08/12/11	08/12/11	08/12/11			
Pipettor(s)	70	70	70	190	190	190	190			
Volume Used	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value	Expected Value			
Expected values are only amounts added in mg and not final concentrations										
Sample ID	Client ID	Type	Sample Volume (ml)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec. / RPD
n/a	n/a	ICV	100.000	0.944	0.000	0.944	1	0.5057	0.506	101.14%
n/a	n/a	ICB	100.000	0.002	0.000	0.002	1	-0.0061	<MDL	
MLKNL1AA	n/a	Prep Blank	100.000	0.002	0.000	0.002	1	-0.0061	<MDL	
MLKNL1AC	n/a	LCS	100.000	0.955	0.000	0.955	1	0.5117	0.512	102.33%
MLKL41AA	B2FK72	Sample	100.000	0.023	0.000	0.023	1	0.0053	0.005	104.26%
MLKL41AC-S	B2FK72-MS	MS	100.000	0.528	0.000	0.528	1	0.2797	-0.280	
MLKL41AD-D	B2FK72-MSD	MSD	100.000	0.527	0.000	0.527	1	0.2791	-0.279	
MLKL41AE-X	B2FK72-DUP	Duplicate	100.000	0.024	0.000	0.024	1	0.0058	0.006	9.79%
n/a	n/a	CCV	100.000	0.942	0.000	0.942	1	0.5046	0.505	100.92%
n/a	n/a	CCB	100.000	0.002	0.000	0.002	1	-0.0061	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

02
82411

Lot No., Due Date: J1H110499; 09/26/2011
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 1230082; RNP237 Np-237 w/tracer
 SDG, Matrix: W06210; 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 limes, 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 *Tra Auterson* Date 9/21/11



THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
 RADIOCHEMISTRY
 Second Level Review

Batch Number: 1230082

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: Sandra Segura Date: 9/26/11

Lot No., Due Date: J1H050496, J1H050498, J1H090497, J1H100449, J1H110499, J1H120507, J1H150413; 09/26/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 1230078; RGAMLEPS Gamma by LEPS
SDG, Matrix: W06210; WATER

1.0: ICOC

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 # 10-19146

First Level *John Norton* Date *9-7-11*

OCTOBER 13, 2011



THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1230078

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: B2FL61 did not meet the CDAL due to reduced aliquot size. Aliquot size was reduced due to screening result.

Second Level Review: Sandra Seger Date: 9/7/11

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

**Clouseau
Nonconformance Memo**



NCM #: 10-19146 NCM Initiated By: John Norton Date Opened: 09/07/2011 Date Closed:	Classification: Anomaly Status: PMREVIEW Production Area: Environmental - Prep Tests: None Lot #'s (Sample #'s): J1H100449 (1), QC Batches: None.,
Nonconformance: MDA not met Subcategory: Data accepted	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
John Norton	09/07/2011	this sample did not meet the CRDL due to the reduced aliquot size.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
John Norton	09/07/2011	The aliquot size was reduced because of activity detected during the sample screening procedure.

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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Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

10/10/2011 11:25:00 AM

Lot No., Due Date: J1H050498,J1H100413,J1H090497,J1H100449; 09/26/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 1230080; RTC99 Tc-99 by LSC
SDG, Matrix: W06210; WATER

- 1.0 COC
 - 1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A
- 2.0 QC Batch
 - 2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A
 - 2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A
 - 2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A
 - 2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A
- 3.0 QC & Samples
 - 3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A
 - 3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A
 - 3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A
 - 3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A
 - 3.5 Are the sample yields and MDAs within contract limits? Yes No N/A
- 4.0 Raw Data
 - 4.1 Were results calculated in the correct units? Yes No N/A
 - 4.2 Were analysis volumes entered correctly? Yes No N/A
 - 4.3 Were Yields entered correctly? Yes No N/A
 - 4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A
 - 4.5 Were raw counts reviewed for anomalies? Yes No N/A
- 5.0 Other
 - 5.1 Are all nonconformances included and noted? Yes No N/A
 - 5.2 Are all required forms filled out? Yes No N/A
 - 5.3 Was the correct methodology used? Yes No N/A
 - 5.4 Was transcription checked? Yes No N/A
 - 5.5 Were all calculations checked at a minimum frequency? Yes No N/A
 - 5.6 Are worksheet entries complete and correct? Yes No N/A
- 6.0 Comments on any No response:
NCM 10-19370

First Level *Mica Auterson* Date *10/10/11*

Lot No., Due Date: J1H100449; 09/26/2011
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 1277187; RTC99 Tc-99 by LSC
 SDG, Matrix: W06210; WATER

- 1.0 ICOC**
 1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A
- 2.0 QC Batch**
 2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A
 2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A
 2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A
 2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A
- 3.0 QC & Samples**
 3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A
 3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A
 3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A
 3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A
 3.5 Are the sample yields and MDAs within contract limits? Yes No N/A
- 4.0 Raw Data**
 4.1 Were results calculated in the correct units? Yes No N/A
 4.2 Were analysis volumes entered correctly? Yes No N/A
 4.3 Were Yields entered correctly? Yes No N/A
 4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A
 4.5 Were raw counts reviewed for anomalies? Yes No N/A
- 5.0 Other**
 5.1 Are all nonconformances included and noted? Yes No N/A
 5.2 Are all required forms filled out? Yes No N/A
 5.3 Was the correct methodology used? Yes No N/A
 5.4 Was transcription checked? Yes No N/A
 5.5 Were all calculations checked at a minimum frequency? Yes No N/A
 5.6 Are worksheet entries complete and correct? Yes No N/A
- 6.0 Comments on any No response:
 NCM 10-19370

First Level [Signature] Date 10/10/11



Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 1230080 & 1277187

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 10-19370

Second Level Review: *Sandra Legner* Date: 10/12/11

**Clouseau
Nonconformance Memo**



NCM #: 10-19370 NCM Initiated By: Lisa Antonson Date Opened: 10/10/2011 Date Closed:	Classification: Anomaly Status: PMREVIEW Production Area: Environmental - Sep Tests: Tc-99 by LSC Lot #'s (Sample #'s): J1H050498 (1,2), J1H090497 (1,2), J1H100413 (1), J1H100449 (1,2,3), J1H180000 (80), QC Batches: 1230080,
Nonconformance: Other (describe in detail) Subcategory: Other (explanation required)	

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	10/10/2011	The MS in the original batch was 209%. Due to the high activity of the sample, both sample and MS were rerun with reduced aliquot and good results in batch 1277187. Sample and MS do not meet CRDL due to reduced aliquot, sample result exceeds MDA.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	10/10/2011	The sample and MS were rerun with reduced aliquot.

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: J1H110499; 09/26/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 1230083; RSE79 Se-79 by LSC
SDG, Matrix: W06210; 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 *John Zlot* Date 9-7-11

OCTOBER 13, 2011



THE LEADER IN ENVIRONMENTAL TESTING

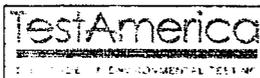
Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1230083

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: Andrea Seger Date: 9/7/11

	Data Review/Verification Checklist RADIOCHEMISTRY, First Level Review	9/19/2011 2:24:11 PM
Lot No., Due Date: J1G280491,J1G290442,J1H050442,J1H050499; 09/12/2011,09/19/2011,09/26/2011 Client, Site: 384868; PGW 615HANFORD HANFORD QC Batch No., Method Test: 1214238; RTRITIUM Midlevel Tritium SDG, Matrix: W06203,W06209,W06210; WATER		
1.0 COC		
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?		Yes No N/A <input checked="" type="checkbox"/> Yes
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 <input checked="" type="checkbox"/> Yes
2.2 Are the QC appropriate for the analysis included in the batch?		Yes No N/A <input checked="" type="checkbox"/> Yes
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?		Yes No N/A <input checked="" type="checkbox"/> Yes
2.4 Does the Worksheets include a Tracer Vial label for each sample?		Yes No N/A <input checked="" type="checkbox"/> Yes
3.0 QC & Samples		
3.1 Is the blank results, yield, and MDA within contract limits?		Yes No N/A <input checked="" type="checkbox"/> Yes
3.2 Is the LCS result, yield, and MDA within contract limits?		Yes No N/A <input checked="" type="checkbox"/> Yes
3.3 Are the MS/MSD results, yields, and MDA within contract limits?		Yes No N/A <input checked="" type="checkbox"/> Yes
3.4 Are the duplicate result, yields, and MDAs within contract limits?		Yes No N/A <input checked="" type="checkbox"/> Yes
3.5 Are the sample yields and MDAs within contract limits?		Yes No N/A <input checked="" type="checkbox"/> Yes
4.0 Raw Data		
4.1 Were results calculated in the correct units?		Yes No N/A <input checked="" type="checkbox"/> Yes
4.2 Were analysis volumes entered correctly?		Yes No N/A <input checked="" type="checkbox"/> Yes
4.3 Were Yields entered correctly?		Yes No N/A <input checked="" type="checkbox"/> Yes
4.4 Were spectra reviewed/meet contractual requirements?		Yes No N/A <input checked="" type="checkbox"/> Yes
4.5 Were raw counts reviewed for anomalies?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.0 Other		
5.1 Are all nonconformances included and noted?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.2 Are all required forms filled out?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.3 Was the correct methodology used?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.4 Was transcription checked?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.5 Were all calculations checked at a minimum frequency?		Yes No N/A <input checked="" type="checkbox"/> Yes
5.6 Are worksheet entries complete and correct?		Yes No N/A <input checked="" type="checkbox"/> Yes
6.0 Comments on any No response:		
(Empty space for comments)		
First Level 	Date 9/19/11	
TestAmerica Richard OAS_RADCALCv4.8.44		Page 1



THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
 RADIOCHEMISTRY
 Second Level Review

Batch Number: 1214238

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: Sandra Seger Date: 9/26/11

Lot No., Due Date: J1H110499, J1H150413; 09/26/2011
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 1230084; RC14 C-14 by LSC
 SDG, Matrix: W06210; WATER

- | | | |
|---|------------|--|
| 1.0 COC | | |
| 1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 2.2 Are the QC appropriate for the analysis included in the batch? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 2.4 Does the Worksheets include a Tracer Vial label for each sample? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3.0 QC & Samples | | |
| 3.1 Is the blank results, yield, and MDA within contract limits? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3.2 Is the LCS result, yield, and MDA within contract limits? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3.3 Are the MS/MSD results, yields, and MDA within contract limits? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3.4 Are the duplicate result, yields, and MDAs within contract limits? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3.5 Are the sample yields and MDAs within contract limits? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4.0 Raw Data | | |
| 4.1 Were results calculated in the correct units? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4.2 Were analysis volumes entered correctly? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4.3 Were Yields entered correctly? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4.4 Were spectra reviewed/meet contractual requirements? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4.5 Were raw counts reviewed for anomalies? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.0 Other | | |
| 5.1 Are all nonconformances included and noted? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.2 Are all required forms filled out? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.3 Was the correct methodology used? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.4 Was transcription checked? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.5 Were all calculations checked at a minimum frequency? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5.6 Are worksheet entries complete and correct? | Yes No N/A | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 6.0 Comments on any No response: | | |

First Level *Lisa Anderson* Date *9/20/11*



THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
 RADIOCHEMISTRY
 Second Level Review

Batch Number: 1230084

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: Sandra Seger Date: 9/26/11

Lot No., Due Date: J1H050499; 09/26/2011
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 1230085; RUNAT UNat by KPA
 SDG, Matrix: W06210; 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 John Hoots Date 9-26-11

OCTOBER 13, 2011



THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1230085

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: *Sandra Seger* Date: 9/26/11

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

OCTOBER 13, 2011



Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1223177				
Lab Sample Numbers or SDG: W06210 Due 9/26				
Method/Test/Parameter: Cr+6 in Water / RL-WC-003				
Review Item	Yes (✓)	No (✓)	N/A (✓)	2 nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration				
1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis				
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples				
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?	✓			✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

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

Comments on any "No" response:

Analyst: H. B.

