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: 45555

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06066	X11-005	B27X46	J0L020474-1	MAQ3H1AA	9MAQ3H10	0347404
		B27X46	J0L020474-1	MAQ3H1AC	9MAQ3H10	0347400
		B27X46	J0L020474-1	MAQ3H1AD	9MAQ3H10	0347399
		B27X34	J0L020474-10	MAQ7G1AA	9MAQ7G10	0347404
		B27X34	J0L020474-10	MAQ7G1AC	9MAQ7G10	0347400
		B27X34	J0L020474-10	MAQ7G1AD	9MAQ7G10	0347399
	X11-005	B27XD4	J0L020474-2	MAQ4M1AA	9MAQ4M10	0347404
		B27XD4	J0L020474-2	MAQ4M1AC	9MAQ4M10	0347400
		B27XD4	J0L020474-2	MAQ4M1AD	9MAQ4M10	0347399
		B27X52	J0L020474-3	MAQ5G1AA	9MAQ5G10	0347404
		B27X52	J0L020474-3	MAQ5G1AC	9MAQ5G10	0347400
		B27X52	J0L020474-3	MAQ5G1AD	9MAQ5G10	0347399
		B27XB6	J0L020474-4	MAQ5T1AA	9MAQ5T10	0347404
		B27XB6	J0L020474-4	MAQ5T1AC	9MAQ5T10	0347400
		B27XB6	J0L020474-4	MAQ5T1AD	9MAQ5T10	0347399

Comments:

RECEIVED
SEP 26 2011
EDMC

RECEIVED JANUARY 17, 2011

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Report Nbr: 45555

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06066	X11-005	B27XC2	J0L020474-5	MAQ541AA	9MAQ5410	0347404
		B27XC2	J0L020474-5	MAQ541AC	9MAQ5410	0347400
		B27XC2	J0L020474-5	MAQ541AD	9MAQ5410	0347399
		B27X94	J0L020474-6	MAQ591AA	9MAQ5910	0347404
		B27X94	J0L020474-6	MAQ591AC	9MAQ5910	0347400
		B27X94	J0L020474-6	MAQ591AD	9MAQ5910	0347399
		B27X22	J0L020474-7	MAQ6C1AA	9MAQ6C10	0347404
		B27X22	J0L020474-7	MAQ6C1AC	9MAQ6C10	0347400
		B27X22	J0L020474-7	MAQ6C1AD	9MAQ6C10	0347399
		B27X28	J0L020474-8	MAQ6G1AA	9MAQ6G10	0347404
		B27X28	J0L020474-8	MAQ6G1AC	9MAQ6G10	0347400
		B27X28	J0L020474-8	MAQ6G1AD	9MAQ6G10	0347399
		B27XB0	J0L020474-9	MAQ6Q1AA	9MAQ6Q10	0347404
		B27XB0	J0L020474-9	MAQ6Q1AC	9MAQ6Q10	0347400
		B27XB0	J0L020474-9	MAQ6Q1AD	9MAQ6Q10	0347399
	X11-004	B27T96	J0L020502-1	MARA31AA	9MARA310	0347402
		B27T96	J0L020502-1	MARA31AC	9MARA310	0347404
		B27T96	J0L020502-1	MARA31AD	9MARA310	0347400
		B27T96	J0L020502-1	MARA31AE	9MARA310	0347399
		B28MM9	J0L020502-2	MARCK1AA	9MARCK10	0347402
		B28MM9	J0L020502-2	MARCK1AC	9MARCK10	0347404
		B28MM9	J0L020502-2	MARCK1AD	9MARCK10	0347400
		B28MM9	J0L020502-2	MARCK1AE	9MARCK10	0347399
	X11-006	B28695	J0L020518-1	MAREV1AA	9MAREV10	0347399
	X11-005	B27X11	J0L030566-1	MAVG31AA	9MAVG310	0347404
		B27X11	J0L030566-1	MAVG31AC	9MAVG310	0347400

Comments:

Report Nbr: 45555

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06066	X11-005	B27X12	J0L030566-2	MAVHD1AA	9MAVHD10	0347404
		B27X12	J0L030566-2	MAVHD1AC	9MAVHD10	0347400
	X11-017	B29L82	J0L070525-1	MA05D1AA	9MA05D10	0347404
		B29L82	J0L070525-1	MA05D1AC	9MA05D10	0347403
		B29L78	J0L070525-2	MA05K1AA	9MA05K10	0347404
	X11-006	B286F0	J0L070554-1	MA1DK1AA	9MA1DK10	0347399
	X11-012	B29583	J0L080477-1	MA17H1AA	9MA17H10	0342318
	X11-005	B27XC8	J0L100650-1	MA7XX1AA	9MA7XX10	0347404
		B27XC8	J0L100650-1	MA7XX1AC	9MA7XX10	0347400
		B27XC8	J0L100650-1	MA7XX1AD	9MA7XX10	0347399

Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

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

January 17, 2011

Attention: Mike Neely

SAF Number	:	X11-004, X11-005, X11-006, X11-012, X11-017
Date SDG Closed	:	December 9, 2010
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W06066
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

Between December 1, 2010 and December 9, 2010 twenty 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:

CH2M ID#	TARL ID#	DATE OF RECEIPT	MATRIX
B27X34	MAQ7G	12/01/10	WATER
B27XB0	MAQ6Q	12/01/10	WATER
B27X28	MAQ6G	12/01/10	WATER
B27X22	MAQ6C	12/01/10	WATER
B27X94	MAQ59	12/01/10	WATER
B27XC2	MAQ54	12/01/10	WATER
B27XB6	MAQ5T	12/01/10	WATER
B27X52	MAQ5G	12/01/10	WATER
B27XD4	MAQ4M	12/01/10	WATER
B27X46	MAQ3H	12/01/10	WATER
B27T96	MARA3	12/01/10	WATER
B28MM9	MARCK	12/01/10	WATER
B28695	MAREV	12/01/10	WATER
B27X11	MAVG3	12/02/10	WATER

B27X12	MAVHD	12/02/10	WATER
B29L82	MA05D	12/03/10	WATER
B29L78	MA05K	12/03/10	WATER
B286F0	MA1DK	12/06/10	WATER
B29583	MA17H	12/08/10	WATER
B27XC8	MA7XX	12/09/10	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
Thorium-228,230,232 by method RL-ALP-005 (RICH-RC-5084)*
Gamma Spectroscopy
Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017)*
Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025)*
Liquid Scintillation Counting
Carbon-14 by method RL-LSC-008 (RICH-RC-5022)*
Nickel-63 by method RL-LCS-017 (RICH-RC-5069)*
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

*SOP ID's changed effective 7-01-2008. Attached is a cross reference until SOP ID's are changed in all systems.

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Thorium-228,230,232 by method RL-ALP-005 (RICH-RC-5084):
The LCS, batch blank, sample and sample duplicate (B27T96) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017):
There was insufficient volume for a duplicate. Sample B27X46 was recounted on a different detector for the duplicate (B27X46 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B27X46) results are within contractual requirements.

Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025):
The LCS, batch blank, samples and sample duplicate (B28695) results are within contractual requirements.

Liquid Scintillation Counting

Carbon-14 by method RL-LSC-008 (RICH-RC-5022):
The LCS, batch blank, samples and sample duplicate (B27X11) results are within contractual requirements.

Nickel-63 by method RL-LCS-017 (RICH-RC-5069):
Sample B29L78 was not analyzed. TARL submitted a proposed resolution on January 17, 2011. The client accepted the proposed resolution (CHPRC Tracking Number: 11-309) on January 17, 2011. Except as noted, the LCS, batch blank, sample and sample duplicate (B29L82) results are within contractual requirements.

Chemical Analysis

Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B29583), sample matrix spike (B29583), and matrix spike duplicate (B29583) results are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Project Manager

ISSUE RESOLUTION FORM

CHPRC TRACKING NUMBER: 11-309

Date : January 17, 2011 SAF No. X11-017

SDG: W06066 LOGIN No.: TEST: NI63_LSC: Nickel-63(1)

Sample No.(s) B29L78

Submitted By:	Sandra Seger	Submitted To:	Mike Neely
Phone No.	509-375-3131 x 158	Phone No.	509-373-5869
Fax No.	509-375-5590	Fax No.	866-252-5816

ISSUE	PROPOSED RESOLUTION
Sample B29L78 was not analyzed for Ni-63. The sample was inadvertently omitted from the Ni-63 batch paper work.	Report W06066 with out the Ni-63 result for sample B29L78. Re-log sample B29L78 for Ni-63. Use W06066I for the SDG number. Client will not be charged for this Ni-63 result.

CHPRC/BHI/WMH/PNNL COMMENTS

Accept proposed resolution and please provide the Ni-63 data ASAP.

Sara Champoux 1/17/2011
Signature and Date

Seger, Sandra

From: Champoux, Sara J [Sara_J_Champoux@RL.gov]
Sent: Monday, January 17, 2011 2:15 PM
To: Seger, Sandra
Cc: Douglas, James G (Jim); Evans, Robert T; Fitzgerald, Scot L; Luke, Scott N; Neely, Michael; Radloff, Anna W; Stinnett, Mark W; Waters-husted, Karen S; Widrig, Dana L
Subject: IRF 11-309 SAF X11-017
Attachments: 11-309.docx

Sandra,

Please see attached for our response. Do you have an idea of when the data will be ready?

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

From: Seger, Sandra [mailto:Sandra.Seger@testamericainc.com]
Sent: Monday, January 17, 2011 1:44 PM
To: ^CPP Sample Management
Cc: Champoux, Sara J
Subject: W06066 IRF

<<W06066_IRF.doc>>
I found an error while preparing the report/EDD for W06066. This SDG can be reported if IRF is approved.