Date: 08/11/11

Second-Level Review: [Signature]

Date: 8/11/11

CH2M Hill Plateau Remediation Company		C.O.C. # S11-007-106	
Collectors: HERRICK CHPRO		Contact/Requester: Karen Waters-Husted	Telephone No. 376-4650
SAF No. S11-007	Sampling Origin: Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title: SURV, July 2011	Logbook No. HNF-N-506 43 / 03	Ice Chest No.	N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			
SPECIAL INSTRUCTIONS: Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.			
Sample No.	Filter	Date	Time
B2F3Y6	N	08/02/11	1252
B2F3Y6	N	08/04/11	1252
Sample Analysis: MLEN8		Sample Analysis	MLEN8
No/Type Container: 1x20-mL P		Activity Scan	1129LL_SEP_LEPS_GS_LL: 1-129 (1)
Holding Time: 6 Months		Preservative: None	
Holding Time: 6 Months		Preservative: None	

Quok #57671
 SDG #W06210
 LOT #JH050496
 Report: 9/16/11
 LU 8/5/11
 J1H050496

Relinquished By: HERRICK CHPRO	Sign: [Signature]	Date/Time: 1400 AUG 02 2011	Received By: SSU #1	Sign: [Signature]	Date/Time: 1400 AUG 02 2011	Print	Matrix *	
Relinquished By: SSU-1	Sign: [Signature]	Date/Time: 0700 AUG 03 2011	Received By: L.D. Wall CHPRO	Sign: [Signature]	Date/Time: 0700 AUG 03 2011		S = Soil	
Relinquished By: L.D. Wall CHPRO	Sign: [Signature]	Date/Time: 0650 AUG 03 2011	Received By: H. Carnes CHPRO	Sign: [Signature]	Date/Time: 0650 AUG 03 2011		DS = Drum Solids	
Relinquished By:	Sign:	Date/Time:	Received By:	Sign:	Date/Time:		DL = Drum Liquids	
FINAL SAMPLE DISPOSITION							Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Matrix * T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other

CH2M Hill Plateau Remediation Company		C.O.C.# S11-007-102	
JP HERRICK CHPRC		Telephone No.	376-4650
SAF No.	S11-007	Purchase Order/Charge Code	30007IES20
Project Title	SURV, July 2011	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Bill of Lading/Air Bill No.	N/A
Protocol	SURV	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2F3W6	N	W 08/04/11	1142	1x20-mL P	Activity Scan	6 Months	None
B2F3W6	N	W 08/02/11	1142	2x4-L G/P	1129LL_SEP_LEPS_GS_LL: 1-129 (1)	6 Months	None

SDG# 1002 600 6210
LOT# JH050496

Relinquished By JP HERRICK CHPRC	Sign <i>[Signature]</i>	Date/Time AUG 02 2011	Received By SSU #1	Print SSU #1	Sign <i>[Signature]</i>	Date/Time AUG 02 2011	Matrix *
Relinquished By SSU-1	Sign <i>[Signature]</i>	Date/Time AUG 03 2011 0700	Received By L.D. Wall CHPRC	Print L.D. Wall	Sign <i>[Signature]</i>	Date/Time AUG 03 2011 0700	S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other
Relinquished By L.D. Wall CHPRC	Sign <i>[Signature]</i>	Date/Time AUG 03 2011 1050	Received By H. Carnes	Print H. Carnes	Sign <i>[Signature]</i>	Date/Time AUG 03 2011 1050	
Relinquished By	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION							Date/Time
Disposal Method (e.g., Return to customer, per lab procedure, used in process)							Date/Time

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/3/11 @ 1056 GM Screen Result: (Airlock) .04 Initials: [Signature] (Sample Receiving) .05 Initials: [Signature]
Client: PGW SDG #: W06210 NA [] SAF #: S11-007 NA []

Lot Number: J1H050496
Chain of Custody # 511-007-106; 107
Shipping Container ID: Hand delivered NA []

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [X]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [X]
- 3. Cooler temperature: _____ °C NA [X]
- 4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.
5. Chain of Custody record present? Yes [X] No []
6. Number of samples received (Each sample may contain multiple bottles): 2 samples
7. Containers received: 4x4LP

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have:
tape [X] custody seals hazard labels [X] appropriate sample labels

10. Matrix:
A (FLT, Wipe, Solid, Soil) [X] (Water)
S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples:
[X] are in good condition _____ are leaking
_____ are broken _____ have air bubbles (Only for samples requiring no head space)
Other _____

12. Sample pH appropriate for analysis requested Yes [X] No [] NA []
(If acidification is necessary, then document sample ID, initial pH, amount of HNO₃ added and pH after addition on table overleaf)
RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): NA [X]

CH2M Hill Plateau Remediation Company		C.O.C.# W11-008-066	
Collector JP HERRICK		Page 1 of 1	
SAF No. CHPRC W11-008	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650	
Project Title RCRA, August 2011	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20	
Shipped To (Lab) TestAmerica Incorporated, Richland	Logbook No. HNF-N-506 42 / 03	Ice Chest No. N/A	
Protocol RCRA	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air-Bill No. N/A	
	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)			
SPECIAL INSTRUCTIONS Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.			

Sample No.	Filter	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FL92	N	08/24/11	0912	1x20-mL P		MLFP1	6 Months	None
B2FL92	N	08/24/11	0912	2x4-L G/P	1129LL_SEP_LEPS_GS_LL: I-129 (1)		6 Months	None
B2FL92	N	08/24/11	0912	3x1-L G/P	TC99_SEP_LSC: Tc-99 (1)		6 Months	HCl to pH <2

SDG # 606210
LOT # J1H050498

Relinquished By JP HERRICK CHPRC	Sign <i>J. Herrick</i>	Date Time 1400 AUG 02 2011	Received By SSU #1	Sign	Date Time 1400 AUG 02 2011
Relinquished By SSU-1	Sign	Date Time 0700 AUG 03 2011	Received By LD. Wall CHPRC	Sign <i>L.D. Wall</i>	Date Time 0700 AUG 03 2011
Relinquished By LD. Wall CHPRC	Sign <i>L.D. Wall</i>	Date Time 1050 AUG 03 2011	Received By <i>L. Lyness</i>	Sign <i>L. Lyness</i>	Date Time 1050 AUG 03 2011
Relinquished By	Sign	Date Time	Received By	Sign	Date Time

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

FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/31/11 @ 1050 GM Screen Result: (Airlock) 1.04 Initials: HC
(Sample Receiving) 1.05 Initials: HC
Client: PGW SDG #: W06210 NA [] SAF #: W11-008 NA []

Lot Number: JH060498

Chain of Custody # W11-008-065, 066

Shipping Container ID: Hand delivered N/A

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [X]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [X]
3. Cooler temperature: _____ °C NA [X]
4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [X] No []
6. Number of samples received (Each sample may contain multiple bottles): 2 samples
7. Containers received: 4x4LP, 6x1LP

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have: tape [X] hazard labels [X]
custody seals [X] appropriate sample labels [X]

10. Matrix: A (FLT, Wipe, Solid, Soil) [X] (Water) [X]
S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [X] are in good condition _____ are leaking
are broken _____ have air bubbles (Only for samples requiring no head space)
Other

12. Sample pH appropriate for analysis requested Yes [X] No [] NA []
(If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf)
RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): N/A

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S11-007-426
Collector: L.D. Wall CHPRG		Contact/Requester:	Karen Waters-Husted Telephone No. 376-4650	
SAF No. S11-007		Sampling Origin:	Hanford Site Purchase Order/Charge Code 300071ES20	
Project Title: SURV, July 2011		Logbook No.:	HNF-N-506 42/5 Ice Chest No. N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland		Method of Shipment:	GOVERNMENT VEHICLE Bill of Lading/Air Bill No. N/A	
Protocol: SURV		Priority:	45 Days Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	*	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2F5B5	N	W	8/4/11	1030	1x20-ml P	906.0ML_H3_LSC: Mid-level Tritium (1)	MLFP3	6 Months	None
B2F5B5	N	W			1x1-L P			6 Months	None


 JTH050499
 SDG# W06210
 LOT# JTH050499
 Report: 9/19/11

Relinquished By: LD Wall CHPRG	Date/Time: 8/15 AUG 04 2011	Received By: Karen Waters-Husted	Date/Time: 8/15 AUG 04 2011	Sign: KAR Print: KAR
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Relinquished By:	Date/Time:	Received By:	Date/Time:	

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

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company		C.O.C.# S11-007-427	
Collector: L.D. Wall CHPRC		Contact/Requester: Karen Waters-Husted	Telephone No. 376-4650
SAF No. S11-007	Sampling Origin: Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title: SURV, July 2011	Logbook No. HNF-N-506 42 / 5	Ice Chest No. N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol: SURV	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Sample No.	Filter	Date	Time
B2F5B6	N	W 8/4/11	1230
B2F5B6	N	W	↓
Sample Analysis: MLFPY		Holding Time	Preservative
UTOT_KPA: Uranium (1)		6 Months	None
		6 Months	HNO3 to pH <2

SDG # W020210
 LOT # J1H050494

Relinquished By: L.D. Wall CHPRC	Sign: [Signature]	Date/Time: 8/15	Print: AIR	Date/Time: 8/15	Received By: [Signature]	Date/Time: AUG 04 2011	Matrix * S = Soil, SE = Sediment, SO = Solid, W = Sludge, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
Relinquished By:	Sign:	Date/Time:	Print:	Date/Time:	Received By:	Date/Time:	
Relinquished By:	Sign:	Date/Time:	Print:	Date/Time:	Received By:	Date/Time:	
Relinquished By:	Sign:	Date/Time:	Print:	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	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S11-007-428	Page 1 of 1				
Collector L.D. Wall CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650							
SAF No. S11-007	Sampling Origin Hanford Site	Purchase Order/Charge Code 30007IES20							
Project Title SURV, July 2011	Logbook No. HNF-N-506 42 / 5	Ice Chest No. N/A							
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A							
Protocol SURV	Priority: 45 Days	Offsite Property No. N/A							
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input type="checkbox"/> No <input type="checkbox"/> Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.							
Sample No. B2F5B7	Filter N	* W	Date 8/4/11	Time 1030	No/Type Container 1x20-mL P	Activity Scan	Sample Analysis MLEP5	Holding Time 6 Months	Preservative None
B2F5B7	N	W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)		6 Months	HNO3 to pH <2

SDG # W06210
 LOT # J1H05D499

Relinquished By L.D. Wall CHPRC	Print R.D. Wall	Date/Time AUG 04 2011	Date/Time 215	Received By Lucas Velazquez	Sign [Signature]	Date/Time AUG 04 2011	Date/Time 215	Matrix *
Relinquished By		Date/Time	Date/Time	Received By		Date/Time	Date/Time	S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By		Date/Time	Date/Time	Received By		Date/Time	Date/Time	
Relinquished By		Date/Time	Date/Time	Received By		Date/Time	Date/Time	
Disposal Method (e.g., Return to customer, per lab procedure, used in process)								Date/Time
FINAL SAMPLE DISPOSITION								Date/Time

CHEM Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# S11-007-429		
LD Wall CHPRC		Contact/Requester	Karen Waters-Husted		Telephone No.	376-4650
SAF No.	S11-007	Sampling Origin	Hanford Site		Purchase Order/Charge Code	30007IES20
Project Title	SURV, July 2011	Logbook No.	HNF-N-506 4215		Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.	N/A
Protocol	SURV	Priority:	45 Days		Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Hold Time	Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.3 (1990/1993)		Site-Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.				
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis
B2F5B8	N	W	8/4/11	1030	1x20-mL P	Activity Scan
B2F5B8	N	W	↓	↓	1x500-mL GIP	UTOT_KPA: Uranium (1)
						Sample Analysis
						MIFP6
						Holding Time
						6 Months
						6 Months
						Preservative
						None
						HNO3 to pH <2

SDG # 1206210
LOT # J117050499

Relinquished By	Print	Signature	Date/Time	Received By	Print	Signature	Date/Time
LD Wall	LD Wall	LD Wall	AUG 04 2011 1815	Lucas Velazquez	Lucas Velazquez	LD Wall	AUG 04 2011 2115
Relinquished By	Signature	Signature	Date/Time	Received By	Signature	Signature	Date/Time
Relinquished By	Signature	Signature	Date/Time	Received By	Signature	Signature	Date/Time
Relinquished By	Signature	Signature	Date/Time	Received By	Signature	Signature	Date/Time
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposited By		Date/Time	



Sample Check-in List

Date/Time Received: 8-4-11 12:15 GM Screen Result: (Airlock) 04 Initials [BR
(Sample Receiving) 04 Initials [BR
Client: PLW SDG #: 2006210 NA [] SAF #: 511-007 NA []

Lot Number: J11H050499

Chain of Custody # 511-007-426, 427, 428 & 429

Shipping Container ID: Hand delivered NA []

Samples received inside shipping container/cooler/box Yes [BR] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [BR]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [BR]
- 3. Cooler temperature: _____ °C NA [BR]
- 4. Vermiculite/packing materials is NA [] Wet [] Dry [BR]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [BR] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 4
- 7. Containers received: 1x Lp, 3x 500mlp

8. Sample holding times exceeded? NA [] Yes [] No [BR]

9. Samples have:
____ tape hazard labels
____ custody seals BR appropriate sample labels

10. Matrix:
____ A (FLT, Wipe, Solid, Soil) BR (Water)
____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples:
BR are in good condition _____ are leaking
_____ are broken _____ have air bubbles (Only for samples requiring no head space)
_____ Other

12. Sample pH appropriate for analysis requested Yes [BR] No [] NA []
(If acidification is necessary, then document sample ID, initial pH, amount of HNO₃ added and pH after addition on table overleaf)

RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [BR]

14. Description of anomalies (include sample numbers): NA [BR]

CH2MHHI Plateau Remediation Company		C.O.C. # W11-008-058	
JP HERRICK CHPRC		Page 1 of 1	
Collector	JP HERRICK CHPRC	Contact/Requester	Karen Waters-Husted
SAF No.	W11-008	Telephone No.	376-4650
Project Title	RCRA, August 2011	Purchase Order/Charge Code	30007IES20
Shipped To (Lab)	TestAmerica Incorporated, Richland	Ice Chest No.	N/A
Protocol	RCRA	Bill of Lading/Air Bill No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS		Offsite Property No.	N/A
** ** 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. The CACN for all analytical work at WSCF is 401647.	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample No.	Filter	Date	Time
B2FL56	N	8-8-11	0937
B2FL56	N	↓	↓
Sample Analysis		Holding Time	Preservative
Activity Scan		6 Months	None
TC99_SEP_LSC: Tc-99 (1) MLHLL		6 Months	HCl to pH <2