Thank you,
Sandra Seger
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

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

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, ***u_c the combined uncertainty.*** The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Asbestos	RL-ASB-001	N/A	NIOSH 7400	Fiber Counting by Phase Contrast Microscopy based on NIOSH 7400
Asbestos	RL-ASB-002	N/A	NIOSH 9002	Sample Prep and Analysis for Asbestos (bulk) by Polarized Light Microscopy based on NIOSH 9002
Alpha - Gross	ARCHIVED	RICH-RB-5035	Liquid Scintillation Anal/ Packard	DETERMINATION OF GROSS ALPHA IN NASAL SMEARS BY LIQUID SCINTILLATION COUNTING
Alpha - Gross	RL-GPC-001	RICH-RC-5014	9310 / EPA SW846 900.0 / EPA 600	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN WATER BY METHOD 9310
Alpha - Gross	RL-GPC-007	RICH-RC-5020	SM 7110B EPA 680	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN SOIL, SHORELINE SOIL, FOOD AND VEGETATION
Alpha - Gross	RL-GPC-002	RICH-RC-5021	00-02 EPA 520	DETERMINATION OF GROSS ALPHA ACTIVITY IN WATER BY COPRECIPITATION
Alpha - Gross	RL-GPC-008	RICH-RC-5036	ER100 / LANL	PREPARATION OF AIR FILTERS FOR GROSS ALPHA/BETA AND COMPOSITING AIR FILTERS
Am	RL-ALP-003	RICH-RC-5072	Mod RP 725 / DOE0089T EXT Chromatography	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
Am	RL-ALP-010	RICH-RC-5080	Am03/Pu11HASL 300 NAS-NS-3006	SEQUENTIAL SEPARATION OF PLUTONIUM AND AMERICIUM
Beta - Gross	RL-GPC-001	RICH-RC-5014	9310 / EPA SW846 900.0 / EPA 600	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN WATER BY METHOD 9310
Beta - Gross	RL-GPC-007	RICH-RC-5020	SM 7110B EPA 680	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN SOIL, SHORELINE SOIL, FOOD AND VEGETATION
Beta - Gross	RL-GPC-008	RICH-RC-5036	ER100 / LANL	PREPARATION OF AIR FILTERS FOR GROSS ALPHA/BETA AND COMPOSITING AIR FILTERS
C14	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
C14	RL-LSC-008	RICH-RC-5022	EPA C-01 / EPA 520	CARBON 14 BY DIGESTION METHOD
C14	RL-LSC-009	RICH-RC-5040	Mod C14 / EPA 680	DETERMINATION OF CARBON-14 BY BENZENE SYNTHESIS
C14	RL-LSC-010	RICH-RC-5046	EPA C-01 / EPA 520	DETERMINATION OF CARBON-14 IN GRAPHITE AND SOIL
C14	RL-LSC-011	RICH-RC-5047	Mod H-02 / EPA 520	DETERMINATION OF CARBON-14 IN WATER BY DIRECT COUNTING
Cm	RL-ALP-003	RICH-RC-5072	Mod RP 725 / DOE0089T EXT Chromatography	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
Coliform	RL-WC-001	RICH-WC-5001	9222B	DETERMINATION OF TOTAL COLIFORM: MULTIPLE TUBE FERMENTATION TECHNIQUE
Coliform	RL-WC-002	RICH-WC-5002	9131	TOTAL COLIFORMS BY MEMBRANE FILTRATION
Coliform	RL-WC-005	RICH-WC-5007	9223	TOTAL COLIFORM BY THE COLILERT METHOD
Cr6+	RL-WC-003	RICH-WC-5003	7196A, SW846	DETERMINATION OF HEXAVALENT CHROMIUM [Cr(VI)] IN WATER, SOIL, AND SIMILAR MATRICES
Cr6+	RL-WC-004	RICH-WC-5005	3060 / SW846	DETERMINATION OF HEXAVALENT CHROMIUM (CrVI) IN SOLID MATRICES WITH ALKALINE DIGESTION
Fe	RL-LSC-015	RICH-RC-5074	EXT Chromatography ModFe55/PNL-ALO-435	SEPARATION OF IRON AND NICKEL BY EXTRACTION CHROMATOGRAPHY
Fe55	RL-LSC-016	RICH-RC-5023	R4-73-014 / EPA HASL 300	DETERMINATION OF IRON-55 AND IRON-59 IN WATER
Fe59	RL-LSC-016	RICH-RC-5023	R4-73-014 / EPA HASL 300	DETERMINATION OF IRON-55 AND IRON-59 IN WATER
Gamma	RL-GAM-001	RICH-RC-5017	901.0 / HASL 300 ASTM D3649	PREPARATION OF ALL MATRICES FOR ANALYSIS BY GAMMA SPECTROSCOPY
H3	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
H3	RL-LSC-003	RICH-RB-5034	7500-3 / SM	DETERMINATION OF TRITIUM IN URINE BY DISTILLATION
H3	RL-LSC-004	RICH-RC-5004	H3 / EPA LV539	DETERMINATION OF TRITIUM IN AIR
H3	RL-LSC-005	RICH-RC-5007	Mod 906.0 / EPA 600	SEPARATION OF TRITIUM IN WATER AND AQUEOUS COMPONENT OF WINE
H3	RL-LSC-007	RICH-RC-5024	H-3 by EE EPA LV539 / HASL 300	DETERMINATION OF LOW LEVEL TRITIUM IN WATER BY ELECTROLYTIC ENRICHMENT
H3	RL-LSC-002	RICH-RC-5037	H-3 In Water/Tissue / LV 539	DETERMINATION OF TRITIUM BY CRYOGENIC DISTILLATION
H3	RL-LSC-006	RICH-RC-5048	H-3 In Water/Tissue / LV 539	TRITIUM PREPARATION IN MILK SAMPLES
I129	RL-GAM-002	RICH-RC-5025	R4-73-014I/EPA ASTM D2334 (Discontinued)	DETERMINATION OF IODINE-131 AND 129 IN WATER BY SOLVENT EXTRACTION METHOD
I131	RL-GAM-002	RICH-RC-5025	R4-73-014I/EPA ASTM D2334 (Discontinued)	DETERMINATION OF IODINE-131 AND 129 IN WATER BY SOLVENT EXTRACTION METHOD
I131	ARCHIVED	RICH-RC-5049	HASL 300 (1983)	DETERMINATION OF IODINE-131 IN MILK BY BATCH ION-EXCHANGE
Metals	ARCHIVED	BHI-MT-9001	6010	ICP-AE SPECTROSCOPY, SPECTROMETRIC METHOD FOR TRACE ELEMENT ANALYSIS, METHOD 6010A FOR Bechtel

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Metals	RL-MT-001	RICH-MT-0001	6010B	ICP-AES for TRACE ELEMENT ANALYSIS, METHOD 6010B
Metals	RL-MT-002	RICH-MT-0002	SW486 3050B	ACID DIGESTION FOR ICP ANALYSIS
Metals	RL-MT-003	RICH-MT-0003	NIOSH 7300	DIGESTION PREP based on METHOD NIOSH 7300
Ni	RL-LSC-015	RICH-RC-5074	EXT Chromatography ModFe55/PNL-ALO-435	SEPARATION OF IRON AND NICKEL BY EXTRACTION CHROMATOGRAPHY
Ni63	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
Ni63	RL-LSC-017	RICH-RC-5069	EXT Chromatography Mod RP300 / DOE0089T	SEPARATION OF Ni-63 BY EXTRACTION CHROMATOGRAPHY
Np	RL-ALP-013	RICH-RC-5009	NAS-NS-3060	DETERMINATION OF NEPTUNIUM-237 BY LIQUID-LIQUID EXTRACTION IN ALL MATRICES
Np	RL-ALP-006	RICH-RC-5064	EXT Chromatography	SEPARATION OF NEPTUNIUM BY EXTRACTION CHROMATOGRAPHY
P32	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
Pb	RL-ALP-011	RICH-RC-5076	EXT Chromatography	DETERMINATION OF LEAD-210 BY EXTRACTION CHROMATOGRAPHY
Po	RL-ALP-007	RICH-RB-5001	NAS-NS-3037 HASL 300	DETERMINATION OF POLONIUM-210 IN URINE
Po	RL-ALP-012	RICH-RC-5012	Po-01 / HASL 300 Mod U01 HASL 300	SEPARATION OF ISOTOPIC URANIUM AND POLONIUM-210 IN WATER, SOIL AND FILTERS
Prep - Bioassay	ARCHIVED	RICH-RB-0001		PREPARATION FOR RAPID BIOASSAY ANALYSES
Prep - Bioassay	RL-PRP-001	RICH-RB-5002	Mod Pu06 / HASL 300	PREPARATION OF URINE AND BLOOD SAMPLES
Prep - Bioassay	ARCHIVED	RICH-RB-5004	ASTM D1429-95	DETERMINATION OF SPECIFIC GRAVITY OF URINE
Prep - Bioassay	RL-RPL-002	RICH-RB-5036	Pub 6490,6601 / PNL	PREPARATION OF SYNTHETIC URINE AND FECES USING RECIPES FROM HPS N13.30 PREFORMANCE TESTING
Prep - Bioassay	RL-PRP-002	RICH-RB-5037	LA-10300-M R200 ASTM D3865	PREPARATION OF FECAL SAMPLES USING HYDROFLUORIC ACID DIGESTION
Prep - Bioassay	RL-RPL-003	RICH-RC-5028	ICRP Publication 23	PREPARATION OF SYNTHETIC URINE AND FECES
Prep - Count	RL-ALP-016	RICH-RC-5003	G-03 / HASL 300	COPRECIPITATION OF SOME ACTINIDES ON NEODYMIUM FLUORIDE FOR ALPHA-PARTICLE SPECTROMETRY
Prep - Count	RL-ALP-015	RICH-RC-5039	G-03 / HASL 300 Anal Chem 1972	ELECTRODEPOSITION OF ACTINIDES
Prep - Count	RL-ALP-014	RICH-RC-5085	Morrison & Freiser NAS-NS-3050	ANHYDROUS ETHER EXTRACTION OF URANIUM
Prep - Env	RL-KPA-001	RICH-RC-5015	ASTM / D5174-97	ENVIRONMENTAL SAMPLE PREPARATION FOR URANIUM BY LASER-INDUCED PHOSPHORESCENCE
Prep - Env	RL-PRP-004	RICH-RC-5016	Sr02 / HASL 300	PREPARATION OF ENVIRONMENTAL MATRICES
Prep - Env	RL-PRP-007	RICH-RC-5045	Mod Pu02 / HASL 300	PREPARATION OF MIXED BED RESINS AND PRE-FILTERS
Prep - Env	RL-PRP-008	RICH-RC-5068	Mod ER100 / LA10300	PREPARATION OF SOIL, VEGETATION AND AIR FILTERS BY MIXED STRONG ACID LEACHING
Prep - Resin	RL-ALP-017	RICH-RC-5018	Mod Pu11 / Mod 300	ION-EXCHANGE PREPARATION
Prep - Soil	RL-PRP-003	RICH-RC-5013	Pu02A / HASL 300	PREPARATION OF SOIL SAMPLES
Prep - Soil	RL-PRP-005	RICH-RC-5019	D5259 / ASTM SW 846/3015/3051/3052	PREPARATION AND DISSOLUTION OF SEDIMENTS AND SOIL BY MICROWAVE BOMB DIGESTION
Prep - Soil	RL-PRP-006	RICH-RC-5032	Pu02A / HASL 300	COMPLETE DISSOLUTION BY MIXED ACIDS IN A TEFLON BEAKER
Prep - Soil	RL-PRP-009	RICH-RC-5077	Mod ER100 / LA10300	PREPARATION OF SMALL SOIL SAMPLES FOR GAMMA SPEC AND/OR RADIOCHEM ANAL BY ACID DIGESTION
Prep - Urine	RL-PRP-010	RICH-RC-5086	AnalyticaChemActa1992 RP800 / DOE0089T	URINE AND WATER SAMPLE PREPARATION BY CALCIUM PHOSPHATE PRECIPITATION
Prep - Water	RL-PRP-010	RICH-RC-5086	AnalyticaChemActa1992 RP800 / DOE0089T	URINE AND WATER SAMPLE PREPARATION BY CALCIUM PHOSPHATE PRECIPITATION
Pu	ARCHIVED	RICH-RB-5015	Pu11 / HASL 300	RAPID DETERMINATION OF PLUTONIUM IN FECES
Pu	RL-ALP-002	RICH-RC-5010	Pu11 / HASL 300	DETERMINATION OF ISOTOPIC PLUTONIUM IN ALL MATRICES
Pu	RL-ALP-010	RICH-RC-5080	Am03 HASL 300 Pu11 / HASL 300	SEQUENTIAL SEPARATION OF PLUTONIUM AND AMERICIUM
Pu	RL-ALP-001	RICH-RC-5087	AnalyticaChemActa1992 RP800 / DOE0089T	DETERMINATION OF PLUTONIUM BY EXTRACTION CHROMATOGRAPHY
Ra	RL-RA-001	RICH-RC-5005	903.1 / EPA 600	RADIUM-226 AND RADIUM-228 SEPARATION IN RADIOCHEMICAL MATRICES - ADAPTED FROM EPA 903.1 AND 904.0
Ra	RL-RA-001	RICH-RC-5005	904.0 / EPA 600	RADIUM-226 AND RADIUM-228 SEPARATION IN RADIOCHEMICAL MATRICES - ADAPTED FROM EPA 903.1 AND 904.0