W06210
 J1H090497
 Due 9-23-11



Relinquished By JP HERRICK CHPRC	Print JSA #1	Sign L.D. Wall	Date/Time AUG 08 2011 1115
Relinquished By SSU-1	Print L.D. Wall	Sign CHPRC	Date/Time AUG 09 2011 0640
Relinquished By L.D. Wall CHPRC	Print Luis Velazquez	Sign Luis Velazquez	Date/Time AUG 09 2011 1120
Relinquished By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time
Received By	Print	Sign	Date/Time

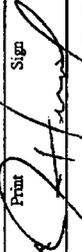
S	=	Soil	DS	=	Drum Solids
SE	=	Sediment	DL	=	Drum Liquids
SO	=	Solid	I	=	Tissue
SL	=	Sludge	WI	=	Wipe
W	=	Water	L	=	Liquid
O	=	Oil	V	=	Vegetation
A	=	Air	X	=	Other

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# W11-008-047
Collector JP HERRICK CHPRC		Contact/Requester Karen Waters-Husted		Telephone No. 376-4650
SAF No. W11-008		Sampling Origin Hanford Site		Purchase Order/Charge Code 300071ES20
Project Title RCRA, August 2011		Logbook No. HNF-N-506 41/50		Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE		Bill of Lading/Air Bill No. N/A
Protocol RCRA		Priority: 45 Days		Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material air 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. The CACN for all analytical work at WSCF is 401647.		
Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Sample No.	Filter	Date	Time	No/Type Container
B2FL00	N	W 8-8-11	1025	1x20-mL P
B2FL00	N	W		2x4-L G/P
B2FL00	N	W		3x1-L G/P
				Activity Scan
				1129LL_SEP_LEPS_GS_LL: 1-129 (1)
				TC99_SEP_LSC: Tc-99 (1) MLHAMN
				Sample Analysis
				Holding Time
				6 Months
				6 Months
				6 Months
				Preservative
				None
				None
				HCl to pH <2

W06210
 J1H090497
 Due 9-23-11

 J1H090497

Relinquished By JP HERRICK CHPRC	Sign 	Date/Time AUG 08 2011 1115	Received By SSU #1	Sign AUG 08 2011	Date/Time 1115	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By SSU: 1	Sign 	Date/Time AUG 09 2011 0640	Received By LD. Wall CHPRC	Sign AUG 09 2011	Date/Time 0640	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By LD. Wall CHPRC	Sign 	Date/Time AUG 09 2011 1120	Received By LD. Wall CHPRC	Sign AUG 09 2011	Date/Time 1120	
Relinquished By LD. Wall CHPRC	Sign 	Date/Time AUG 09 2011 1120	Received By LD. Wall CHPRC	Sign AUG 09 2011	Date/Time 1120	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/19/11 @ 11:20 GM Screen Result: (Airlock) 104 Initials: HC (Sample Receiving) 102 Initials: HC

Client: PGW SDG #: W06210 NA [] SAF #: W11-008 NA []

Lot Number: JH090497

Chain of Custody # W11-008-047; 658

Shipping Container ID: Hand delivered NA []

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [X]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [X]
3. Cooler temperature: _____ °C NA [X]
4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [X] No []
6. Number of samples received (Each sample may contain multiple bottles): 2 samples
7. Containers received: 2 vials; 2x4LP; 6x1LP

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have: tape [X] hazard labels [X] custody seals [X] appropriate sample labels [X]

10. Matrix: A (FLT, Wipe, Solid, Soil) [X] T (Water) [X] S (Air, Niosh 7400) [] T (Biological, Ni-63) []

11. Samples: are in good condition [X] are leaking [] are broken [] have air bubbles (Only for samples requiring no head space) [] Other []

12. Sample pH appropriate for analysis requested Yes [X] No [] NA [] (If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf) RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): NA [X]

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# W11-008-050			
Collector TONY VALERO CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 376-4650	Page 1 of 1			
SAF No. W11-008	Sampling Origin Hanford Site	Logbook No. HNF-N-506 39 / 86	Purchase Order/Charge Code 300071ES20	Ice Chest No. N/A			
Project Title RCRA, August 2011	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	Offsite Property No. N/A	Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Shipped To (Lab) TestAmerica Incorporated, Richland	Priority: 45 Days	SPECIAL INSTRUCTIONS Hold Time Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.					
Protocol RCRA	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)						
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2FL16	N	8/6/11	1337	1x20-mL P	Activity Scan	6 Months	None
B2FL16	N	↓	↓	3x1-L GIP	TC99_SEP_LSC: Tc-99 (1)	6 Months	HCl to pH <2

Quota # 57671
SDG # W06210
LOT # J1H100413
Report # 99211



Relinquished By TONY VALERO CHPRC	Print ZV/z	Date/Time 1500 AUG 04 2011	Received By SSU-1	Print	Sign	Date/Time 1500 AUG 04 2011	Matrix *
Relinquished By SSU-1		Date/Time AUG 08 2011 0830	Received By L.D. Wall CHPRC			Date/Time AUG 08 2011 0830	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid O = Oil A = Air
Relinquished By L.D. Wall CHPRC		Date/Time AUG 08 2011 1235	Received By L.D. Wall CHPRC			Date/Time AUG 08 2011 1235	SE = Sediment SO = Solid SL = Sludge W = Water V = Vegetation X = Other
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: 8/18/11 @ 1235 GM Screen Result: (Airlock): 04 Initials: HG (Sample Receiving): 02 Initials: HC Client: PGW SDG #: W06210 NA [] SAF #: W11-008 NA []

Lot Number: J11100413

Chain of Custody # W11-008-050

Shipping Container ID: Hand delivered NADP

Samples received inside shipping container/cooler/box Yes [HG] Continue with 1 through 4. Initial appropriate response.

No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal HC
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal HC
3. Cooler temperature: _____ °C NA [HG]
4. Vermiculite/packing materials is NA [] Wet [] Dry [HG]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [HG] No []
6. Number of samples received (Each sample may contain multiple bottles): 1 Sample
7. Containers received: 1 L x 3

8. Sample holding times exceeded? NA [] Yes [] No [HG]

9. Samples have: tape HC Hazard labels HC Custody seals HC appropriate sample labels HC

10. Matrix: A (FLT, Wipe, Solid, Soil) HC (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: HC are in good condition are leaking are broken have air bubbles (Only for samples requiring no head space) Other

12. Sample pH appropriate for analysis requested Yes [HG] No [] NA [] (If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf)

RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [HG]

14. Description of anomalies (include sample numbers): NA [HG]

CH2M Hill Plateau Remediation Company		C.O.C.# W11-008-059	
JP HERRICK CHPRC		Telephone No.	376-4650
Collector	Karen Waters-Husted	Purchase Order/Charge Code	300071ES20
SAF No.	W11-008	Ice Chest No.	N/A
Project Title	RCRA, August 2011	Bill of Lading/Air Bill No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Offsite Property No.	N/A
Protocol	RCRA	Priority:	45 Days
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

Sample No.	Filter	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FL61	N	8-9-11	0951	1x20-mL P	Activity Scan	MLJMO	6 Months	None
B2FL61	N			2x4-L GIP	1129LL_SEP_LEPS_GS_LL:1-129 (1)		6 Months	None
B2FL61	N			3x1-L GIP	TC99_SEP_LSC: Tc-99 (1)		6 Months	HCl to pH <2

Quote # 57671
 SDG # W06210
 LOT # J1H100449
 Report: 9/23/11



Relinquished By JP HERRICK CHPRC	Print [Signature]	Sign	Date/Time AUG 09 2011 1330	Received By SSU #1	Print [Signature]	Sign	Date/Time AUG 09 2011 1330	Matrix *
Relinquished By SSU-1	Print [Signature]	Sign	Date/Time AUG 10 2011 0740	Received By R. Julian CHPRC	Print [Signature]	Sign	Date/Time AUG 10 2011 0740	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By CHPRC	Print [Signature]	Sign	Date/Time AUG 10 2011 0740	Received By A. Carnes Haystack	Print [Signature]	Sign	Date/Time AUG 10 2011 0740	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By				Date/Time
FINAL SAMPLE DISPOSITION								

CH2M Hill Plateau Remediation Company		C.O.C.# W11-008-057 Page 1 of 1	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		Telephone No. 376-4650	Purchase Order/Charge Code 30007IES20
Collector JP HERRICK CHPRC	Contact/Requester Karen Waters-Husted	Sampling Origin Hanford Site	Ice Chest No. N/A
SAF No. W11-008	Logbook No. HNF-N-506 41 151	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Project Title RCRA, August 2011	Priority: 45 Days	SPECIAL INSTRUCTIONS Hold Time	Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Shipped To (Lab) TestAmerica Incorporated, Richland	POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Certain Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	Site: Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	Offsite Property No. N/A
Protocol RCRA	Sample No. B2FL51	Filter N	Holding Time 6 Months
Date 8-9-11	Time 10:30	No./Type Container 1x20-ml P	Preservative None
Date 8-9-11	Time 10:30	Activity Scan MLCM2	Preservative None
Date 8-9-11	Time 10:30	TC99_SEP_LSC: Tc-99 (1)	Holding Time 6 Months
Date 8-9-11	Time 10:30	Sample Analysis	Holding Time 6 Months

SDG# W06210
 LOT# J11100449

Relinquished By JP HERRICK CHPRC	Date/Time AUG 09 2011 1330	Received By SSU #1	Date/Time AUG 09 2011 1330	Sign	Print	Matrix *
Relinquished By SSU-1	Date/Time AUG 10 2011 0746	Received By FO Julian CHPRC	Date/Time AUG 10 2011 0746	Sign	Print	Matrix *
Relinquished By CHPRC	Date/Time AUG 10 2011 1240	Received By H. L. ...	Date/Time AUG 10 2011 1240	Sign	Print	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Sign	Print	Matrix *
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time	Disposed By	Date/Time	Matrix *



Sample Check-in List

Date/Time Received: 8/10/11 @ 1240 GM Screen Result: (Airlock) .05 Initials HGC (Sample Receiving) 104 Initials HGC

Client: PLW SDG #: W06210 NA [] SAF #: W11-008 NA []

Lot Number: J11100449

Chain of Custody # W11-008-054, 057, 075

Shipping Container ID: Hand delivered NA []

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal HGC
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal HGC
3. Cooler temperature: _____ °C NA [X]
4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [X] No []
6. Number of samples received (Each sample may contain multiple bottles): 3 samples
7. Containers received: 3X vials; 2X 4LP; 1X 1LP

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have: [X] tape [X] hazard labels [X] custody seals [X] appropriate sample labels

10. Matrix: _____ A (FLT, Wipe, Solid, Soil) [X] (Water) _____ S (Air, Niosh 7400) [X] T (Biological, Ni-63)

11. Samples: [X] are in good condition _____ are leaking _____ are broken _____ have air bubbles (Only for samples requiring no head space) _____ Other

12. Sample pH appropriate for analysis requested Yes [X] No [] NA [] (If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf) RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): NA [X]

CH2MHI Plateau Remediation Company		C.O.C.# 111-037-009	
JP HERRICK CHPRC		Page 1 of 1	
Collector	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	111-037	Purchase Order/Charge Code	300071ES20
Project Title	100 KR4, August 2011	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time 100 Area Generator Knowledge information Form applies. The CACN for all analytical work at WSCF is 401647.	
Filter *	Date	Sample Analysis	Holding Time
N W	08/11/11	MLKLV	24 Hours
N W	08/11/11	7196_CR6: Hexavalent Chromium (1)	6 Months
		Activity Scan	Preservative

SDG # 67671 W06210 LV 81V11
 LOT # J1H110473
 Report # 9/26/11


Relinquished By JP HERRICK CHPRC	From <i>[Signature]</i>	Date/Time AUG 1 1 2011	Sign <i>[Signature]</i>	Date/Time AUG 1 1 2011	Matrix *
Relinquished By AR M... [Signature]	From AR M... [Signature]	Date/Time AUG 1 1 2011	Sign <i>[Signature]</i>	Date/Time AUG 1 1 2011	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By AR M... [Signature]	From AR M... [Signature]	Date/Time AUG 1 1 2011	Sign <i>[Signature]</i>	Date/Time AUG 1 1 2011	
Relinquished By	From	Date/Time	Sign	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Date/Time	

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/11/11 @ 1330 GM Screen Result: (Airlock) .04 Initials HC
(Sample Receiving) .02 Initials HC
Client: HC 8/11/11 PCGW SDG #: W06210 NA [] SAF #: I11-037 NA []
037 SCS 8/11/11

Lot Number: JWH110473

Chain of Custody # I11-037-609

Shipping Container ID: hand delivered NA []

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [X]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [X]
- 3. Cooler temperature: 3 °C NA []
- 4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [X] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 1 sample
- 7. Containers received: 1 vial; 1 x 500 mL bag

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have:
[X] tape hazard labels
[X] custody seals appropriate sample labels

10. Matrix: [X] A (FLT, Wipe, Solid, Soil) [X] I (Water)
[] S (Air, Niosh 7400) [] T (Biological, Ni-63)

11. Samples: [X] are in good condition [] are leaking
[] are broken [] have air bubbles (Only for samples requiring no head space)
[] Other

12. Sample pH appropriate for analysis requested Yes [] No [] NA [X]
(If acidification is necessary, then document sample ID, initial pH, amount of HNO₃ added and pH after addition on table overleaf)
RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): NA [X]

CH2M Hill Plateau Remediation Company		C.O.C.# I11-039-011	
Collector: JOSHARTZER CHPRC		Contact/Requester: Karen Waters-Husted	Telephone No. 376-4650
SAF No. I11-039	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20	Page 1 of 1
Project Title: 22P1, August 2011	Logbook No. HNF-N-506 43 107	Ice Chest No. N/A	
Shipped To (Lab): <u>TestAmerica Incorporated, Richland</u>	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol: CERCLA	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			

Sample No.	Filter	* Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FKN5	N	W 08/23/11	0730	1x20-ml P	C14_LSC: C-14 (1)	MLKBI	6 Months	None
B2FKN5	N	W 08/23/11	↓	2x1-L GIP	1129LL_SEP_LEPS_GS_LL: 1-129 (1)		6 Months	None
B2FKN5	N	W 08/23/11	↓	2x4-L GIP	NP237_LLE_PLATE_AEA: Np-237(1)		6 Months	None
B2FKN5	N	W 08/23/11	↓	1x1-L GIP	Selenium-79		6 Months	HNO3 to pH <2
B2FKN5	N	W 08/23/11	0730	2x1-L GIP			6 Months	HNO3 to pH <2

W06210
 J1H110499
 Due 9-23-11
 9-23-11

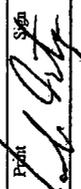
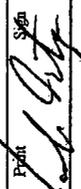
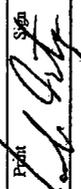
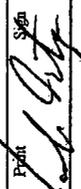


Requisitioned By: JOSHARTZER CHPRC	Print: [Signature]	Sign: [Signature]	Received By: [Signature]	Date/Time: AUG 09 2011	1435	Date/Time: AUG 09 2011	1435
Requisitioned By: SSU-1	Print: [Signature]	Sign: [Signature]	Received By: [Signature]	Date/Time: AUG 10 2011 0740		Date/Time: AUG 10 2011 0740	
Requisitioned By: CHPRC	Print: [Signature]	Sign: [Signature]	Received By: H. Carnes	Date/Time: AUG 10 2011 1440		Date/Time: AUG 10 2011 1440	
Requisitioned By:	Print:	Sign:	Received By:	Date/Time:		Date/Time:	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedures, used in process)		Disposed By		Date/Time	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 111-039-012
Collector JOSHARTZER SAF No. 111-039		Contact/Requester Karen Waters-Husted Sampling Origin Hanford Site		Telephone No. 376-4650 Purchase Order/Charge Code 300071ES20
Project Title 22P1, August 2011		Logbook No. INF-N-506 43 / 67		Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE		Bill of Lading/Air Bill No. N/A
Protocol CERCLA		Priority: 45 Days		Offsite Property No. N/A
SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information: Form applies. The CACN for all analytical work at WSCF is 401647.				
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)				

Sample No.	Filter	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FKNG	N	08/09/11	1019	1x20-mL P	C14_LSC: C-14 (1)	MUSIP	6 Months	None
B2FKNG	N	08/09/11	1019	2x1-L GIP	1129LL_SEP_LEPS_GS_LL: 1-129 (1)		6 Months	None
B2FKNG	N	08/09/11	1019	2x4-L GIP	NP237_LLE_PLATE_AEA-IP-237(1)		6 Months	None
B2FKNG	N	08/09/11	1019	1x1-L GIP	Selenium-79		6 Months	HNO3 to pH <2
B2FKNG	N	08/09/11	1019	2x1-L GIP			6 Months	HNO3 to pH <2

W006210
 J117110499
 Due 9.23.11


Relinquished By JOSHARTZER CHPRC	Print 	Date/Time AUG 09 2011	Received By SSU-1 #1	Sign [Signature]	Date/Time AUG 09 2011	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge W1 = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By SSU-1	Print 	Date/Time AUG 10 2011 0740	Received By RD Julian CHPRC	Sign [Signature]	Date/Time AUG 10 2011 0740	
Relinquished By CHPRC	Print 	Date/Time AUG 10 2011 0740	Received By H. Carnes Hayslee	Sign [Signature]	Date/Time AUG 10 2011 1240	
Relinquished By CHPRC	Print 	Date/Time AUG 10 2011 1240	Received By [Signature]	Sign [Signature]	Date/Time AUG 10 2011 1240	
FINAL SAMPLE DISPOSITION					Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Date/Time

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/10/11 @ 1240 GM Screen Result: (Airlock) 105 Initials HG (Sample Receiving) 04 Initials HJ

Client: PGW SDG #: W06210 NA [] SAF #: I11-039 NA []

Lot Number: Chain of Custody # I11-039-011; 012 SKS 8/16/11 I11-039-011, 012

Shipping Container ID: Hand delivered NA []

Samples received inside shipping container/cooler/box Yes [X] continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal HG
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal HC
3. Cooler temperature: _____ °C NA HG
4. Vermiculite/packing materials is NA [] Wet [] Dry HC

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes HG No []
6. Number of samples received (Each sample may contain multiple bottles) 2 Samples
7. Containers received: 2x Vial; 10x 1L; 4L x 4

8. Sample holding times exceeded? NA [] Yes [] No HG

9. Samples have: tape hazard labels HC custody seals HC appropriate sample labels HC

10. Matrix: A (FLT, Wipe, Solid, Soil) HC I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: are in good condition are broken are leaking have air bubbles (Only for samples requiring no head space)

12. Sample pH appropriate for analysis requested Yes HG No [] NA [] (If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf) RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No HG

14. Description of anomalies (include sample numbers): NA HG

CH2M Hill Plateau Remediation Company		C.O.C.# 111-039-009	
Collector S.J. Southerland CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. 111-039	Sampling Origin Hanford Site	Purchase Order/Charge Code	300071ES20
Project Title 2ZP1, August 2011	Logbook No. HNF-N-506 41152	Ice Chest No. N/A	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Sample No.	Filter *	Date	Time
B2FKLO	N	W 8/10/11	0857
B2FKLO	N	W	↓
No/Type Container		Sample Analysis	Hold Time
1x20-mL P		MLLTP	6 Months
2x4-L G/P		1129LL_SEP_LEPS_GS_LL: 1-129 (1)	6 Months
			Preservative
			None
			None

WD 6210
 J1A120507



Relinquished By S.J. Southerland CHPRC	Print	Step	Date/Time	Received By SSC #1	Print	Sign	Date/Time
			AUG 10 2011 1400				AUG 10 2011 1400
Relinquished By SJSU-1			AUG 11 2011 0730	ALWENTYRE / CHPRC			AUG 11 2011 0730
Relinquished By ALWENTYRE / CHPRC			AUG 11 2011 1330	A. Carnes Huffel			AUG 11 2011 1330
Relinquished By							
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time	

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

CH2M Hill Plateau Remediation Company		C.O.C.# 111-039-010 Page 1 of 1	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
Collector S.J. Southerland CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 576-4650	
SAP No. 111-039	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20	
Project Title ZZP1, August 2011	Logbook No. HNF-N-506 4/152	Ice Chest No. N/A	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Sample No.	Filter	Date	Time
B2FKL1	N	8/10/11	0859
B2FKL1	N	↓	↓
Sample Analysis		Holding Time	Preservative
MULLIQ		6 Months	None
1129LL_SEP_LEPS_GS_LL: 1129 (1)		6 Months	None

W006210
J1H120507



Requisitioned By S.J. Southerland CHPRC	Print SJC #1	Signature [Signature]	Date/Time AUG 10 2011 1400	Matrix *
Requisitioned By SSU-1	Received By AL MCINTYRE / CHPRC	Signature [Signature]	Date/Time AUG 11 2011 0700	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Requisitioned By AL MCINTYRE / CHPRC	Received By H. Carnes	Signature [Signature]	Date/Time AUG 11 2011 1330	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Requisitioned By	Received By	Signature	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/11/11 @ 1330 GM Screen Result: (Airlock) 106 Initials HC (Sample Receiving) 04 Initials HC

Client: PGW SDG #: W06210 NA [] SAF #: 11-039 NA []

Lot Number: J11120507

Chain of Custody # 11-039-009.0107 HC 8/11/11

Shipping Container ID: Hand delivered / NA GS

Samples received inside shipping container/cooler/box Yes [X] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [X]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [X]
3. Cooler temperature: _____ °C NA [X]
4. Vermiculite/packing materials is NA [] Wet [] Dry [X]

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [X] No []
6. Number of samples received (Each sample may contain multiple bottles): 2 Sample
7. Containers received: 2 vials, 4x4LP

8. Sample holding times exceeded? NA [] Yes [] No [X]

9. Samples have: tape hazard labels [X] appropriate sample labels [X]
custody seals

10. Matrix: A (FLT, Wipe, Solid, Soil) [X] I (Water)
S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [X] are in good condition are leaking
are broken have air bubbles (Only for samples requiring no head space)
Other

12. Sample pH appropriate for analysis requested Yes [X] No [] NA []
(If acidification is necessary, then document sample ID, initial pH, amount of HNO3 added and pH after addition on table overleaf)
RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No [X]

14. Description of anomalies (include sample numbers): NA [X]

CH2MHill Plateau Remediation Company		C.O.C.# 111-038-021	
Collector: S.J. Southerland CHPRC		Contact/Requester: Karen Waters-Husted	Telephone No. 376-4650
SAF No. 111-038		Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 2UPI, August 2011		Logbook No. HNF-N-506 44 / 52	Ice Chest No. N/A
Shipped To (Lab): TestAmerica Incorporated, Richland		Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol: CERCLA		Priority: 45 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Sample No.	Filter	* Date	Time
B2FKC3	N	8/10/11	1107
B2FKC3	N	↓	↓
Sample Analysis: MLMFLW		Hold Time	Preservative
1129LL_SEP_LEPS_GS_LL: 1129 (1)		6 Months	None
		6 Months	None

Quote # 57671
 SDG # 400494 W06210 SKS d/s/ll
 LOT # JH150413

Requisitioned By: S.J. Southerland CHPRC	Print: [Signature]	Received By: SSC #1	Sign: [Signature]	Date/Time: AUG 10 2011 1400	Matrix * S = Soil, DS = Drum Solids, SE = Sediment, DL = Drum Liquids, SO = Solid, T = Tissue, SL = Sludge, WI = Wipe, W = Water, L = Liquid, O = Oil, V = Vegetation, A = Air, X = Other
Requisitioned By: SSU-1	Print: [Signature]	Received By: AL MONTYRE / CHPRC	Sign: [Signature]	Date/Time: AUG 11 2011 0700	
Requisitioned By: AL MONTYRE / CHPRC	Print: [Signature]	Received By: [Signature]	Sign: [Signature]	Date/Time: AUG 11 2011 1330	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Date/Time	

CH2MHill Plateau Remediation Company		C.O.C.# 111-038-027	
Collector R.J. Ramirez CHRPC		Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. 111-038		Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20
Project Title 2UP1, August 2011		Logbook No. HNF-N-506 421 6	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol CERCLA		Priority: 45 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	
Sample No.	Filter	Date	Time
B2FKH2	N	08/10/11	1249
B2FKH2	N	08/12/11	1249
Sample Analysis		MLA8H	
Activity Scan		1129LL_SEP_LEPS_GS_LL: 1-129 (1)	
Holding Time		6 Months	
Preservative		None	
Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

Quote # 57671
 SDG # ~~106674~~ WOB 6210 SES 8/15/11
 LOT # J1H 150413
 Report: 9/26/11

Requisition # CHRPC	Print R.J. Ramirez	Sign [Signature]	Date/Time AUG 10 2011 1356	Received By SSU-1	Print [Signature]	Sign [Signature]	Date/Time AUG 10 2011 1356
Requisition # SSU-1	Print [Signature]	Sign [Signature]	Date/Time AUG 11 2011 0700	Received By [Signature]	Print CHRPC	Sign [Signature]	Date/Time AUG 11 2011 0700
Requisition # CHRPC	Print [Signature]	Sign [Signature]	Date/Time AUG 11 2011 1330	Received By [Signature]	Print [Signature]	Sign [Signature]	Date/Time AUG 11 2011 1330
Requisitioned By		Date/Time		Received By		Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time	

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

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# III-038-029
Collector R.J. Ramirez CHRPC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650	Page 1 of 1	
SAF No. III-038	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20		
Project Title 2UP1, August 2011	Logbook No. HNF-N-506 /	Ice Chest No. N/A		
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A		
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A		
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	Hold Time Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample No.	Filter	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FKJ0	N	8/10/11	0730	1x20-mL P	Activity Scan	M MBI	6 Months	None
B2FKJ0	N	8/10/11	1	2x1-L GIP	C14_LSC: C-14 (1)		6 Months	None
B2FKJ0	N	8/10/11	0730	2x4-L GIP	1129LL_SEP_LEPS_GS_LL: 1-129 (1)		6 Months	None

SDG # 620676 W06210 SCS 8/15/11
 LOT # JH150W13

Reinquished By R.J. Ramirez CHRPC	Print [Signature]	Date/Time 3/24 AUG 1 0 2011	Received By SSU-1	Sign [Signature]	Date/Time 3/26 AUG 1 0 2011	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Reinquished By AL MONTYRE / CHRPC	Print [Signature]	Date/Time 8/11/11 AUG 1 2 2011	Received By AL MONTYRE / CHRPC	Sign [Signature]	Date/Time 8/11/11 AUG 1 1 2011	
Reinquished By [Signature]	Print [Signature]	Date/Time 8/11/11 AUG 1 1 2011	Received By [Signature]	Sign [Signature]	Date/Time 8/11/11 AUG 1 1 2011	
Reinquished By [Signature]	Print [Signature]	Date/Time 8/11/11 AUG 1 1 2011	Received By [Signature]	Sign [Signature]	Date/Time 8/11/11 AUG 1 1 2011	
FINAL SAMPLE DISPOSITION			Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Date/Time