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Ra	RL-RA-002	RICH-RC-5027	Mod D2460/ ASTM 903.0 / EPA 600	DETERMINATION OF TOTAL RADIUM
Rn	RL-LSC-019	RICH-RC-5082	913.0 / EPA	DETERMINATION OF RADON-222 - ADAPTED FROM METHOD 913.0
S35	ARCHIVED	RICH-RB-5020	Hillebrand, Lundsell, Bright, Hoffman 1953	DETERMINATION OF SULFUR-35 IN URINE
Se79	RL-LSC-012	RICH-RC-5043	Selenium / NAS-NS-3030	RADIOCHEMICAL DETERMINATION OF SELENIUM-79
Solubility	ARCHIVED	RICH-RC-5035	Kalfward&Thomas PNL3716	DETERMINATION OF SOLUBILITY OF RADIOACTIVE PARTICLE CONSTITUENTS
Sr	RL-GPC-005	RICH-RB-5007	Mod Sr02 / HASL 300 Mod 905.0 / EPA 600	DETERMINATION OF TOTAL STRONTIUM IN URINE
Sr	RL-GPC-006	RICH-RB-5021	Mod Sr02 / HASL300 Mod 905.0 / EPA 600	DETERMINATION OF STRONTIUM IN FECES
Sr	ARCHIVED	RICH-RB-5022	Mod Sr02 / HASL300 Mod 905.0 / EPA 600	DETERMINATION OF TOTAL STRONTIUM IN URINE FOR RAPID ANALYSIS
Sr	ARCHIVED	RICH-RB-5031	Mod Sr02 / HASL300 Mod 905.0 / EPA 600	RAPID DETERMINATION OF TOTAL STRONTIUM IN FECES
Sr	RL-GPC-003	RICH-RC-5006	Mod Sr02 / HASL300 Mod 905.0 / EPA 600	STRONTIUM SEPARATION IN ENVIROMENTAL MATRICES
Sr - Yt	RL-GPC-004	RICH-RC-5071	Mod Sr02 / HASL300 Mod 905.0 / EPA 600	YTTRIUM-90 SEPARATION FOR STRONTIUM-90 DETERMINATION IN ALL MATRICES
Tc	RL-LSC-014	RICH-RC-5065	EXT Chromatography Mod RP550 / DOE0089T	DETERMINATION OF TECHNETIUM-99 BY EXTRACTION CHROMATOGRAPHY
Tc	RL-LSC-013	RICH-RC-5078	Tc01 / HASL 300	SEPARATION OF TECHNETIUM-99 IN ALL MATRICES
Th	RL-ALP-008	RICH-RB-5006	Mod Th01 / HASL 300	SEPARATION OF THORIUM FROM URINE AND FECAL SAMPLES
Th	RL-ALP-005	RICH-RC-5084	Mod Th01 / HASL 300 Anal Chim Acta 1982	DETERMINATION OF THORIUM ISOTOPIC IN ENVIRONMENTAL MATRICES
U	RL-ALP-012	RICH-RC-5012	Po-01 / HASL 300 Mod U01 / HASL 300	SEPARATION OF ISOTOPIC URANIUM AND POLONIUM-210 IN WATER, SOIL AND FILTERS
U	RL-KPA-002	RICH-RC-5031	Mod U01 / HASL 300	SEPARATION OF TOTAL URANIUM IN WATER AND URINE
U	RL-KPA-003	RICH-RC-5058	D5174 / ASTM	DETERMINATION OF URANIUM BY PHOSPHORESCENCE ANALYSIS
U	RL-ALP-004	RICH-RC-5067	EXT Chromatography Mod RP725 / DOE0089T	SEPARATION OF URANIUM BY EXTRACTION CHROMATOGRAPHY
U	RL-ALP-003	RICH-RC-5072	EXT Chrom Mod RP725 & 800 / DOE0089T	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
U	RL-ALP-009	RICH-RC-5079	EXT Chromatography Mod RP725 / DOE0089T	DETERMINATION OF ISOTOPIC URANIUM IN ALL MATRICES

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45555 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.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:
9MA05D10	B29L82		MW6-SBB-A1	X11-017	W06066					12/02/2010 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	4.11E+03	pCi/L	3.2E+01	1.5E+02		8.05E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 16:30	I
0347403	NI-63	13981-37-8	4.42E+00	pCi/L	1.7E+00	2.6E+00		3.73E+00	89.6	NI63_LSC	4.051E-01	L	12/28/2010 19:03	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:
9MA05K10	B29L78		MW6-SBB-A1	X11-017	W06066					12/02/2010 12:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	3.12E+03	pCi/L	2.8E+01	1.2E+02		8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 17:12	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:
9MA1DK10	B286F0		MW6-SBB-A1	X11-006	W06066					12/05/2010 11:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347399	I-129	15046-84-1	1.21E-01	pCi/L	1.3E-01	1.3E-01	U	2.45E-01	94.3	I129LL_SEP_LEPS	3.8074E+00	L	01/03/2011 16:29	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:
9MA7XX10	B27XC8		MW6-SBB-A1	X11-005	W06066					12/09/2010 11:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	5.59E+00	pCi/L	3.5E+00	4.0E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 17:55	I
0347400	BE-7	13966-02-4	2.14E+00	pCi/L	8.2E+00	8.2E+00	U	1.49E+01		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	CO-60	10198-40-0	-4.13E-01	pCi/L	1.0E+00	1.0E+00	U	1.79E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	CS-134	13967-70-9	4.67E-01	pCi/L	1.1E+00	1.1E+00	U	2.06E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	CS-137	10045-97-3	6.12E-01	pCi/L	9.9E-01	9.9E-01	U	1.88E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	EU-152	14683-23-9	2.17E-01	pCi/L	2.6E+00	2.6E+00	U	4.52E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	EU-154	15585-10-1	-3.11E+00	pCi/L	3.5E+00	3.5E+00	U	5.50E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	EU-155	14391-16-3	1.92E+00	pCi/L	2.0E+00	2.0E+00	U	3.72E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	K-40	13966-00-2	4.65E+00	pCi/L	2.4E+01	2.4E+01	U	4.81E+01		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	RU-106	13967-48-1	-6.47E-01	pCi/L	8.8E+00	8.8E+00	U	1.55E+01		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347400	SB-125	14234-35-6	4.68E-01	pCi/L	2.3E+00	2.3E+00	U	4.18E+00		GAMMALL_GS	2.0024E+00	L	12/22/2010 18:51	I
0347399	I-129	15046-84-1	7.88E-02	pCi/L	1.2E-01	1.2E-01	U	2.38E-01	71.1	I129LL_SEP_LEPS	3.8385E+00	L	01/03/2011 16:31	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:

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

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45555 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

9MAQ3H10 B27X46 MW6-SBB-A1 X11-005 W06066 11/30/2010 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	2.16E+00	pCi/L	3.4E+00	3.8E+00	U	8.05E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 05:03	I
0347400	BE-7	13966-02-4	-1.36E+01	pCi/L	1.5E+01	1.5E+01	U	2.42E+01		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	CO-60	10198-40-0	-1.10E+00	pCi/L	1.5E+00	1.5E+00	U	2.53E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	CS-134	13967-70-9	6.11E-01	pCi/L	1.7E+00	1.7E+00	U	3.07E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	CS-137	10045-97-3	-1.71E-01	pCi/L	1.5E+00	1.5E+00	U	2.63E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	EU-152	14683-23-9	4.94E+00	pCi/L	3.9E+00	3.9E+00	U	6.95E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	EU-154	15585-10-1	5.30E-01	pCi/L	5.3E+00	5.3E+00	U	9.53E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	EU-155	14391-16-3	1.73E+00	pCi/L	4.0E+00	4.0E+00	U	6.90E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	K-40	13966-00-2	-6.04E+01	pCi/L	4.8E+01	4.8E+01	U	9.66E+01		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	RU-106	13967-48-1	1.57E+01	pCi/L	1.3E+01	1.3E+01	U	2.38E+01		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347400	SB-125	14234-35-6	-5.60E-01	pCi/L	3.6E+00	3.6E+00	U	6.21E+00		GAMMALL_GS	2.0018E+00	L	12/22/2010 11:52	I
0347399	I-129	15046-84-1	5.94E-02	pCi/L	8.1E-02	8.1E-02	U	1.71E-01	100.0	I129LL_SEP_LEPS	3.7149E+00	L	12/29/2010 13:14	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:
9MAQ4M10	B27XD4		MW6-SBB-A1	X11-005	W06066					11/29/2010 13:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	5.92E-01	pCi/L	3.3E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 05:46	I
0347400	BE-7	13966-02-4	-5.79E+00	pCi/L	1.3E+01	1.3E+01	U	2.24E+01		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	CO-60	10198-40-0	-2.39E-01	pCi/L	1.4E+00	1.4E+00	U	2.52E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	CS-134	13967-70-9	-5.79E-03	pCi/L	1.4E+00	1.4E+00	U	2.46E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	CS-137	10045-97-3	3.52E-01	pCi/L	1.3E+00	1.3E+00	U	2.37E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	EU-152	14683-23-9	-1.73E+00	pCi/L	3.3E+00	3.3E+00	U	5.46E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	EU-154	15585-10-1	-9.37E-01	pCi/L	3.5E+00	3.5E+00	U	6.15E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	EU-155	14391-16-3	1.48E+00	pCi/L	2.9E+00	2.9E+00	U	5.17E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	K-40	13966-00-2	1.08E-01	pCi/L	2.1E+01	2.1E+01	U	3.95E+01		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	RU-106	13967-48-1	-8.35E-01	pCi/L	1.2E+01	1.2E+01	U	2.13E+01		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347400	SB-125	14234-35-6	2.27E+00	pCi/L	3.3E+00	3.3E+00	U	6.00E+00		GAMMALL_GS	2.00E+00	L	12/22/2010 11:53	I
0347399	I-129	15046-84-1	-3.33E-02	pCi/L	8.5E-02	8.5E-02	U	1.48E-01	93.5	I129LL_SEP_LEPS	3.8618E+00	L	12/29/2010 17:23	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:
9MAQ5410	B27XC2		MW6-SBB-A1	X11-005	W06066					11/29/2010 10:30