CH2M Hill Plateau Remediation Company		C.O.C.# 111-038-030	
Collector: R.J. Ramirez CHRPC		Contact/Requester: Karen Waters-Husted	Telephone No. 376-4650
SAF No. 111-038	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20	Page 1 of 1
Project Title: 2UP1, August 2011	Logbook No. HNF-N-506 421 L	Ice Chest No. N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol: CERCLA	Priority: 45 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		SPECIAL INSTRUCTIONS Hold Time <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes 200 Area Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	

Sample No.	Filter	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Holding Time	Preservative
B2FKJ1	N	08/01/11	1109	1x20-mL P	C14_LSC: C-14 (1)	ML-M8X	6 Months	None
B2FKJ1	N	'	1	2x1-L G/P			6 Months	None
B2FKJ1	N	08/01/11	1109	2x4-L G/P	129LL_SEP_LEPS_GS_LL: 1-129 (1)		6 Months	None

SDG # 100624 W06210 SKS 8/15/11
 LOT # JH150413

Relinquished By: R.J. Ramirez CHRPC	Print: [Signature]	Sign: [Signature]	Date/Time: 1366 AUG 1 0 2011	Received By: SSU-1	Print: [Signature]	Sign: [Signature]	Date/Time: 1366 AUG 1 0 2011	Matrix * S = Soil, DS = Drum Solids, SE = Sediment, DL = Drum Liquids, SO = Solid, T = Tissue, SL = Sludge, WI = Wipe, W = Water, L = Liquid, O = Oil, A = Air, V = Vegetation, X = Other
Relinquished By: SSU-1	Print: [Signature]	Sign: [Signature]	Date/Time: 1366 AUG 1 1 2011	Received By: RALPH MCINTYRE / CHRPC	Print: [Signature]	Sign: [Signature]	Date/Time: 1366 AUG 1 1 2011	
Relinquished By: RALPH MCINTYRE / CHRPC	Print: [Signature]	Sign: [Signature]	Date/Time: 1330 AUG 1 1 2011	Received By: H. Waters Husted	Print: [Signature]	Sign: [Signature]	Date/Time: 1330 AUG 1 1 2011	
Relinquished By:	Print:	Sign:	Date/Time:	Received By:	Print:	Sign:	Date/Time:	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time

OCTOBER 13, 2011



Sample Check-in List

Date/Time Received: 8/11/10 1330 GM Screen Result: (Airlock) 06 Initials HC
(Sample Receiving) 04 Initials HC

Client: PGW SDG #: W06210 NA [] SAF #: I11-038 NA []
~~W06210~~ 8/11/11

Lot Number: J11150413

Chain of Custody # I11-038-027; 030; 026; 029; 021

Shipping Container ID: Hand delivered NA 405

Samples received inside shipping container/cooler/box Yes Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal
- 3. Cooler temperature: _____ °C NA
- 4. Vermiculite/packing materials is NA [] Wet [] Dry

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes No []
- 6. Number of samples received (Each sample may contain multiple bottles): 5 samples
- 7. Containers received: 5 rinses; 10x4LP; 4xLP

8. Sample holding times exceeded? NA [] Yes [] No

9. Samples have:
 tape custody seals hazard labels appropriate sample labels

10. Matrix:
____ A (FLT, Wipe, Solid, Soil) (Water)
____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples: are in good condition _____ are leaking
_____ are broken _____ have air bubbles (Only for samples requiring no head space)
Other _____

12. Sample pH appropriate for analysis requested Yes No [] NA []
(If acidification is necessary, then document sample ID, initial pH, amount of HNO₃ added and pH after addition on table overleaf)

RPL ID # of preservative used: N/A

13. Were any anomalies identified in sample receipt? Yes [] No

14. Description of anomalies (include sample numbers): NA

Sample Preparation/Analysis									
8/25/2011 12:23:47 PM		Pacific Northwest National Laboratory		KO Np-237 Prp PRP010, Sep ALP006(ALP016)		Balance Id: 1120482733		Pipet #:	
Pacific Northwest National Lab		XW Neptunium-237 with tracer by alpha spec		51 CLIENT: HANFORD		Sep1 DT/Tm Tech: 11:15 am		9/13/11 SL	
AnalyteDueDate: 09/26/2011		WATER		PM, Quote: SS, 57671		Sep2 DT/Tm Tech:		Prep Tech: ,Hayesa	
Batch: 1230082		All Tests: 1230078 BNTB, 1230082 KOXW, 1230083 CYTM, 1230084 5SS3.		QC Tracer		Dish Size		Ppt or Geometry	
SEQ Batch, Test: None		Initial Aliquot Amt/Unit		Adj Aliq Amt (Un-Acidified)		Prep Date		Dish Size	
Total Amt /Unit		Total Acidified/Unit		AmfRec: 1XVIAL:5XLP:2X4LP		#Containers: 8		AmfRec: 1XVIAL:5XLP:2X4LP	
Work Ord, Lot, Sample Date		Total Amt /Unit		AmfRec: 1XVIAL:5XLP:2X4LP		#Containers: 8		AmfRec: 1XVIAL:5XLP:2X4LP	
1 MLKR1-1-AA		199.90g,in		200.80g,in		200.80g,in		200.80g,in	
J1H110499-1-SAMP		07/07/11,pd		07/07/11,pd		07/07/11,pd		07/07/11,pd	
08/09/2011 07:30		09/17/08,r		09/17/08,r		09/17/08,r		09/17/08,r	
2 MLKR1-1-AF-X		199.70g,in		200.50g,in		200.50g,in		200.50g,in	
J1H110499-1-DUP		07/07/11,pd		07/07/11,pd		07/07/11,pd		07/07/11,pd	
08/09/2011 07:30		09/17/08,r		09/17/08,r		09/17/08,r		09/17/08,r	
3 MLKTP-1-AA		199.70g,in		200.50g,in		200.50g,in		200.50g,in	
J1H110499-2-SAMP		07/07/11,pd		07/07/11,pd		07/07/11,pd		07/07/11,pd	
08/09/2011 10:19		09/17/08,r		09/17/08,r		09/17/08,r		09/17/08,r	
4 MLRTR-1-AA-B		199.50g,in		200.50g,in		200.50g,in		200.50g,in	
J1H180000-82-BLK		07/07/11,pd		07/07/11,pd		07/07/11,pd		07/07/11,pd	
08/18/2011 09:55 pd		09/17/08,r		09/17/08,r		09/17/08,r		09/17/08,r	
5 MLRTR-1-AC-C		199.50g,in		200.50g,in		200.50g,in		200.50g,in	
J1H180000-82-LCS		07/07/11,pd		07/07/11,pd		07/07/11,pd		07/07/11,pd	
08/18/2011 09:55 pd		09/17/08,r		09/17/08,r		09/17/08,r		09/17/08,r	
Comments: PHCZ AM Aug. 25 11 Scr: Alpha: -5.78E-04 uCi/Sa Beta: -5.23E-04 uCi/Sa Scr: Alpha: -5.78E-04 uCi/Sa Beta: -5.23E-04 uCi/Sa Scr: Alpha: -2.18E-03 uCi/Sa Beta: 1.57E-03 uCi/Sa Scr: Alpha: Beta: Scr: Alpha: Beta:									
All Clients for Batch: 384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS, 57671 MLKR11AA-SAMP Constituent List: Np-237 RDL: 0.6 PCi/L LCL: UCL: RPD: TestAmerica Key: In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.56									

8/18/2011 9:56:30 AM **Sample Preparation/Analysis** Balance Id: _____
 KO Np-237 P/p PRP010, Sep ALP006(ALP016) Pipet #: _____
 XW Neptunium-237 with tracer by alpha spec
 5I CLIENT: HANFORD Sep1 DT/Tm Tech: _____
 Sep2 DT/Tm Tech: _____
 AnalyzeDate: 09/26/2011 pCi/L
 Batch: 1230082
 SEQ Batch, Test: None

Work Ord, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
MLTR1AA-BLK:												
MLTR1AC-ICS:												
MLTR1AA-SMP Calc Info:												
Uncert Level (#s) : 2			Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y							ODRs: B
MLTR1AA-BLK:												
Uncert Level (#s) : 2			Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y							ODRs: B
MLTR1AC-ICS:												
Uncert Level (#s) : 2			Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y							ODRs: B

TestAmerica Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
 Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added
 ISV - Insufficient Volume for Analysis
 WO Cnt: 5
 ICOC v4.8.49

OCTOBER 13, 2011

9/21/2011 12:11:01 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/21/2010, 9/26/2011, Batch: '1230082', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
1230082				
AC	Rev1C	HayesA	8/25/2011 12:26:06	
SC		MaucierS	IsBatched 8/18/2011 10:05:56 AM	ICOC_RADCALC v4.8.49
SC		HayesA	Prep1C 8/25/2011 12:26:06 PM	RL-PRP-004 REVISION 1
SC		HayesA	Prep2C 8/25/2011 3:51:42 PM	RL-PRP-010 REVISION 1
SC		LuksicS	Sep2C 9/14/2011 9:01:12 AM	RL-ALP-016 REVISION 1
SC		ClarkR	InCnt1 9/14/2011 9:05:56 AM	RL-CI-008 REVISION 1
SC		DawkinsO	CalcC 9/14/2011 10:42:05 PM	RL-CI-008 REVISION 1
SC		antonsonI	Rev1C 9/21/2011 12:10:55 PM	RL-DH-001 Rev 2
AC		HayesA	8/25/2011 3:51:42 PM	
AC		LuksicS	9/14/2011 9:01:12	
AC		ClarkR	9/14/2011 9:05:56	
AC		DawkinsO	9/14/2011 10:42:05	
AC		antonsonI	9/21/2011 12:10:55	

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

Page 1

Grp Rec Cnt: 6
ICOCFractions v4,8,44

Sample Preparation/Analysis										
8/22/2011 12:06:33 PM		BN I-129 Prp/Sep GAM002		Balance Id: 1120482733		Pipet #:				
384868, Pacific Northwest National Laboratory		TB Gamma by LEPD		PM, Quote: SS, 57671		Sep1 DT/Tm Tech:				
Pacific Northwest National Lab		51 CLIENT: HANFORD				Sep2 DT/Tm Tech:				
AnalytDueDate: 09/26/2011		WATER		pCi/L		Prep Tech: Nyem				
SEQ Batch, Test: None		All Tests: 1230078 BNTB,								
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 MLFN8-1-AA	3733.10g.in	ITA11084	07/21/11			200	L4	0155	9/1/110A	
J1H050496-1-SAMP										
08/02/2011 12:52										
2 MLFN8-1-AC-X	3732.10g.in	ITA11085	07/21/11				L4	0586	9/6/11	Beta: 5.38E-04 uCi/Sa
J1H050496-1-DUP										
08/02/2011 12:52										
3 MLFN9-1-AA	3810.80g.in	ITA11086	07/21/11				L6	0557		Beta: 5.38E-04 uCi/Sa
J1H050496-2-SAMP										
08/02/2011 11:42										
4 MLFP0-1-AA	3706.90g.in	ITA11087	07/21/11				L4	0920	9/2/11	Beta: 1.94E-04 uCi/Sa
J1H050498-1-SAMP										
08/02/2011 07:45										
5 MLFP1-1-AA	3753.00g.in	ITA11088	07/21/11				L5	0521		Beta: -1.28E-03 uCi/Sa
J1H050498-2-SAMP										
08/02/2011 09:12										
6 MLHMN-1-AA	3742.50g.in	ITA11089	07/21/11				L4	1295	9/2/11	Beta: -1.51E-03 uCi/Sa
J1H090497-2-SAMP										
08/08/2011 10:25										
7 MLJMD-1-AA	350.30g.in	ITA11090	07/21/11				L5	1246		Beta: 3.55E-04 uCi/Sa
J1H100449-1-SAMP										
08/09/2011 09:51										
										Beta: 9.19E-04 uCi/Sa

TestAmerica Key: In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep 1, s2 - Sep 2 Page 1
 Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added
 ISV - Insufficient Volume for Analysis
 WO Cnt: 7
 Prep_SamplePrep v4.8.56

Sample Preparation/Analysis										
Balance Id: 1120482733		Pipet #:		CR Analyst, Init/Date		Count On Off (24hr) Circle		Comments:		
384868, Pacific Northwest National Laboratory		BN I-129 Pip/Sep GAM002								
Pacific Northwest National Lab		TB Gamma by LEPD								
Analyte: 137Cs		PM, Quote: SS, 57671								
Batch: 1230078 WATER		pCi/L								
SEQ Batch, Test: None										
Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MLKR1-1-AD		3770.10g.in	ITA11091 07/21/11			208	24	1609	9/2/11	Beta: -5.23E-04 uCi/Sa
J1H110499-1-SAMP										
08/09/2011 07:30										
9 MLKTP-1-AD		3826.90g.in	ITA11092 07/21/11							Beta: -5.23E-04 uCi/Sa
J1H110499-2-SAMP										
08/09/2011 10:19										
10 MLL7P-1-AA		3631.30g.in	ITA11093 07/21/11							Beta: 1.57E-03 uCi/Sa
J1H120507-1-SAMP										
08/10/2011 08:59										
11 MLL7Q-1-AA		3635.60g.in	ITA11094 07/21/11							Beta: 4.47E-04 uCi/Sa
J1H120507-2-SAMP										
08/10/2011 08:59										
12 MLM7V-1-AA		3694.10g.in	ITA11095 07/21/11							Beta: -9.25E-04 uCi/Sa
J1H150413-1-SAMP										
08/10/2011 11:07										
13 MLM7W-1-AA		3739.30g.in	ITA11096 07/21/11							Beta: 1.05E-04 uCi/Sa
J1H150413-2-SAMP										
08/10/2011 11:07										
14 MLM8H-1-AA		3838.30g.in	ITA11097 07/21/11							Beta: 7.06E-04 uCi/Sa
J1H150413-3-SAMP										
08/10/2011 12:49										

8/22/2011 12:06:35 PM		Sample Preparation/Analysis		Balance Id: 1120482733						
384868, Pacific Northwest National Laboratory		BN I-129 Prp/Sep GAM002		Pipet #:						
Pacific Northwest National Lab		TB Gamma by LEPD		Sep1 DT/Tm Tech:						
Analyte: I-129		SI CLIENT: HANFORD		Sep2 DT/Tm Tech:						
Batch: 1290078		WATER		Prep Tech: NyeM						
SEQ Batch, Test: None		pCi/L		PM, Quote: SS, 57671						
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 MLM8J-1-AC	3898.60g.in	ITA11098	07/21/11			200	US	1019	9/3/11	
J1H150413-4-SAMP						0.1130 g				
08/10/2011 07:30						0.0536 g				
16 MLM8K-1-AC	3913.70g.in	ITA11099	07/21/11			0.1179 g		1344		Beta: 5.63E-04 uCi/Sa
J1H150413-5-SAMP						0.0550 g				
08/10/2011 11:09						0.329 mg				
17 MLRTP-1-AA-B	3486.60g.in	ITA11100	07/21/11			0.1161 g		1344		Beta: 9.91E-04 uCi/Sa
J1H180000-78-BLK						0.0547 g				
08/18/2011 09:55 pd						31.8 mg				
18 MLRTP-1-AC-C	3410.30g.in	ISD1266	07/06/11			0.1145 g		1104	9/15/11	
J1H180000-78-LCS						0.0539 g				
08/18/2011 09:55 pd						30.6 mg				

Comments: MLJMO-SAMP "I-129: reduce sample pour to 350mL due to rad-screen. -8/22/11 MN"

PH 72 - 8/22/11 MN

All Clients for Batch:		Pacific Northwest National Laboratory		Pacific Northwest National Lab, SS, 57671	
MLFNS1AA-SAMP	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
I-129					
MLRTP1AA-BLK:	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
I-129					
MLRTP1AC-LCS:	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20
I-129					
MLFNS1AA-SAMP	Calc Info:				
TestAmerica	Key: in - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2	Page 3	ISV - Insufficient Volume for Analysis	WO Cnt: 18	Prep_SamplePrep v4.6.S6
Richland Wa.	pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added				

8/22/2011 12:06:36 PM **Sample Preparation/Analysis** Balance Id:1120482733

BN I-129 Prp/Sep GAM002
 TB Gamma by LEPD
 5I CLIENT: HANFORD

AnalyDueDate: 09/26/2011
 Batch: 1230078
 SEQ Batch, Test: None

Prep Tech: NYeM

Sep1 DT/Tm Tech: _____
 Sep2 DT/Tm Tech: _____

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

MLRTP1AA-BLK:
 MLRTP1AC-LCS:

TestAmerica Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 4
 Richland Wa. pd - Prep Dt, dc - Data Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added
 ISV - Insufficient Volume for Analysis
 WO Cnt: 18
 Prep_SamplePrep v4.8.56

OCTOBER 13, 2011

9/7/2011 11:57:46 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/7/2010, 9/12/2011, Batch: '1230078', User: 'ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
	1230078				
AC		Rev1C	NyeM	8/22/2011 11:13:38	
SC			MaucieriS	IsBatched 8/18/2011 10:05:45 AM	ICOC_RADCALC v4.8.49
SC			NyeM	Prep1C 8/22/2011 11:13:38 AM	RL-PRP-004 REVISION 1
SC			NyeM	InPrep 8/22/2011 11:17:17 AM	RL-PRP-004 REVISION 1
SC			NyeM	Prep2C 9/1/2011 12:24:35 PM	RL-GAM-002 REVISION 1
SC			ClarkR	InCnt1 9/1/2011 12:26:14 PM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC 9/6/2011 9:27:53 AM	RL-CI-007 REVISION 1
SC			nortonj	Rev1C 9/7/2011 11:57:38 AM	RL-DR-001 Rev 2
AC			NyeM	8/22/2011 11:17:17	
AC			NyeM	9/1/2011 12:24:35 PM	
AC			ClarkR	9/1/2011 12:26:14 PM	
AC			BlackCL	9/6/2011 9:27:53 AM	
AC			nortonj	9/7/2011 11:57:38	

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

Sample Preparation/Analysis									
8/25/2011 9:19:44 AM		Balance Id:1120482733		Pipet #:		Sep1 DT/Tm Tech:		Sep2 DT/Tm Tech:	
394868, Pacific Northwest National Laboratory		AM Tc-99 Prp/Sep LSC013		S5 Technetium-99 by Liquid Scint		51 CLIENT: HANFORD		Prep Tech: ,Hayesa	
Pacific Northwest National Lab		PM, Quote: SS , 57671		Count Time Min		Detector Id		Count On Off (24hr) Circle	
AnalyteDueDate: 09/26/2011		pCi/L		QC Tracer Prep Date		Initial Aliquot Amt/Unit		Scr: Alpha: 4.15E-04 uCi/Sa Beta: -1.28E-03 uCi/Sa	
Batch: 1230080 WATER		All Tests: 1230078 BNTB, 1230080 AMS5,		#Containers: 6		2 MLFP0-1-AC		125.20g.in	
SEQ Batch, Test: None		Total Amt/Unit		AmiRec: 2XVIAL;3XLP;2X4LP		J1H050498-1-SAMP		08/02/2011 07:45	
Work Order, Lot, Sample Date/Time		Initial Aliquot Amt/Unit		#Containers: 6		2 MLFP1-1-AC		124.70g.in	
J1H050498-2-SAMP		AmiRec: 2XVIAL;3XLP;2X4LP		#Containers: 6		J1H050497-1-SAMP		08/02/2011 09:12	
08/02/2011 09:12		Total Amt/Unit		#Containers: 4		3 MLHL-1-AA		124.70g.in	
J1H090497-2-SAMP		AmiRec: 1XVIAL;3XLP;4XLP		#Containers: 4		J1H090497-1-SAMP		08/08/2011 09:37	
08/08/2011 09:37		Initial Aliquot Amt/Unit		#Containers: 6		4 MLHMN-1-AC		126.00g.in	
J1H090497-1-SAMP		AmiRec: 1XVIAL;3XLP;4XLP		#Containers: 6		J1H090497-2-SAMP		08/08/2011 10:25	
08/08/2011 10:25		Total Amt/Unit		#Containers: 4		5 MLH55-1-AA		125.70g.in	
J1H100413-1-SAMP		AmiRec: 1XVIAL;3XLP		#Containers: 4		J1H100413-1-SAMP		08/04/2011 13:37	
08/04/2011 13:37		Initial Aliquot Amt/Unit		#Containers: 6		6 MLJM0-1-AC		101.40g.in	
J1H100449-1-SAMP		AmiRec: 1XVIAL;3XLP		#Containers: 6		J1H100449-1-SAMP		08/09/2011 09:51	
08/09/2011 09:51		Total Amt/Unit		#Containers: 6		7 MLJM0-1-AD-X		99.20g.in	
J1H100449-1-DUP		AmiRec: 1XVIAL;3XLP		#Containers: 6		J1H100449-1-DUP		08/09/2011 09:51	
08/09/2011 09:51		Initial Aliquot Amt/Unit		#Containers: 6		Scr: Alpha: 2.09E-03 uCi/Sa 2.6E-01L Beta: 7.77E-06 uCi/Sa		Scr: Alpha: 2.10E-02 uCi/Sa 9.4E-02L Beta: -9.19E-04 uCi/Sa	
Scr: Alpha: 2.09E-03 uCi/Sa 2.6E-01L Beta: 7.77E-06 uCi/Sa		Scr: Alpha: 2.10E-02 uCi/Sa 9.4E-02L Beta: -9.19E-04 uCi/Sa		Scr: Alpha: 2.10E-02 uCi/Sa 9.4E-02L Beta: -9.19E-04 uCi/Sa		Scr: Alpha: 2.10E-02 uCi/Sa 9.4E-02L Beta: -9.19E-04 uCi/Sa		Scr: Alpha: 2.10E-02 uCi/Sa 9.4E-02L Beta: -9.19E-04 uCi/Sa	

8/25/2011 9:19:45 AM		Sample Preparation/Analysis		Balance Id: 1120482733					
38468, Pacific Northwest National Laboratory		AM Tc-99 Prp/Sep LSC013		Pipet #:					
Pacific Northwest National Lab		S5 Technetium-99 by Liquid Scint		Sep1 DT/Tm Tech:					
Analyte Due Date: 09/26/2011		51 CLIENT: HANFORD		Sep2 DT/Tm Tech:					
Batch: 1230080 WATER		PM, Quote: SS, 57671		Prep Tech: , HayesA					
SEQ Batch, Test: None		pC/L							
Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Alliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
8 MLJM2-1-AA		124.70g.in							
J1H100449-2-SAMP									
08/09/2011 10:30									
9 MLJM2-1-ACS		124.90g.in							
J1H100449-2-MS									
08/09/2011 10:30									
10 MLJM5-1-AA		126.30g.in							
J1H100449-3-SAMP									
08/09/2011 12:40									
11 MLRTQ-1-AA-B		125.00g.in							
J1H180000-80-BLK									
08/18/2011 09:55 pd									
12 MLRTQ-1-AC-C		125.00g.in							
J1H180000-80-LCS									
08/18/2011 09:55 pd									
13 MLRTQ-1-AD-BN		125.99g.in							
J1H180000-80-IBLK									
08/18/2011 09:55 pd									
14 MLRTQ-1-AE-BN									
J1H180000-80-IBLK									
08/18/2011 09:55 pd									
TestAmerica		Key: In - Initial Armt, fi - Final Armt, di - Diluted Armt, s1 - Sep1, s2 - Sep2		Page 2		ISV - Insufficient Volume for Analysis		WO Cnt: 14	
Richland Wa.		pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Cocktailed Added						Prep_SamplePrep v4.8.56	

8/25/2011 9:19:46 AM		Sample Preparation/Analysis		Balance Id: 1120482733	
Analyte Due Date: 09/26/2011		AM Tc-99 Prp/Sep LSC013		Pipet #:	
Batch: 1230080		S5 Technetium-99 by Liquid Scint		Sep1 DT/Tm Tech:	
SEQ Batch, Test: None		51 CLIENT: HANFORD		Sep2 DT/Tm Tech:	
pCi/L		QC Tracer		Prep Tech: ,Hayesa	
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
Comments: MLJMO-SAMP *1-129: reduce sample pour to 350mL due to rad-screen, -8/22/11 MN* PHLZ AH Aug. 25.11 Sample 6 is 7 diluted to 100 ml because of screen AH Aug. 25.11 All Clients for Batch: Pacific Northwest National Laboratory SS , 57671 384868, Pacific Northwest National Laboratory					
MLFP01AC-SAMP Constituent List: Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20 MLJMO21AC-MS: MLRTQ1AA-BLK: Tc-99 RDL:1.50E+01 pCi/L UCL: RPD: MLRTQ1AC-LCS: Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20 MLRTQ1AD-IBLK: Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD: MLRTQ1AE-IBLK: Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD: MLFP01AC-SAMP Calc Info: Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B					
TestAmerica	Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2	Page 3	ISV - Insufficient Volume for Analysis	WO Cnt: 14	Prep_SamplePrep v4.8.56
Richland Wa.	pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added				

OCTOBER 13, 2011

10/10/2011 11:24:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 10/10/2010, 10/15/2011, Batch: '1230080', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
1230080				
AC	Rev1C	HayesA	8/25/2011 9:21:17	
SC		MaucieriS	IsBatched	8/18/2011 10:05:51 AM
SC		HayesA	Prep1C	8/25/2011 9:21:17 AM
SC		NyeM	Sep2C	9/12/2011 2:25:20 PM
SC		ClarkR	InCnt1	9/12/2011 2:46:52 PM
SC		ClarkR	CalcC	9/14/2011 2:29:02 PM
SC		antonsonI	Rev1C	10/10/2011 11:23:43 AM
AC		NyeM	9/12/2011 2:25:20 PM	ICOC_RADCALC v4.8.49
AC		ClarkR	9/12/2011 2:46:52 PM	RL-PRP-004 REVISION 1
AC		ClarkR	9/14/2011 2:29:02 PM	RL-LSC-013 REVISION 1
AC		antonsonI	10/10/2011 11:23:43	RL-CI-005 REVISION 1
				RL-DR-001 Rev 2

AC: Accepting Entry, SC: Status Change

TestAmerica Richland
Richland Wa.

OCTOBER 13, 2011

PRIORITY

*** RE-ANALYSIS REQUEST ***

DUE DATE 9/26/11

CUSTOMER P&W

ANALYSIS TC99

MATRIX Water

LOT NUMBER J1H105449

SAMPLE DELIVERY GROUP _____

OLD BATCH NUMBER 1230080

NEW BATCH NUMBER 1277187

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) MLJma1AA		209910ms
2) MLJma1AC		please repair @ 50ms
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.