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

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45555 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.96E+00	pCi/L	3.4E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 07:55	I
0347400	BE-7	13966-02-4	-4.94E+00	pCi/L	9.9E+00	9.9E+00	U	1.65E+01		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	CO-60	10198-40-0	-2.03E-01	pCi/L	1.2E+00	1.2E+00	U	2.09E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	CS-134	13967-70-9	2.08E-01	pCi/L	1.1E+00	1.1E+00	U	2.06E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	CS-137	10045-97-3	1.36E-01	pCi/L	1.1E+00	1.1E+00	U	1.92E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	EU-152	14683-23-9	-9.13E-01	pCi/L	2.3E+00	2.3E+00	U	3.79E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	EU-154	15585-10-1	3.99E+00	pCi/L	3.2E+00	3.2E+00	U	6.89E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	EU-155	14391-16-3	1.11E+00	pCi/L	1.9E+00	1.9E+00	U	3.57E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	K-40	13966-00-2	-1.61E+01	pCi/L	2.2E+01	2.2E+01	U	4.31E+01		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	RU-106	13967-48-1	-3.54E-01	pCi/L	9.2E+00	9.2E+00	U	1.63E+01		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347400	SB-125	14234-35-6	9.46E-01	pCi/L	2.2E+00	2.2E+00	U	4.17E+00		GAMMALL_GS	2.002E+00	L	12/22/2010 11:54	I
0347399	I-129	15046-84-1	1.33E-01	pCi/L	1.5E-01	1.5E-01	U	1.54E-01	92.4	I129LL_SEP_LEPS	3.8498E+00	L	12/30/2010 06:31	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:
9MAQ5910	B27X94		MW6-SBB-A1	X11-005	W06066					11/29/2010 14:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	4.29E+00	pCi/L	3.5E+00	3.9E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 08:37	I
0347400	BE-7	13966-02-4	-1.05E+01	pCi/L	1.9E+01	1.9E+01	U	3.15E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	CO-60	10198-40-0	2.78E-01	pCi/L	2.0E+00	2.0E+00	U	3.84E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	CS-134	13967-70-9	-7.26E-01	pCi/L	2.3E+00	2.3E+00	U	3.91E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	CS-137	10045-97-3	-7.63E-01	pCi/L	1.8E+00	1.8E+00	U	3.02E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	EU-152	14683-23-9	3.28E+00	pCi/L	6.0E+00	6.0E+00	U	9.13E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	EU-154	15585-10-1	5.23E-01	pCi/L	5.9E+00	5.9E+00	U	1.08E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	EU-155	14391-16-3	-1.59E+00	pCi/L	4.3E+00	4.3E+00	U	7.22E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	K-40	13966-00-2	-3.42E+01	pCi/L	5.3E+01	5.3E+01	U	1.12E+02		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	RU-106	13967-48-1	-2.15E+00	pCi/L	1.7E+01	1.7E+01	U	3.01E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347400	SB-125	14234-35-6	-2.31E+00	pCi/L	4.8E+00	4.8E+00	U	8.07E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 11:55	I
0347399	I-129	15046-84-1	1.22E-01	pCi/L	1.2E-01	1.2E-01	U	1.54E-01	94.9	I129LL_SEP_LEPS	3.8879E+00	L	12/30/2010 09:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAQ5G10	B27X52		MW6-SBB-A1	X11-005	W06066					12/01/2010 08:48

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	2.85E+00	pCi/L	3.4E+00	3.9E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 06:29	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.

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45555 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

0347400	BE-7	13966-02-4	-2.66E+00	pCi/L	1.5E+01	1.5E+01	U	2.64E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	CO-60	10198-40-0	2.61E-01	pCi/L	1.6E+00	1.6E+00	U	3.15E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	CS-134	13967-70-9	2.01E+00	pCi/L	1.8E+00	1.8E+00	U	3.54E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	CS-137	10045-97-3	1.62E-01	pCi/L	1.7E+00	1.7E+00	U	3.06E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	EU-152	14683-23-9	4.26E-01	pCi/L	4.0E+00	4.0E+00	U	7.11E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	EU-154	15585-10-1	-4.09E+00	pCi/L	5.3E+00	5.3E+00	U	8.67E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	EU-155	14391-16-3	2.75E+00	pCi/L	3.2E+00	3.2E+00	U	5.64E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	K-40	13966-00-2	-3.61E+01	pCi/L	3.7E+01	3.7E+01	U	7.45E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	RU-106	13967-48-1	2.15E+00	pCi/L	1.4E+01	1.4E+01	U	2.62E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347400	SB-125	14234-35-6	-6.95E-01	pCi/L	4.5E+00	4.5E+00	U	7.70E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	11:53	I
0347399	I-129	15046-84-1	3.27E-02	pCi/L	9.1E-02	9.1E-02	U	1.70E-01	100.0	I129LL_SEP_LEPS	3.8124E+00	L	12/29/2010	20:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAQ5T10	B27XB6		MW6-SBB-A1	X11-005	W06066					12/01/2010 10:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.03E+00	pCi/L	3.4E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 07:12	I
0347400	BE-7	13966-02-4	5.20E+00	pCi/L	2.1E+01	2.1E+01	U	3.72E+01		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	CO-60	10198-40-0	1.40E+00	pCi/L	2.5E+00	2.5E+00	U	4.74E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	CS-134	13967-70-9	-2.10E+00	pCi/L	2.6E+00	2.6E+00	U	4.29E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	CS-137	10045-97-3	1.53E+00	pCi/L	2.3E+00	2.3E+00	U	4.21E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	EU-152	14683-23-9	9.17E-01	pCi/L	5.5E+00	5.5E+00	U	9.58E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	EU-154	15585-10-1	-1.02E+00	pCi/L	6.7E+00	6.7E+00	U	1.19E+01		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	EU-155	14391-16-3	-5.09E-01	pCi/L	3.8E+00	3.8E+00	U	6.49E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	K-40	13966-00-2	-4.37E+01	pCi/L	5.3E+01	5.3E+01	U	1.07E+02		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	RU-106	13967-48-1	-1.48E+01	pCi/L	2.0E+01	2.0E+01	U	3.31E+01		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347400	SB-125	14234-35-6	3.64E+00	pCi/L	5.4E+00	5.4E+00	U	9.78E+00		GAMMALL_GS	2.0039E+00	L	12/22/2010 11:54	I
0347399	I-129	15046-84-1	9.33E-02	pCi/L	1.0E-01	1.0E-01	U	1.63E-01	91.4	I129LL_SEP_LEPS	3.8501E+00	L	12/30/2010 03:07	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAQ6C10	B27X22		MW6-SBB-A1	X11-005	W06066					11/29/2010 09:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.07E+01	pCi/L	3.7E+00	4.2E+00		8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 09:20	I
0347400	BE-7	13966-02-4	-5.38E+00	pCi/L	1.5E+01	1.5E+01	U	2.60E+01		GAMMALL_GS	2.0008E+00	L	12/22/2010 11:55	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.

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45555 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

0347400	CO-60	10198-40-0	6.34E-01	pCi/L	1.6E+00	1.6E+00	U	3.07E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	CS-134	13967-70-9	-1.06E+00	pCi/L	1.7E+00	1.7E+00	U	2.61E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	CS-137	10045-97-3	1.80E+00	pCi/L	1.6E+00	1.6E+00	U	3.15E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	EU-152	14683-23-9	1.59E+00	pCi/L	4.0E+00	4.0E+00	U	7.27E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	EU-154	15585-10-1	-1.98E+00	pCi/L	4.8E+00	4.8E+00	U	8.37E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	EU-155	14391-16-3	-1.23E+00	pCi/L	2.5E+00	2.5E+00	U	4.23E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	K-40	13966-00-2	-5.57E+01	pCi/L	3.6E+01	3.6E+01	U	7.09E+01		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	RU-106	13967-48-1	2.15E+00	pCi/L	1.5E+01	1.5E+01	U	2.68E+01		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347400	SB-125	14234-35-6	-2.39E+00	pCi/L	4.0E+00	4.0E+00	U	6.64E+00		GAMMALL_GS	2.0008E+00	L	12/22/2010	11:55	I
0347399	I-129	15046-84-1	1.89E-01	pCi/L	2.3E-01	2.3E-01	U	1.73E-01	92.7	I129LL_SEP_LEPS	3.7613E+00	L	12/30/2010	13:18	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAQ6G10	B27X28		MW6-SBB-A1	X11-005	W06066					11/29/2010 12:07

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.81E+00	pCi/L	3.4E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 10:03	I
0347400	BE-7	13966-02-4	1.31E+01	pCi/L	1.4E+01	1.4E+01	U	2.63E+01		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	CO-60	10198-40-0	3.86E-01	pCi/L	1.8E+00	1.8E+00	U	3.28E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	CS-134	13967-70-9	1.61E+00	pCi/L	1.6E+00	1.6E+00	U	3.09E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	CS-137	10045-97-3	-2.22E+00	pCi/L	1.5E+00	1.5E+00	U	2.33E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	EU-152	14683-23-9	4.23E-01	pCi/L	3.8E+00	3.8E+00	U	6.49E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	EU-154	15585-10-1	-6.12E+00	pCi/L	5.3E+00	5.3E+00	U	8.15E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	EU-155	14391-16-3	-7.83E-01	pCi/L	4.0E+00	4.0E+00	U	6.71E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	K-40	13966-00-2	-9.87E+01	pCi/L	4.8E+01	4.8E+01	U	9.38E+01		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	RU-106	13967-48-1	-7.39E+00	pCi/L	1.3E+01	1.3E+01	U	2.15E+01		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347400	SB-125	14234-35-6	-1.27E-01	pCi/L	3.6E+00	3.6E+00	U	6.19E+00		GAMMALL_GS	1.9997E+00	L	12/22/2010 15:22	I
0347399	I-129	15046-84-1	-2.87E-02	pCi/L	9.7E-02	9.7E-02	U	1.69E-01	93.8	I129LL_SEP_LEPS	3.8893E+00	L	12/30/2010 17:40	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:
9MAQ6Q10	B27XB0		MW6-SBB-A1	X11-005	W06066					11/29/2010 12:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.03E+00	pCi/L	3.4E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 10:46	I
0347400	BE-7	13966-02-4	-4.61E+00	pCi/L	1.7E+01	1.7E+01	U	2.87E+01		GAMMALL_GS	2.005E+00	L	12/22/2010 15:22	I
0347400	CO-60	10198-40-0	1.24E+00	pCi/L	1.8E+00	1.8E+00	U	3.57E+00		GAMMALL_GS	2.005E+00	L	12/22/2010 15:22	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.