10/7/2011 12:23:10 PM		Sample Preparation/Analysis		Balance Id: 1120482733			
384868, Pacific Northwest National Laboratory		AM Tc-99 Pp/Sep LSC013		Pipet #:			
Pacific Northwest National Lab		S5 Technetium-99 by Liquid Scint		Sep1 DT/Tm Tech:			
AnalyteDueDate: 09/26/2011		5I CLIENT: HANFORD		Sep2 DT/Tm Tech:			
Batch: 1277187 WATER		PCIL		Prep Tech: ,Luksics			
SEQ Batch, Test: None		All Tests: 1230078 BNTB, 1230080 AMSS, 1277187 AMSS,		CR Analyst, Init/Date			
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	Comments:
1 MLJM2-2-AA	51.50g,in						
J1H100449-2-SAMP							
08/09/2011 10:30		AmtRec: 1XVIAL-3XLP					Scr: Alpha: 1.96E-03 uCi/Sa 2.8E-01L Beta: 4.02E-05 uCi/Sa
2 MLJM2-2-AC-S	51.80g,in						
J1H100449-2-MS							
08/09/2011 10:30		AmtRec: 1XVIAL-3XLP					Scr: Alpha: 1.96E-03 uCi/Sa 2.8E-01L Beta: 4.02E-05 uCi/Sa
3 MMX74-1-AA-B	127.50g,in						
J1J040000-187-BLK							
10/04/2011 16:34 pd		AmtRec					Scr: Alpha: 1.96E-03 uCi/Sa 2.8E-01L Beta: 4.02E-05 uCi/Sa
4 MMX74-1-AC-C	125.20g,in						
J1J040000-187-LCS							
10/04/2011 16:34 pd		AmtRec					Scr: Alpha: 1.96E-03 uCi/Sa 2.8E-01L Beta: 4.02E-05 uCi/Sa
5 MMX74-1-AD-BN							
J1J040000-187-IBLK							
10/06/2011 08:07 pd		AmtRec					Scr: Alpha: 1.96E-03 uCi/Sa 2.8E-01L Beta: 4.02E-05 uCi/Sa
Comments:							
All Clients for Batch: Pacific Northwest National Laboratory SS / 57671							
384868, Pacific Northwest National Laboratory							
MLJM22AA-SAMP Constituent List:							
Tc-99	RDL: 1.50E+01	PCi/L	ICL: 70	DCL: 130	REP: 20		
TestAmerica	Key: In - Initial Amt, fl - Final Amt, dl - Diluted Amt, s1 - Sep1, s2 - Sep2	Richland Wa.		pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added		WO Cnt: 5	
						ICOC v4.8.49	

Sample Preparation/Analysis		Balance Id:	
AM Tc-99 Prp/Sep LSC013 S5 Technetium-99 by Liquid Scint 5I CLIENT: HANFORD		Pipet #:	
AnalyzDueDate: 09/26/2011		Sep1 DT/Tm Tech:	
Batch: 1277187		Sep2 DT/Tm Tech:	
SEQ Batch, Test: None		Prep Tech:	
	pCi/L	CR Analyst, Init/Date	
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
			Comments:

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	Comments:
MLJM22AC-MS Constituent List:							
MMX741AA-BLK: Tc-99	RDL:1.50E+01	pCi/L	LCL:	UCL:	REP:		
MMX741AC-LCS: Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	REP:20		
MMX741AD-IBLK: Tc-99	RDL:1.50E+01	pCi/L	LCL:	UCL:	REP:		
MLJM22AA-SAMP Calc Info:	Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subst.: N	Sci.Not.: Y	ODRs: B		
MLJM22AC-MS Calc Info:	Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subst.: N	Sci.Not.: Y	ODRs: B		
MMX741AA-BLK:	Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subst.: N	Sci.Not.: Y	ODRs: B		
MMX741AC-LCS:	Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subst.: N	Sci.Not.: Y	ODRs: B		
MMX741AD-IBLK:	Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subst.: N	Sci.Not.: Y	ODRs: B		

10/10/2011 11:18:06 AM

ICOC Fraction Transfer/Status Report

ByDate: 10/10/2010, 10/15/2011, Batch: '1277187', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments	
1277187					
AC	Rev1C	LuksicS	10/5/2011 2:35:43 PM		
SC		luksics	IsBatched	10/5/2011 1:52:45 PM	ICOC_RADCALC v4.8.49
SC		LuksicS	Prep1C	10/5/2011 2:35:43 PM	RL-PRP-004 REVISION 1
SC		LuksicS	Sep2C	10/6/2011 7:31:27 PM	RL-LSC-013 REVISION 1
SC		DawkinsO	InCnt1	10/6/2011 8:02:04 PM	RL-CI-005 REVISION 1
SC		DawkinsO	CalcC	10/7/2011 10:34:11 PM	RL-CI-005 REV. 1
SC		antonsonl	Rev1C	10/10/2011 11:17:52 AM	RL-DR-001 Rev 2
AC		LuksicS	10/6/2011 7:31:27 PM		
AC		DawkinsO	10/6/2011 8:02:04 PM		
AC		DawkinsO	10/7/2011 10:34:11	rev. 1	
AC		antonsonl	10/10/2011 11:17:52		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

8/22/2011 2:46:17 PM **Sample Preparation/Analysis** Balance Id: 1120482733

384868, Pacific Northwest National Laboratory, Pacific Northwest National Lab
 CY Se-79 Prp PRP004, Sep LSC012
 TM Selenium-79 by Liquid Scint
 5I CLIENT: HANFORD

Analyte Due Date: 09/26/2011

Batch: 1230083 WATER PC/L PM, Quote: SS, 57671
 SEQ Batch, Test: None

Prep Tech: Jorgenson HAYSA

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 MLKRI-1-AE		202.10g.in	SETA0890 10/22/10		200				
J1H110499-1-SAMP 08/09/2011 07:30							Alpha: -5.78E-04 uCi/Sa		Beta: -5.23E-04 uCi/Sa
2 MLKTP-1-AE		199.30g.in	SETA0891 07/19/11						
J1H110499-2-SAMP 08/09/2011 10:19							Alpha: -2.18E-03 uCi/Sa		Beta: 1.57E-03 uCi/Sa
3 MLKTP-1-AF-X		200.90g.in	seta0892 07/19/11						
J1H110499-2-DUP 08/09/2011 10:19							Alpha: -2.18E-03 uCi/Sa		Beta: 1.57E-03 uCi/Sa
4 MLRTT-1-AA-B		200.50g.in	seta0894 07/19/11						
J1H180000-83-BLK 08/18/2011 09:55 pd							Alpha: -2.18E-03 uCi/Sa		Beta: 1.57E-03 uCi/Sa
5 MLRTT-1-AC-BN									
J1H180000-83-BLK 08/18/2011 09:55 pd							Alpha: -2.18E-03 uCi/Sa		Beta: 1.57E-03 uCi/Sa

Comments: PK-2 KH Aug 22. 11

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

MLKRI-AE-SAMP Constituent List:
 Se-79 RDL: 3.00E+01 pCi/L LCL: UCL: RPD:

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

WO Cnt: 5
 Prep_SamplePrep v4.8.56

8/18/2011 9:56:31 AM		Sample Preparation/Analysis										Balance Id:	
		CY Se-79 Prp PRP004, Sep LSC012 TM Selenium-79 by Liquid Scint										Pipet #:	
		5I CLIENT: HANFORD										Sep1 DT/Tm Tech:	
		pCi/L										Sep2 DT/Tm Tech:	
Batch: 1230083												Prep Tech:	
SEQ Batch, Test None												Count On Off	
												(24hr) Circle	
												CR Analyst,	
												Init/Date	
												Detector	
												Id	
												Count	
												Time Min	
												Tracer	
												Yield	
												QC Tracer	
												Prep Date	
												Initial Aliquot	
												Amt/Unit	
												Total	
												Amt/Unit	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												Uncert Level (#s):	
												2	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												Uncert Level (#s):	
												2	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												Work Order, Lot,	
												Sample Date/Time	
												MURTLAA-BLK:	
												MURTLAC-IBLK:	
												MLKELIAE-SAMP Calc Info:	
												Uncert Level (#s):	
												2	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												MURTLAA-BLK:	
												Uncert Level (#s):	
												2	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												MURTLAC-IBLK:	
												Uncert Level (#s):	
												2	
												Decay to saDt:	
												Y	
												Blk Subt.:	
												N	
												Sci.Not.:	
												Y	
												ODRs:	
												B	
												Test/America	
												Key: In - Initial Amt,	
												fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2	
												Page 2	
												ISV - Insufficient Volume for Analysis	
												Richland Wa.	
												pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added	
												WO Cnt: 5	
												ICOC v4.8.49	

OCTOBER 13, 2011

9/7/2011 9:33:17 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/7/2010, 9/12/2011, Batch: '123C083', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
1230083					
AC			Rev1C	HayesA	8/22/2011 3:55:59 PM
SC				MaucierS	IsBatched 8/18/2011 10:06:01 AM ICOC_RADCALC v4.8.49
SC				HayesA	Prep1C 8/22/2011 3:55:59 PM RL-PRP-004 REVISION 1
SC				JorgensonD	Sep2C 9/1/2011 2:19:13 PM RL-LSC-012 REVISION 2
SC				DawkinsO	InCnt1 9/1/2011 3:19:01 PM RL-CI-005 REVISION 1
SC				BlackCL	CalcC 9/6/2011 9:41:37 AM RL-CI-005 REVISION 1
SC				nortonj	Rev1C 9/7/2011 9:33:10 AM RL-DR-001 Rev 2
AC				JorgensonD	9/1/2011 2:19:13 PM
AC				DawkinsO	9/1/2011 3:19:01 PM
AC				BlackCL	9/6/2011 9:41:37 AM
AC				nortonj	9/7/2011 9:33:10 AM

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

Page 1

Grp Rec Cnt: 5
ICOCFractions v4.8.44

9/2/2011 9:28:35 AM **Sample Preparation/Analysis** **Balance Id:** _____ **Pipet #:** _____

384868, Pacific Northwest National Laboratory **AR H-3 Prp/Sep LSC005**
 Pacific Northwest National Lab **T0 Tritium - Midlevel, by Liquid Scint**
51 CLIENT: HANFORD

AnalyteDueDate: 09/12/2011 **PM, Quote: SS, 57671**
Batch: 1214238 WATER **pCi/L**
 SEQ Batch, Test None All Tests: 1214235 BNTB, 1214236 AAWA, 1214238 ART0,

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 MK809-1-AA								
J1G280491-1-SAMP 07/27/2011 09:57								Alpha: 2.42E-03 uCi/Sa Beta: 5.34E-03 uCi/Sa
2 MK809-1-AE-X								
J1G280491-1-DJP 07/27/2011 09:57								Alpha: 2.42E-03 uCi/Sa Beta: 5.34E-03 uCi/Sa
3 MK9N3-1-AC								
J1G290442-1-SAMP 07/26/2011 10:51								Alpha: 4.31E-05 uCi/Sa Beta: 6.11E-05 uCi/Sa
4 MLCWE-1-AA-B								
J1H020000-238-BLK 08/03/2011 07:58 pd								Alpha: 2.42E-03 uCi/Sa Beta: 5.34E-03 uCi/Sa
5 MLCWE-1-AC-C								
J1H020000-238-LCS 08/03/2011 07:58 pd								Alpha: 2.42E-03 uCi/Sa Beta: 5.34E-03 uCi/Sa
6 MLCWE-1-AD-BN								
J1H020000-238-IBLK 08/03/2011 07:58 pd								Alpha: 2.42E-03 uCi/Sa Beta: 5.34E-03 uCi/Sa
7 MLE8P-1-AC								
J1H050442-4-SAMP 08/04/2011 10:30								Alpha: 9.50E-05 uCi/Sa Beta: 6.15E-05 uCi/Sa

TestAmerica **Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2** **Page 1**
Richland Wa. **pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec - Enrichment Cell, ct - Cocktail Added** **Page 1**
ISV - Insufficient Volume for Analysis **WO Cnt: 7**
ICOC v4.8.49

9/2/2011 9:28:36 AM **Sample Preparation/Analysis** Balance Id: _____ Pipet #: _____

394868, Pacific Northwest National Laboratory, AR H-3 Pip/Sep LSC005
 Pacific Northwest National Lab T0 Tritium - Midlevel, by Liquid Scint

AnalyseDueDate: 09/12/2011 51 CLIENT: HANFORD

Batch: 1214238 WATER pCi/L PM, Quote: SS, 57671

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:
8 MLE89-1-AC								
J1H050442-5-SAMP								
08/04/2011 10:30								Alpha: 6.78E-05 uCi/Sa Beta: -1.90E-04 uCi/Sa
9 MLFP3-1-AA								
J1H050499-1-SAMP								
08/04/2011 10:30								Alpha: -1.27E-04 uCi/Sa Beta: -6.15E-05 uCi/Sa

AmRec: 1XVIAL-1XLP #Containers: 2

AmRec: 1XVIAL-1XLP #Containers: 2

Comments: MK809-SAMP "I-129: sample has very heavy sediment which was orange in color- 8/9/11"

All Clients for Batch:

394868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS, 57671
 394868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS, 57671

MK8091AA-SAMP Constituent List:

	RDL:25	pCi/L	LCL:	UCL:	RPD:
H-3 MLCWE1AA-BLK:					
H-3 MLCWE1AC-LCS:					
H-3 MLCWE1AD-IBLK:					
MK8091AA-SAMP Calc Info:					
Uncert Level (#s) :	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
Uncert Level (#s) :	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
Uncert Level (#s) :	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
Uncert Level (#s) :	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

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

ISV - Insufficient Volume for Analysis WO Cnt: 9 ICOC v4.8.49

OCTOBER 13, 2011

9/19/2011 2:22:46 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/19/2010, 9/24/2011, Batch: '1214238', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting	Comments
	1214238				
AC		Rev1C	DefordP	9/9/2011 9:05:03 AM	
SC			MaucieriS	IsBatched 8/3/2011 8:00:06 AM	ICOC_RADCALC v4.8.49
SC			DefordP	Sep1C 9/9/2011 9:05:03 AM	RL-LSC-005 REVISION 1
SC			ClarkR	InCnt1 9/9/2011 1:43:03 PM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC 9/19/2011 11:49:05 AM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C 9/19/2011 2:22:37 PM	RL-DR-001 Rev 2
AC			ClarkR	9/9/2011 1:43:03 PM	
AC			ClarkR	9/19/2011 11:49:05	
AC			antonsonl	9/19/2011 2:22:37 PM	

AC: Accepting Entry, SC: Status Change

TestAmerica Richland
Richland Wa

26

8/18/2011 9:56:31 AM **Sample Preparation/Analysis** Balance Id: _____ Pipet #: _____

384868, Pacific Northwest National Laboratory, 55 C-14 Prp/Sep LSC008
 Pacific Northwest National Lab S3 Carbon-14 by Liquid Scint

Analyte: HANFORD 5l CLIENT: HANFORD Sep1 DT/Tm Tech: _____
 Batch: 1230084 WATER pCi/L PM, Quote: SS, 57671 Sep2 DT/Tm 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 MLKR1-1-AC								
J1H110489-1-SAMP								
08/09/2011 07:30								Beta: 5.23E-04 uCi/Sa
2 MLKTP-1-AC								
J1H110499-2-SAMP								
08/09/2011 10:19								Beta: 1.57E-03 uCi/Sa
3 MLM8J-1-AA								
J1H150413-4-SAMP								
08/10/2011 07:30								Beta: 5.63E-04 uCi/Sa
4 MLM8J-1-AD-X								
J1H150413-4-DUP								
08/10/2011 07:30								Beta: 5.63E-04 uCi/Sa
5 MLM8K-1-AA								
J1H150413-5-SAMP								
08/10/2011 11:09								Beta: 9.91E-04 uCi/Sa
6 MLRTW-1-AA-B								
J1H180000-84-BLK								
08/18/2011 09:55 pd								Beta: _____
7 MLRTW-1-AC-C								
J1H180000-84-LCS								
08/18/2011 09:55 pd								Beta: _____

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

ISV - Insufficient Volume for Analysis WO Cnt: 7 ICOC v4.8.49

8/18/2011 9:56:32 AM **Sample Preparation/Analysis** Balance Id: _____
 5S C-14 Prp/Sep LSC008 Pipet #: _____
 S3 Carbon-14 by Liquid Scint Sep1 DT/Tm Tech: _____
 5I CLIENT: HANFORD Sep2 DT/Tm Tech: _____
 AnalytDueDate: 09/26/2011 pCi/L Prep Tech: _____
 Batch: 1230084
 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:
8 MLRTW-1-AD-BN								
J1H180000-84-IBLK								
08/18/2011 09:55 pd								

8 MLRTW-1-AD-BN
 J1H180000-84-IBLK
 08/18/2011 09:55 pd

Alpha: _____ Beta: _____
 Scr: _____

Comments:

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

MLR11AC-SAMP Constituent List:
 C-14 RDL: 2.00E+02 pCi/L LCL: 70 UCL: 130 RPD: 20
 MLRTW1AA-BLK:
 MLRTW1AC-LCS:
 MLRTW1AD-IBLK:

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

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

WO Cnt: 8
 ICOC v4.8.49

OCTOBER 13, 2011

9/20/2011 1:26:33 PM

ICOC Fraction Transfer/Status Report

ByDate: 9/20/2010, 9/25/2011, Batch: '1230084', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
1230084				
AC	Rev1C	DefordP	9/8/2011 9:50:26 AM	
SC		MaucieriS	IsBatched	8/18/2011 10:06:06 AM
SC		DefordP	Sep1C	9/8/2011 9:50:26 AM
SC		ClarkR	InCnt1	9/8/2011 10:55:26 AM
SC		ClarkR	CalcC	9/9/2011 3:42:36 PM
SC		antonsonl	Rev1C	9/20/2011 1:26:26 PM
AC		ClarkR	9/8/2011 10:55:26	
AC		ClarkR	9/9/2011 3:42:36 PM	
AC		antonsonl	9/20/2011 1:26:26 PM	

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

Page 1

Grp Rec Cnt: 4
ICOCFractions v4.8.44

8/24/2011 6:22:02 PM		Sample Preparation/Analysis		Balance Id: 1120413753					
384868, Pacific Northwest National Laboratory		DH Unat_Laser Prp KPA001		Pipet #:					
Pacific Northwest National Lab		SS Total Uranium by KPA		Sep1 DT/Tm Tech:					
AnalytDueDate: 09/26/2011		5I CLIENT: HANFORD		Sep2 DT/Tm Tech:					
Batch: 1230085 WATER ug/L		PM, Quote: SS, 57671		Prep Tech: AshworthA BaughB					
SEQ Batch, Test: None				Comments:					
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
1 MLFP4-1-AA			24.90g.in	24.90g					
J1H050499-2-SAMP									
08/04/2011 10:30				AmiRec: 1XVIAL;1X500MLAG				Alpha: 4.82E-05 uCi/Sa	Beta: 4.95E-05 uCi/Sa
2 MLFP4-1-AC-X			25.10g.in	25.10g					
J1H050499-2-DUP									
08/04/2011 10:30				AmiRec: 1XVIAL;1X500MLAG				Alpha: 4.82E-05 uCi/Sa	Beta: 4.95E-05 uCi/Sa
3 MLFP5-1-AA			25.10g.in	25.10g					
J1H050499-3-SAMP									
08/04/2011 10:30				AmiRec: 1XVIAL;1X500MLAG				Alpha: 8.07E-05 uCi/Sa	Beta: 1.34E-06 uCi/Sa
4 MLFP5-1-AC-S			24.80g.in	24.80g					
J1H050499-3-MS					UNSF5248				
08/04/2011 10:30				AmiRec: 1XVIAL;1X500MLAG	06/21/11.pd 02/01/86.r			Alpha: 8.07E-05 uCi/Sa	Beta: 1.34E-06 uCi/Sa
5 MLFP6-1-AA			25.60g.in	25.60g					
J1H050499-4-SAMP									
08/04/2011 10:30				AmiRec: 1XVIAL;1X500MLAG				Alpha: 1.27E-04 uCi/Sa	Beta: 5.21E-05 uCi/Sa
6 MLRT5-1-AA-B			24.90g.in	24.90g					
J1H180000-85-BLK									
08/18/2011 09:55 pd				AmiRec				Alpha:	Beta:
7 MLRT5-1-AC-C			25.10g.in	25.10g					
J1H180000-85-LCS					UNSF5249				
08/18/2011 09:55 pd				AmiRec	06/21/11.pd 02/01/86.r			Alpha:	Beta:

TestAmerica Key: in - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
 Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added Prep_SamplePrep v4.8.56

8/24/2011 6:22:03 PM		Sample Preparation/Analysis		Balance Id:1120413753	
DH UNat_Laser Prp KPA001		Pipet #:			
SS Total Uranium by KPA		Sep1 DT/Tm Tech:			
51 CLIENT: HANFORD		Sep2 DT/Tm Tech:			
AnalytDueDate: 09/26/2011		Prep Tech: ,AshworthA			
Batch: 1230085		QC Tracer		CR Analyst, Inlt/Date	
SEQ Batch, Test None		Prep Date		Count On Off (24hr) Circle	
Work Order, Lot, Sample Date		Adj Aliq Amt (Un-Acidified)		Count Time Min	
Total Amt /Unit		Initial Aliquot Amt/Unit		Detector Id	
Total Acidified/Unit		24.80g.in		24.80g	
8 MLRT5-1-AD-C		UNSC4088			
J1H180000-85-LCS		06/23/11.pd			
08/18/2011 09:55 pd		02/01/86.r			
AmfFec		#Containers: 1		Alpha: Beta:	
Comments:					
All Clients for Batch: Pacific Northwest National Laboratory SS , 57671					
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671					
MLFP41AA-SAMP Constituent List:					
Uranium	RDL:1.44E-01	ug/L	UCL:	RPD:	
MLRT51AC-MS:					
MLRT51AA-BLK:	RDL:1.44E-01	ug/L	UCL:	RPD:	
Uranium					
MLRT51AC-LCS:	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
Uranium					
MLRT51AD-LCS:	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20
Uranium					
MLFP41AA-SAMP Calc Info:					
Uncert Level (#):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MLFP51AC-MS:					
Uncert Level (#):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MLRT51AA-BLK:					
Uncert Level (#):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MLRT51AC-LCS:					
Uncert Level (#):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MLRT51AD-LCS:					
Uncert Level (#):	2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

WO Cnt: 8
Prep_SamplePrep v4.8.56

ISV - Insufficient Volume for Analysis

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

OCTOBER 13, 2011

9/26/2011 11:52:13 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/26/2010, 10/1/2011, Batch: '1230085', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
1230085				
AC	Rev1C	AshworthA	8/24/2011 6:22:07 PM	
SC		MaucieriS	IsBatched	8/18/2011 10:06:11 AM
SC		AshworthA	Prep1C	8/24/2011 6:22:07 PM
SC		BaughB	InPrep2	9/21/2011 3:07:32 PM
SC		BaughB	Prep2C	9/23/2011 1:38:22 PM
SC		SmithD	Cnt1C	9/26/2011 11:06:55 AM
SC		nortonj	Rev1C	9/26/2011 11:44:47 AM
AC		BaughB	9/21/2011 3:07:32 PM	ICOC_RADCALC v4.8.49
AC		BaughB	9/23/2011 1:38:22 PM	RL-PRP-004 REVISION 1
AC		SmithD	9/26/2011 11:06:55	RL-KPA-001 REVISION 1
AC		nortonj	9/26/2011 11:44:47	RL-KPA-001 REVISION 1
				RL-KPA-003 REVISION 0
				RL-DR-001 Rev 2

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.

Page 1

Grp Rec Cnt: 5
ICOCFractions v4.8.44

Sample Preparation/Analysis									
8/11/2011 2:45:09 PM		Balance Id:		88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION		Pipet #:			
384868, Pacific Northwest National Laboratory		Pacific Northwest National Lab		EA Chromium, Hexavalent (7196A)		Sep1 DT/Tm Tech:			
AnalyteDueDate: 09/26/2011		51 CLIENT: HANFORD		PM, Quote: SS, 57671		Sep2 DT/Tm Tech:			
Batch: 1223177 WATER mg/L		SEQ Batch, Test: None		QC Tracer Prep Date		Prep Tech:			
Work Order, Lot, Sample Date/Time		Total Amt/Unit		Initial Aliquot Amt/Unit		Count Time Min		Detector Id	
								Count On Off (24hr) Circle	
								CR Analyst, Init/Date	
								Comments:	
1 MLKL4-1-AA									
J1H110473-1-SAMP									
08/11/2011 09:32									
AmfRec: 1XVAL-1X500MLAG #Containers: 2									
2 MLKL4-1-AC-S									
J1H110473-1-MS									
08/11/2011 09:32									
AmfRec: 1XVAL-1X500MLAG #Containers: 2									
3 MLKL4-1-AD-D									
J1H110473-1-MSD									
08/11/2011 09:32									
AmfRec: 1XVAL-1X500MLAG #Containers: 2									
4 MLKL4-1-AE-X									
J1H110473-1-DUP									
08/11/2011 09:32									
AmfRec: 1XVAL-1X500MLAG #Containers: 2									
5 MLKNL-1-AA-B									
J1H110000-177-BLK									
08/11/2011 14:44 pd									
AmfRec: #Containers: 1									
6 MLKNL-1-AC-C									
J1H110000-177-LGS									
08/11/2011 14:44 pd									
AmfRec: #Containers: 1									

8/11/2011 2:45:10 PM		Sample Preparation/Analysis		Balance Id:	
AnalyzDueDate: 09/26/2011		88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION		Pipet #:	
Batch: 1223177		EA Chromium, Hexavalent (7196A)		Sep1 DT/Tm Tech:	
SEQ Batch, Test: None		5I CLIENT: HANFORD		Sep2 DT/Tm Tech:	
mg/L				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:					
All Clients for Batch:					
394868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SS , 57671					
MLKL41AA-SAMP Constituent List:					
MLKL41AC-MS Constituent List:					
MLKL41AD-MSD:					
MLKML1AA-BLK:					
MLKML1AC-ICS:					
MLKL41AA-SAMP Calc Info:					
Uncert Level (#s) : 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
MLKL41AC-MS Calc Info:					
Uncert Level (#s) : 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
MLKL41AD-MSD:					
Uncert Level (#s) : 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
MLKML1AA-BLK:					
Uncert Level (#s) : 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
MLKML1AC-ICS:					
Uncert Level (#s) : 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	