1/17/2011 11:20:21 AM *SKS 1/17/11 **TestAmerica Report** Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45555 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

0347400	CS-134	13967-70-9	-7.07E-01	pCi/L	1.8E+00	1.8E+00	U	3.16E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	CS-137	10045-97-3	3.67E-01	pCi/L	1.8E+00	1.8E+00	U	3.25E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	EU-152	14683-23-9	1.58E-01	pCi/L	4.2E+00	4.2E+00	U	7.49E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	EU-154	15585-10-1	-8.98E-01	pCi/L	5.0E+00	5.0E+00	U	9.12E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	EU-155	14391-16-3	-1.55E-02	pCi/L	3.1E+00	3.1E+00	U	5.20E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	K-40	13966-00-2	5.19E+00	pCi/L	4.1E+01	4.1E+01	U	3.41E+01		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	RU-106	13967-48-1	-2.42E+00	pCi/L	1.5E+01	1.5E+01	U	2.68E+01		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347400	SB-125	14234-35-6	2.40E+00	pCi/L	4.1E+00	4.1E+00	U	7.52E+00		GAMMALL_GS	2.005E+00	L	12/22/2010	15:22	I
0347399	I-129	15046-84-1	-4.79E-02	pCi/L	1.0E-01	1.0E-01	U	1.42E-01	88.4	I129LL_SEP_LEPS	3.8699E+00	L	12/31/2010	06:07	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAQ7G10	B27X34		MW6-SBB-A1	* X11-005	W06066					11/29/2010 13:58

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	3.84E+00	pCi/L	3.5E+00	3.9E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 11:29	I
0347400	BE-7	13966-02-4	-3.03E+00	pCi/L	2.1E+01	2.1E+01	U	3.60E+01		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	CO-60	10198-40-0	1.72E+00	pCi/L	2.2E+00	2.2E+00	U	4.38E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	CS-134	13967-70-9	2.02E+00	pCi/L	2.4E+00	2.4E+00	U	4.52E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	CS-137	10045-97-3	-5.91E-01	pCi/L	2.1E+00	2.1E+00	U	3.65E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	EU-152	14683-23-9	-8.88E-01	pCi/L	5.5E+00	5.5E+00	U	9.37E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	EU-154	15585-10-1	-3.68E-01	pCi/L	5.9E+00	5.9E+00	U	1.07E+01		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	EU-155	14391-16-3	5.67E-01	pCi/L	3.7E+00	3.7E+00	U	6.50E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	K-40	13966-00-2	-3.03E+01	pCi/L	5.2E+01	5.2E+01	U	1.07E+02		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	RU-106	13967-48-1	-7.64E+00	pCi/L	1.9E+01	1.9E+01	U	3.29E+01		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347400	SB-125	14234-35-6	-1.48E+00	pCi/L	5.4E+00	5.4E+00	U	9.13E+00		GAMMALL_GS	2.0007E+00	L	12/22/2010 15:22	I
0347399	I-129	15046-84-1	-7.54E-02	pCi/L	8.6E-02	8.6E-02	U	1.39E-01	100.0	I129LL_SEP_LEPS	3.8867E+00	L	12/31/2010 09:30	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:
9MARA310	B27T96		MW6-SBB-A1	X11-004	W06066					11/29/2010 11:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	1.80E+00	pCi/L	3.4E+00	3.8E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 12:12	I
0347400	BE-7	13966-02-4	-3.47E+00	pCi/L	9.0E+00	9.0E+00	U	1.52E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010 15:24	I
0347400	CO-60	10198-40-0	-3.61E-01	pCi/L	1.1E+00	1.1E+00	U	1.95E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 15:24	I
0347400	CS-134	13967-70-9	-1.96E-01	pCi/L	1.0E+00	1.0E+00	U	1.86E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010 15:24	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.

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45555 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

0347400	CS-137	10045-97-3	7.84E-01	pCi/L	1.1E+00	1.1E+00	U	2.02E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	EU-152	14683-23-9	5.14E-01	pCi/L	2.6E+00	2.6E+00	U	4.55E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	EU-154	15585-10-1	2.92E+00	pCi/L	3.1E+00	3.1E+00	U	6.52E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	EU-155	14391-16-3	-3.14E+00	pCi/L	2.0E+00	2.0E+00	U	2.87E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	K-40	13966-00-2	6.86E+00	pCi/L	2.4E+01	2.4E+01	U	2.34E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	RU-106	13967-48-1	4.42E+00	pCi/L	9.1E+00	9.1E+00	U	1.69E+01		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347400	SB-125	14234-35-6	-1.77E+00	pCi/L	2.4E+00	2.4E+00	U	3.89E+00		GAMMALL_GS	2.0001E+00	L	12/22/2010	15:24	I
0347399	I-129	15046-84-1	-6.73E-02	pCi/L	1.2E-01	1.2E-01	U	1.99E-01	91.1	I129LL_SEP_LEPS	3.8886E+00	L	01/03/2011	08:36	I
0347402	TH-228	14274-82-9	3.28E-02	pCi/L	1.1E-01	1.1E-01	U	3.09E-01	102.4	THISO_IE_PRECIP	1.994E-01	L	12/24/2010	14:06	I
0347402	TH-230	14269-63-7	2.13E-02	pCi/L	1.1E-01	1.1E-01	U	3.37E-01	102.4	THISO_IE_PRECIP	1.994E-01	L	12/24/2010	14:06	I
0347402	TH-232	Th-232	-1.07E-02	pCi/L	1.1E-01	1.1E-01	U	2.55E-01	102.4	THISO_IE_PRECIP	1.994E-01	L	12/24/2010	14:06	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:
9MARCK10	B28MM9		MW6-SBB-A1	X11-004	W06066					11/29/2010 09:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
0347404	C-14	14762-75-5	8.67E-01	pCi/L	3.4E+00	3.8E+00	U	8.06E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010	13:38	I
0347400	BE-7	13966-02-4	1.03E+01	pCi/L	1.8E+01	1.8E+01	U	3.24E+01		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	CO-60	10198-40-0	-8.64E-01	pCi/L	2.0E+00	2.0E+00	U	3.57E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	CS-134	13967-70-9	9.55E-01	pCi/L	2.1E+00	2.1E+00	U	3.83E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	CS-137	10045-97-3	1.60E-01	pCi/L	2.0E+00	2.0E+00	U	3.53E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	EU-152	14683-23-9	1.56E-01	pCi/L	5.1E+00	5.1E+00	U	8.89E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	EU-154	15585-10-1	3.47E-01	pCi/L	5.6E+00	5.6E+00	U	1.02E+01		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	EU-155	14391-16-3	6.32E-01	pCi/L	4.2E+00	4.2E+00	U	7.30E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	K-40	13966-00-2	-5.70E+01	pCi/L	5.2E+01	5.2E+01	U	1.08E+02		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	RU-106	13967-48-1	-4.34E+00	pCi/L	1.7E+01	1.7E+01	U	2.92E+01		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347400	SB-125	14234-35-6	-4.02E+00	pCi/L	4.7E+00	4.7E+00	U	7.63E+00		GAMMALL_GS	1.9996E+00	L	12/22/2010	15:24	I
0347399	I-129	15046-84-1	-1.50E-02	pCi/L	8.8E-02	8.8E-02	U	1.57E-01	89.7	I129LL_SEP_LEPS	3.8452E+00	L	01/03/2011	08:37	I
0347402	TH-228	14274-82-9	4.73E-02	pCi/L	1.6E-01	1.6E-01	U	4.45E-01	97.8	THISO_IE_PRECIP	2.004E-01	L	12/24/2010	14:06	I
0347402	TH-230	14269-63-7	7.68E-02	pCi/L	1.6E-01	1.6E-01	U	3.68E-01	97.8	THISO_IE_PRECIP	2.004E-01	L	12/24/2010	14:06	I
0347402	TH-232	Th-232	-3.07E-02	pCi/L	1.6E-01	1.6E-01	U	4.34E-01	97.8	THISO_IE_PRECIP	2.004E-01	L	12/24/2010	14:06	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:
9MAREV10	B28695		MW6-SBB-A1	X11-006	W06066					11/30/2010 10:24

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

1/17/2011 11:20:21 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45555 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347399	I-129	15046-84-1	8.26E-02	pCi/L	1.2E-01	1.2E-01	U	2.27E-01	100.0	I129LL_SEP_LEPS	3.866E+00	L	01/03/2011 12:00	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAVG310	B27X11		MW6-SBB-A1	X11-005	W06066					12/01/2010 12:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	4.05E+00	pCi/L	3.5E+00	3.9E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 14:21	I
0347400	BE-7	13966-02-4	-1.10E+01	pCi/L	1.6E+01	1.6E+01	U	2.55E+01		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	CO-60	10198-40-0	1.08E-02	pCi/L	1.6E+00	1.6E+00	U	3.03E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	CS-134	13967-70-9	-7.95E-01	pCi/L	1.8E+00	1.8E+00	U	3.05E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	CS-137	10045-97-3	-1.15E+00	pCi/L	1.5E+00	1.5E+00	U	2.50E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	EU-152	14683-23-9	9.16E-01	pCi/L	4.1E+00	4.1E+00	U	7.28E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	EU-154	15585-10-1	2.95E-01	pCi/L	3.5E+00	3.5E+00	U	6.85E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	EU-155	14391-16-3	2.75E+00	pCi/L	2.7E+00	2.7E+00	U	4.89E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	K-40	13966-00-2	-4.09E+01	pCi/L	3.6E+01	3.6E+01	U	7.34E+01		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	RU-106	13967-48-1	-4.33E-02	pCi/L	1.3E+01	1.3E+01	U	2.32E+01		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I
0347400	SB-125	14234-35-6	-4.84E+00	pCi/L	3.8E+00	3.8E+00	U	5.88E+00		GAMMALL_GS	2.0038E+00	L	12/22/2010 15:24	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MAVHD10	B27X12		MW6-SBB-A1	X11-005	W06066					12/01/2010 12:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0347404	C-14	14762-75-5	4.10E+00	pCi/L	3.5E+00	3.9E+00	U	8.04E+00	100.0	C14_LSC	2.00E-01	L	12/19/2010 15:47	I
0347400	BE-7	13966-02-4	-2.95E+00	pCi/L	2.1E+01	2.1E+01	U	3.58E+01		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	CO-60	10198-40-0	-7.38E-01	pCi/L	2.3E+00	2.3E+00	U	4.05E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	CS-134	13967-70-9	9.52E-01	pCi/L	2.3E+00	2.3E+00	U	4.21E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	CS-137	10045-97-3	4.24E-01	pCi/L	2.3E+00	2.3E+00	U	4.09E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	EU-152	14683-23-9	-3.86E+00	pCi/L	5.6E+00	5.6E+00	U	9.31E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	EU-154	15585-10-1	-8.39E-01	pCi/L	6.2E+00	6.2E+00	U	1.10E+01		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	EU-155	14391-16-3	-2.54E+00	pCi/L	3.7E+00	3.7E+00	U	6.09E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	K-40	13966-00-2	1.07E+02	pCi/L	5.6E+01	5.6E+01		3.44E+01		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	RU-106	13967-48-1	-1.16E+01	pCi/L	2.0E+01	2.0E+01	U	3.37E+01		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	I
0347400	SB-125	14234-35-6	-2.06E-01	pCi/L	5.4E+00	5.4E+00	U	9.25E+00		GAMMALL_GS	2.0065E+00	L	12/22/2010 18:51	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.

Monday, January 17, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VC1AB	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/30/2010 10:24
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347399	I-129	1.91E-01	pCi/L	3.0E-01	U	2.09E-01	92.2		I129LL_SEP_L	3.8939E+00	01/03/2011				D
BLK	15046-84-1			3.0E-01						L	19:58				

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

Monday, January 17, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VH1AB	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/30/2010 10:10
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347400	BE-7	-7.75E+00	pCi/L	1.2E+01	U	1.98E+01			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	13966-02-4			1.2E+01						L	18:52				
0347400	CO-60	1.03E+00	pCi/L	1.6E+00	U	3.19E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	10198-40-0			1.6E+00						L	18:52				
0347400	CS-134	-2.26E-01	pCi/L	1.7E+00	U	3.09E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	13967-70-9			1.7E+00						L	18:52				
0347400	CS-137	4.49E-01	pCi/L	1.7E+00	U	3.11E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	10045-97-3			1.7E+00						L	18:52				
0347400	EU-152	-1.93E+00	pCi/L	4.0E+00	U	6.81E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	14683-23-9			4.0E+00						L	18:52				
0347400	EU-154	4.76E+00	pCi/L	4.5E+00	U	9.50E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	15585-10-1			4.5E+00						L	18:52				
0347400	EU-155	1.77E-01	pCi/L	2.7E+00	U	4.74E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	14391-16-3			2.7E+00						L	18:52				
0347400	K-40	-3.80E+01	pCi/L	3.7E+01	U	7.53E+01			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	13966-00-2			3.7E+01						L	18:52				
0347400	RU-106	9.33E+00	pCi/L	1.3E+01	U	2.52E+01			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	13967-48-1			1.3E+01						L	18:52				
0347400	SB-125	-4.43E-01	pCi/L	3.5E+00	U	6.07E+00			GAMMALL_GS	2.0035E+00	12/22/2010				D
BLK	14234-35-6			3.5E+00						L	18:52				

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

Monday, January 17, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VK1AB	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/29/2010 11:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/01/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347402	TH-228	0.00E+00	pCi/L	1.6E-01	U	3.72E-01	95.6		THISO_IE_PR	2.039E-01	12/24/2010				D
BLK	14274-82-9			1.6E-01						L	14:06				
0347402	TH-230	0.00E+00	pCi/L	1.5E-01	U	3.63E-01	95.6		THISO_IE_PR	2.039E-01	12/24/2010				D
BLK	14269-63-7			1.5E-01						L	14:06				
0347402	TH-232	-1.52E-02	pCi/L	1.5E-01	U	3.63E-01	95.6		THISO_IE_PR	2.039E-01	12/24/2010				D
BLK	Th-232			1.5E-01						L	14:06				

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

Monday, January 17, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VL1AB	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/02/2010 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/03/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347403	NI-63	2.68E+00	pCi/L	2.6E+00	U	3.85E+00	87.6		NI63_LSC	4.012E-01	12/28/2010				D
BLK	13981-37-8			1.7E+00						L	22:29				

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

Monday, January 17, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VM1AB	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/01/2010 12:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/02/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347404	C-14	5.19E+00	pCi/L	4.0E+00	U	8.04E+00	100.0		C14_LSC	2.00E-01	12/19/2010				D
BLK	14762-75-5			3.5E+00						L	18:38				

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

Monday, January 17, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VC1CS	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/30/2010 10:24
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/01/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347399	I-129	1.08E+01	pCi/L	1.2E+00		2.31E-01	99.8	9.87E+00	I129LL_SEP_L	3.8995E+00	01/03/2011			70	D
BS	15046-84-1			1.2E+00				109.4		L	20:00			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.

Monday, January 17, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id: MA9VH1CS **Sdg/Rept Nbr:** W06066 45555 **Collection Date:** 11/30/2010 10:10

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/01/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347400	CO-60	3.60E+01	pCi/L	6.6E+00		4.30E+00		3.74E+01	GAMMALL_GS	2.0029E+00	12/22/2010			70	D
BS	10198-40-0			6.6E+00				96.2		L	18:52			130	
0347400	CS-137	5.91E+01	pCi/L	9.7E+00		3.81E+00		4.97E+01	GAMMALL_GS	2.0029E+00	12/22/2010			70	D
BS	10045-97-3			9.7E+00				119.0		L	18:52			130	
0347400	EU-152	7.99E+01	pCi/L	2.6E+01		1.00E+01		7.61E+01	GAMMALL_GS	2.0029E+00	12/22/2010			70	D
BS	14683-23-9			2.6E+01				105.0		L	18:52			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.

Monday, January 17, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id: MA9VK1CS **Sdg/Rept Nbr:** W06066 45555 **Collection Date:** 11/29/2010 11:36

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/01/2010

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	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347402	TH-228	3.28E-02	pCi/L	1.1E-01	U	3.09E-01	97.7	1.13E+01	THISO_IE_PR	2.047E-01	12/24/2010			70	D
BS	14274-82-9			1.1E-01				0.3		L	14:06			130	
0347402	TH-230	9.27E+00	pCi/L	2.0E+00		3.02E-01	97.7	1.10E+01	THISO_IE_PR	2.047E-01	12/24/2010			70	D
BS	14269-63-7			1.4E+00				83.9		L	14:06			130	
0347402	TH-232	2.14E-01	pCi/L	2.2E-01	U	2.56E-01	97.7	1.10E+01	THISO_IE_PR	2.047E-01	12/24/2010			70	D
BS	Th-232			2.1E-01				1.9		L	14:06			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.

Monday, January 17, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VL1CS	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/02/2010 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/03/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347403	NI-63	3.23E+02	pCi/L	2.0E+01		3.62E+00	93.5	3.75E+02	NI63_LSC	3.991E-01	12/29/2010			70	D
BS	13981-37-8			5.3E+00				86.1		L	00:12			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.

Monday, January 17, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA9VM1CS	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/01/2010 12:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/02/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347404	C-14	7.16E+03	pCi/L	4.2E+02		3.22E+02	100.0	7.30E+03	C14_LSC	5.00E-03	12/19/2010			70	D
BS	14762-75-5			3.0E+02				98.1		L	19:21			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.

Monday, January 17, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MA05D1DR	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/02/2010 10:00
Client Id:	B29L82	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/03/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-017	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347403	NI-63	5.10E+00	pCi/L	2.6E+00		3.70E+00	91.3		NI63_LSC	4.001E-01	12/28/2010	14.4	0.4		D
DUP	13981-37-8	4.42E+00		1.7E+00						L	20:46	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.

Monday, January 17, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MAQ3H1ER	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/30/2010 10:10
Client Id:	B27X46	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-005	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347400	BE-7	-6.25E+00	pCi/L	1.3E+01	U	2.18E+01			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	0.8		D
DUP	13966-02-4	-1.36E+01		1.3E+01						L	15:21	20.0	3		
0347400	CO-60	1.18E+00	pCi/L	1.3E+00	U	2.60E+00			GAMMALL_GS	2.0018E+00	12/22/2010	5603.2	2.5		D
DUP	10198-40-0	-1.10E+00		1.3E+00						L	15:21	20.0	3		
0347400	CS-134	-6.65E-01	pCi/L	1.4E+00	U	2.30E+00			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	1.3		D
DUP	13967-70-9	6.11E-01		1.4E+00						L	15:21	20.0	3		
0347400	CS-137	-5.14E-01	pCi/L	1.3E+00	U	2.22E+00			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	0.4		D
DUP	10045-97-3	-1.71E-01		1.3E+00						L	15:21	20.0	3		
0347400	EU-152	8.93E-01	pCi/L	3.6E+00	U	6.33E+00			GAMMALL_GS	2.0018E+00	12/22/2010	138.8	1.6		D
DUP	14683-23-9	4.94E+00		3.6E+00						L	15:21	20.0	3		
0347400	EU-154	-3.40E-01	pCi/L	3.5E+00	U	6.31E+00			GAMMALL_GS	2.0018E+00	12/22/2010	916.7	0.4		D
DUP	15585-10-1	5.30E-01		3.5E+00						L	15:21	20.0	3		
0347400	EU-155	-3.43E+00	pCi/L	3.1E+00	U	4.97E+00			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	2.3		D
DUP	14391-16-3	1.73E+00		3.1E+00						L	15:21	20.0	3		
0347400	K-40	1.04E+01	pCi/L	2.0E+01	U	4.04E+01			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	4.9		D
DUP	13966-00-2	-6.04E+01		2.0E+01						L	15:21	20.0	3		
0347400	RU-106	-5.66E+00	pCi/L	1.3E+01	U	2.12E+01			GAMMALL_GS	2.0018E+00	12/22/2010	425.2	2.4		D
DUP	13967-48-1	1.57E+01		1.3E+01						L	15:21	20.0	3		
0347400	SB-125	-1.32E+00	pCi/L	3.0E+00	U	5.21E+00			GAMMALL_GS	2.0018E+00	12/22/2010	0.0	0.4		D
DUP	14234-35-6	-5.60E-01		3.0E+00						L	15:21	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.

Monday, January 17, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MARA31FR	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/29/2010 11:36
Client Id:	B27T96	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-004	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347402	TH-228	7.58E-02	pCi/L	1.6E-01	U	3.63E-01	101.0		THISO_IE_PR	2.007E-01	12/24/2010	79.2	0.4		D
DUP	14274-82-9	3.28E-02		1.5E-01						L	14:06	20.0	3		
0347402	TH-230	0.00E+00	pCi/L	1.5E-01	U	3.54E-01	101.0		THISO_IE_PR	2.007E-01	12/24/2010	200.0	0.2		D
DUP	14269-63-7	2.13E-02		1.5E-01						L	14:06	20.0	3		
0347402	TH-232	-1.48E-02	pCi/L	1.5E-01	U	3.54E-01	101.0		THISO_IE_PR	2.007E-01	12/24/2010	0.0	0.		D
DUP	Th-232	-1.07E-02		1.5E-01						L	14:06	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.

Monday, January 17, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MAREV1CR	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 11/30/2010 10:24
Client Id:	B28695	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/01/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-006	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 LCL/UCL	R Typ
0347399	I-129	1.74E-01	pCi/L	1.0E-01	U	2.06E-01	100.0		I129LL_SEP_L	3.8724E+00	01/03/2011	71.3	1.3		D
DUP	15046-84-1	8.26E-02		1.0E-01						L	12:00	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.

Monday, January 17, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06066.Edd, h:\Reportdb\edd\FeadIV\Rad\45555.Edd

Lab Sample Id:	MAVG31DR	**Sdg/Rept Nbr:**	W06066	45555	**Collection Date:** 12/01/2010 12:30
Client Id:	B27X11	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/02/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-005	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0347404	C-14	8.64E-01	pCi/L	3.8E+00	U	8.06E+00	100.0		C14_LSC	2.00E-01	12/19/2010	129.7	1.2		D
DUP	14762-75-5	4.05E+00		3.4E+00						L	15:04	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
THE LEADER IN ENVIRONMENTAL TESTING

TA Richland
Hexavalent Chromium - Water

Analyst:	D. Lucas	Calibration Curve Information				SOP Information		BATCH #	0342318
Start Date:	12/8/2010		Amount	Conc.(mg/L)	ABS.	RL-WC-003		SDG #	W06066
Start Time:		Blank	0.000	0.000	0.000	Revision 0		Matrix	Water
End Date:	12/8/2010	Std. 1	0.100	0.050	0.098				
End Time		Std. 2	0.500	0.250	0.480			Instrument Information	
		Std. 3	0.750	0.375	0.714	MDL (mg/L)	0.0037	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.406			Wavelength:	540
		Std 5	2.000	1.000	1.853			R Squared	0.99986
Date:	12/08/10	Standard Volume (mL):			100.000			Slope:	1.85374
		Date of Curve:						Intercept:	0.00928

		Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #		Cr-10-00304	Cr-10-00305		Cr-10-00304		Cr-10-00304	
Prep Date:		12/08/10	12/08/10		12/08/10		12/08/10	
Concentration (mg/L)		50	50		50		50	
Expiration Date:		12/09/10	12/09/10		12/09/10		12/09/10	
Pipettor(s)		70,190	190		190		190	
Volume Used (	Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

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

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec. / RPD
n/a	n/a	ICV	100.000	0.937	0.000	0.937	1	0.5005	0.500	100.09%
n/a	n/a	ICB	100.000	0.009	0.000	0.009	1	-0.0002	<MDL	
MA2KC1AA	n/a	Prep Blank	100.000	0.009		0.009	1	-0.0002	<MDL	
MA2KC1AC	n/a	LCS	100.000	0.956		0.956	1	0.5107	0.511	102.14%
MA17H1AA	B29583'	Sample	100.000	0.011		0.011	1	0.0009	<MDL	
MA17H1AC-S	B29583'-MS	MS	100.000	0.518		0.518	1	0.2744	0.274	104.28%
MA17H1AD-D	B29583'-MSD	MSD	100.000	0.519		0.519	1	0.2750	0.275	104.49%
MA17H1AE-X	B29583'-DUP	Duplicate	100.000	0.013		0.013	1	0.0020	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.937		0.937	1	0.5005	0.500	100.09%
n/a	n/a	CCB	100.000	0.010		0.010	1	0.0004	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

12/28/2010 3:13:53 PM

Lot No., Due Date: J0L020502; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0347402; RTHISO Thiso by ALP
SDG, Matrix: W06066; 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 [signature] **Date** 12/28/10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 0347402

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

Comments on any "No" response: _____

Second Level Review: Jodie C. Date: 12/29/10

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

12/28/2010 10:50:42 AM

Lot No., Due Date: J0L100650,J0L020474,J0L020502,J0L030566; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0347400; RGAMMA Gamma by GER
SDG, Matrix: W06066; 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 [signature] **Date** 12/28/10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 0347400

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

Comments on any "No" response: _____

Second Level Review: Jodie C. Date: 12/29/10

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

1/11/2011 2:10:22 PM

Lot No., Due Date: J0L070554,J0L100650,J0L020474,J0L020502,J0L020518; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0347399; RGAMLEPS Gamma by LEPS
SDG, Matrix: W06066; 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 [signature] **Date** 1/11/11

TestAmerica Richland
QAS_RADCALCv4.8.44

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 0347399

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

Comments on any "No" response: _____

Second Level Review: Jodie G Date: 1/14/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

12/28/2010 10:07:24 AM

Lot No., Due Date: J0L070525,J0L100650,J0L020474,J0L020502,J0L030566; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0347404; RC14 C-14 by LSC
SDG, Matrix: W06066; 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 Tina Anderson **Date** 12/28/10

TestAmerica Richland
QAS_RADCALCv4.8.44

Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 0347404

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

Comments on any "No" response: _____

Second Level Review: Jodie G Date: 12/29/10

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

12/30/2010 12:47:35 PM

Lot No., Due Date: J0L070525; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0347403; RNI63 Ni-63 by LSC
SDG, Matrix: W06066; 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 Lisa Antonson Date 12/30/10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 0347Q3

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

Comments on any "No" response: _____

Second Level Review: Jodie Date: 1/14/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **0342318**

Lab Sample Numbers or SDG: **W06066**

Method/Test/Parameter: **Cr+6 in Water / RL-WC-003**

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

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

Comments on any "No" response:

Analyst: [signature] Date: 12/08/2010

Second-Level Review: [signature] Date: 1/17/11

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-139

Page 1 of 2

Collector: JOSH ARTZER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 31 191	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X34	N	W	11/29/10	1358	1x20-mL P	Activity Scan	6 Months	None
B27X34	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X34	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X34	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQ761

JOL020474
JDGW06066

JOL020474

Relinquished By	Received By	Matrix *
Print: JOSH ARTZER CHPRC; Sign: Josh Artzer; Date/Time: 1503 NOV 29 2010	Print: SSU-1; Sign: ; Date/Time: 1503 NOV 29 2010	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By: SSU-1; 0800; Date/Time: NOV 30 2010	Received By: SE Hamaker CHPRC; 0800; Date/Time: NOV 30 2010	
Relinquished By: SE Hamaker CHPRC; 1030; Date/Time: NOV 30 2010	Received By: SSU-1; 1030; Date/Time: NOV 30 2010	
Relinquished By: SSU #1; 12/1/10 1200	Received By: SCOTT HAMAKER; Date/Time: 12/1/10 1200	

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

A-6004-842 (REV 2)

JOL020474

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-005-139

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER	Scott Hamaker	12/1/10 1315	TALR	Luis Velazquez	Luis Velazquez	12/1/10 1315
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-249

Collector: JP HERRICK	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No.: HNF-N-506 32 / 72	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27XB0	N	W	11/29/10	1246	1x20-mL P	Activity Scan	6 Months	None
B27XB0	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27XB0	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27XB0	N	W	11/29/10	1246	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQ6Q

AJOL020474
CTDGW06066

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
JP HERRICK CHPRC	1120 NOV 29 2010	SSU #1	1120 NOV 29 2010
SSU- 1	0800 NOV 30 2010	SE Hamaker CHPRC	0800 NOV 30 2010
SE Hamaker CHPRC	1030 NOV 30 2010	SSU- 1	1030 NOV 30 2010
SSU #1	12/1/10 1200	SCOTT HAMAKER	12/1/10 1200

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

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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. XII-005-249

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott HAMAKER	/ Scott Hamaker		12/1/10 13:15	TALR	Lucas Villagomez	[illegible]	12/1/10 1315
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGWS

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-129

Page 1 of 2

Collector: JOSH ARTZER, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 31 / 91	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X28	N	W	11/29/10	1207	1x20-mL P	Activity Scan	6 Months	None
B27X28	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X28	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X28	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQ69

JOL020474
SDGW06066

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
JOSH ARTZER CHPRC	Josh Artzer	1503 NOV 29 2010	SSU- 1		1503 NOV 29 2010
SSU- 1		0800 NOV 30 2010	SE Hamaker CHPRC	Scott Hamaker	0800 NOV 30 2010
SE Hamaker CHPRC	Scott Hamaker	1030 NOV 30 2010	SSU- 1		1030 NOV 30 2010
SSU #1		12/1/10 1200	SCOTT HAMAKER	Scott Hamaker	12/1/10 1200

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-005-129

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER	Scott Hamaker	12/1/10 1315	TALD	Lucius Velazquez	[illegible]	1315 12/1/10
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-119

Page 1 of 2

Collector JOSH ARTZER CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-005	Sampling Origin Hanford Site	Purchase Order/Charge Code 300118ES20
Project Title IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 31 / 91	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: 30 Days PRIORITY	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X22	N	W	11/29/10	0950	1x20-mL P	Activity Scan	6 Months	None
B27X22	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X22	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X22	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQBC

JOL020474
SDEW06066

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTZER CHPRC		Josh Artzer	1503 NOV 2 9 2010	SSU- 1			1503 NOV 2 9 2010
SSU- 1		0800	NOV 3 0 2010	SE Hamaker CHPRC		Scott Hamaker	0800 NOV 3 0 2010
SE Hamaker CHPRC		Scott Hamaker	1100 NOV 3 0 2010	SSU-..1			1100 NOV 3 0 2010
SSU #1			12/1/10 1200	SCOTT HAMAKER		Scott Hamaker	12/1/10 1200

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. XI1-005-119

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER		12/1/10 1315	TALR	Lucas Velazquez		12/1/10 1315
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC P&S	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-239 Page 1 of 2

Collector JP HERRICK CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-005	Sampling Origin Hanford Site	Purchase Order/Charge Code 300118ES20
Project Title IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 32 / 72	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: 30 Days PRIORITY	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X94	N	W	11/29/10	1413	1x20-mL P	Activity Scan	6 Months	None
B27X94	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X94	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X94	N	W	11/29/10	1413	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQ59

JOL020474
JDBW06066

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JP HERRICK CHPRC			NOV 29 2010 1520	SSU #1			NOV 29 2010 1520
SSU- 1			0800 NOV 30 2010	SE Hamaker CHPRC			0800 NOV 30 2010
SE Hamaker CHPRC			1030 NOV 30 2010	SSU- 1			1030 NOV 30 2010
SSU #1			12/1/10 1200	SCOTT HAMAKER			12/1/10 1200

Matrix *

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

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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-005-239

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER	Scott Hamaker	12/1/10 1315	TALR	Lucas Velazquez	Lucas Velazquez	1315 12/1/10
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-269

Page 1 of 2

Collector: JP HERRICK	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 32 / 72	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27XC2	N	W	11/29/10	1030	1x20-mL P	Activity Scan	6 Months	None
B27XC2	N	W	|	|	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27XC2	N	W	|	|	1x4000-mL G/P	GAMMALL_GS: List-1 (9) MAQ54	6 Months	HNO3 to pH <2
B27XC2	N	W	11/29/10	1030	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOL020474
SDGW06066

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JP HERRICK CHPRC			NOV 29 2010 1520	SSU #1			NOV 29 2010 1530
SSU-1			0800 NOV 30 2010	SE Hamaker CHPRC		Scott Hamaker	0800 NOV 30 2010
SE Hamaker CHPRC		Scott Hamaker	1030 NOV 30 2010	SSU-1			1030 NOV 30 2010
SSU #1			12/1/10 1200	SCOTT HAMAKER		Scott Hamaker	12/1/10 1200

Matrix *

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

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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-005-269

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SCOTT HAMAKER	/	Scott Hamaker	1315 12/1/10	TALR	Lucas Velazquez	[illegible]	1315 12/1/10
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-259

Page 1 of 1

Collector: MS McCoy CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 33177	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27XB6	N	W	12-1-10	1030	1x20-mL P	Activity Scan	6 Months	None
B27XB6	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27XB6	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27XB6	N	W	12-1-10	1030	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQST

JOL020474
SDGW06066

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
MS McCoy CHPRC	DEC 0 1 2010 1145	SSIL-1	DEC 0 1 2010 1145
SSutt	12/1/10 1200	K Patterson	12/1/10 1200
K Patterson	12/1/10 1315	Lucas Velazquez / Lady THR	12/1/10 1315

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (REV 2)

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-169 Page 1 of 1

Collector: MS McCoy CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 33177	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X52	N	W	12-1-10	0848	1x20-mL P	Activity Scan	6 Months	None
B27X52	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X52	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X52	N	W	12-1-10	0848	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQ5G

J0L020474
JDGW06066

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
MS McCoy CHPRC	DEC 0 1 2010 1145	SSU-1	DEC 0 1 2010 1145
SSU#1	12/1/10 1200	K Patterson	12/1/10 1200
K Patterson	12/1/10 1315	Lucas De Luzquez TALR	1315 12/1/10

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-289

Page 1 of 2

Collector: DJ Woehle, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 34 / 83	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27XD4	N	W	11/29/10	1304	1x20-mL P	Activity Scan	6 Months	None
B27XD4	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27XD4	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27XD4	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAQYM

JQL020474
JDEW06066

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
DJ Woehle, CHPRC		NOV 29 2010 1400	SSU-1		NOV 29 2010 1400
SSU-1		0800 NOV 30 2010	SE Hamaker, CHPRC		0800 NOV 30 2010
SE Hamaker, CHPRC		1030 NOV 30 2010	SSU-1		1030 NOV 30 2010
SSU #1		DEC 01 2010 1000	SE Hamaker, CHPRC		DEC 01 2010 1000

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-005-289

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SE Hamaker CHPRC		Scott Hamaker	~~1400~~ 1315 12/1/2010 DEC 01 2010	~~FED EX~~ 12/1/10		TAUR	12/1/10 1315
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC
PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-159

Page 1 of 1

Collector CA Snyder ~~CHPRC~~	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-005	Sampling Origin Hanford Site	Purchase Order/Charge Code 300118ES20
Project Title IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 34184	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: 30 Days PRIORITY	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X46	N	W	11-30-10	1010	1x20-mL P	Activity Scan	6 Months	None
B27X46	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X46	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9) MAQ3H	6 Months	HNO3 to pH <2
B27X46	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOL020474
SDGW06066
DLG

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder ~~CHPRC~~			1100 NOV 30 2010	SSU- 1			1110 NOV 30 2010
SSU #1			12/1/10 0800	SCOTT HAMAKER			12/1/10 0800
SCOTT HAMAKER			12/1/10 1315	Lucas Velazquez	TALR		12/1/10 1315PM

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: Dec.01.10 @ 1315 GM Screen Result (out) .1 (in) .2 Initials: [✓]

Client: PGW SDG #: W06066 NA [ ] SAF #: X11-005 NA [ ]

Work Order Number: JQ020474 Chain of Custody # X11-005-159;289;

Shipping Container ID: Hand delivery NA [✓] Air Bill # 169;259;269;239; NA [ ]

Item 1 through 5 for shipping container only. Initial appropriate response. 119;129;249;139;

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 10
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - [✓] tape
   - [✓] custody seals
   - [✓] hazard labels
   - [✓] appropriate sample labels
9. Samples:
   - [✓] are in good condition
   - ____ are broken
   - ____ are leaking
   - ____ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : ____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [ ] ____

See other side for additional comments

Sample Custodian: [signature] Date: Dec.01.10 @ 1315 [signature]

Client Informed on ____ by ____ Person contacted ____

[ ] No action necessary; process as is

Project Manager ____ Date ____

LS-023, Rev. 12, 10/10

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-004-106

Page 1 of 2

Collector: DJ Woehle CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: FDURA, OCTOBER 2010	Logbook No: HNF-N-506 341 / 83	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Do not combine samples from this SAF with other data sets. Need SDG to be stand alone.
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27T96	N	W	11/29/10	1130	1x20-mL P	Activity Scan	6 Months	None
B27T96	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27T96	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27T96	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B27T96	N	W	↓	↓	1x1000-mL G/P	Isotopic Thorium	6 Months	HNO3 to pH <2

MARAB

JOL020502
SDG WQ6067 SKS
WQ6066 12/2/10

JOL020502

Relinquished By: DJ Woehle CHPRC — Print / Sign — Date/Time 1400 NOV 29 2010	Received By: SSU- 1 — Print / Sign — Date/Time 1400 NOV 29 2010	Matrix *	
Relinquished By: SSU- 1 — Date/Time 0800 NOV 30 2010	Received By: SE Hamaker CHPRC — Date/Time 0800 NOV 30 2010	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air	DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other
Relinquished By: SE Hamaker CHPRC — Date/Time 1030 NOV 30 2010	Received By: SSU- 1 — Date/Time 1030 NOV 30 2010		
Relinquished By: SSU #1 — Date/Time 12/1/10 1200	Received By: SCOTT HAMAKER — Date/Time 12/1/10 1200		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

A-6004-842 (05/10)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. X11-004-106

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER	Scott Hamaker	12/1/10 1315	TALP	Lucas Hernandez	[illegible]	1315 12/1/10
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-004-152

Page 1 of 2

Collector: DJ Woehle CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-004	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: FDURA, OCTOBER 2010	Logbook No: HNF-N-506-341/83	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine samples from this SAF with other data sets. Need SDG to be stand alone.
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B28MM9	N	W	11/29/10	0900	1x20-mL P	Activity Scan	6 Months	None
B28MM9	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B28MM9	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B28MM9	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B28MM9	N	W			1x1000-mL G/P	Isotopic Thorium	6 Months	HNO3 to pH <2

MARCK

J0L020502
SDG ~~W06067~~
W06066
SKS 12/2/10

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Woehle CHPRC		DJ Woehle	NOV 29 2010 1400	SSU- 1			NOV 29 2010 1400
SSU- 1			0800 NOV 30 2010	SE Hamaker CHPRC		Scott Hamaker	0800 NOV 30 2010
SE Hamaker CHPRC		Scott Hamaker	1030 NOV 30 2010	SSU- 1			1030 NOV 30 2010
SSU #1			12/1/10 1000	SCOTT HAMAKER		Scott Hamaker	12/1/10 1000

Matrix *

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

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

A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST (continued)

C.O.C. No. XII-004-152

Page 2 of 2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	SCOTT HAMAKER	[signature]	12/1/10 1315 ~~1400~~ 12/1/10 AM	~~FED EX~~ 12/2/10 AM	Lucas Velazquez	TALR	12/1/10 1315PM
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

A-6003-962 (03/05)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PGW

Sample Check-in List

Date/Time Received: Dec-1-10@13 15 GM Screen Result (out) .2 (in) .3 Initials

Client: PGW SDG #: W0067 W0066 NA [ ] SAF #: X11-004 NA [

Work Order Number: JOL020502 SKS 12/2/10 Chain of Custody # X11-004-106;

Shipping Container ID: Hand Delivery NA [ ] Air Bill # X11-004-152 NA [ ]

Item 1 through 5 for shipping container only. Initial appropriate response.

1. Custody Seals on shipping container intact? Yes [✓] No [ ] No Custody Seal [ ]

2. Custody Seals dated and signed? Yes [✓] No [ ] No Custody Seal [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature: 4°C NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2 @ multiple Containers

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

8. Samples have:
   ✓ tape
   ✓ custody seals
   ✓ hazard labels
   ✓ appropriate sample labels JOL020502

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

10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : _____

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

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

13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: Dec-1-10@1315 TMR

Client Informed on N/A by N/A Person contacted N/A

[✓] No action necessary; process as is

Project Manager [signature] Date 12/5/10

LS-023, Rev. 12, 10/10

CHPRC

PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-006-56

Page 1 of 1

Collector: JOSH ARTZER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300206ES20
Project Title: 300DURA, OCTOBER 2010	Logbook No: HNF-N-506 31 / 92	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine samples from this SAF with other data sets. Need SDG to be stand alone.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401930.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B28695	N	W	11/30/10	1024	1x20-mL P	Activity Scan	6 Months	None
B28695	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

MAREV

JOL020518
SDG ~~W06067~~
W06066 SS 12/2/10

JOL020518

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
JOSH ARTZER CHPRC	Josh Artzer	NOV 30 2010 1125	SSU- 1		NOV 30 2010 1125
SSU #1		12/1/10 1000	L.D. WALL	L.D. Wall	12/1/10 1000
L.D. WALL	L.D. Wall	12/1/10 13:45	Lucas Velazquez TALR		12/1/10 1315

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

PGW

Sample Check-in List

Date/Time Received: Dec 1 10 @ 1315 GM Screen Result (out) .3 (in) .4 Initials [✓]

Client: PGW SDG #: W066066 NA [ ] SAF #: X11-006 NA [ ]

Work Order Number: JOL020518 Chain of Custody # X11-006-56

Shipping Container ID: Hand Delivery NA [✓] Air Bill # _____ NA [ ]

Item 1 through 5 for shipping container only. Initial appropriate response.

1. Custody Seals on shipping container intact? Yes [✓] No [ ] No Custody Seal [ ]

2. Custody Seals dated and signed? Yes [✓] No [ ] No Custody Seal [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature: 4°C NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 3 Containers

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

8. Samples have:
   - ✓ tape
   - ✓ custody seals
   - ✓ hazard labels
   - ✓ appropriate sample labels

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

10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : _____

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

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

13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: Dec 1 10 @ 1315 MW

Client Informed on N/A by N/A Person contacted N/A

[✓] No action necessary; process as is

Project Manager: [signature] Date 12/5/10

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CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-109

Page 1 of 1

Collector: KE Hamilton	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No. CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 32 / ~~30~~ 74 12/01/10	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X11	N	W	12/01/10	1230	1x20-mL P	Activity Scan	6 Months	None
B27X11	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1) } MAVG13	6 Months	None
B27X11	N	W	12/01/10	1230	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

JOL030566
SDG WO 6066

JOL030566

Relinquished By	Date/Time	Received By	Date/Time
KE Hamilton CHPRC (Print) (Sign)	DEC 01 2010 1405	SSU- 1 (Print) (Sign)	DEC 01 2010 1405
SSU- 1	DEC 02 2010 0720	L.D. Wall CHPRC	DEC 02 2010 0720
L.D. Wall CHPRC	DEC 02 2010 1050	Angel Garcia	DEC 02 2010 1050

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

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

A-6004-842 (REV 2)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-110

Page 1 of 1

Collector: KE Hamilton	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA OCTOBER 2010	Logbook No.: HNF-N-506 32 / 74	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X12	N	W	12/01/10	1230	1x20-mL P	Activity Scan	6 Months	None
B27X12	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X12	N	W	12/01/10	1230	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

MAVHD

JOL030566
SDGW06066

JOL030566

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KE Hamilton CHPRC			DEC 01 2010 1405	SSU- 7			DEC 01 2010 1405
SSU- 1			DEC 02 2010 0720	L.D. Wall CHPRC		L.D. Wall	DEC 02 2010 0720
L.D. Wall CHPRC		L.D. Wall	DEC 02 2010 1050	ANGEL Garcia Ruiz			DEC 02 2010 1050
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = 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

A-6004-842 (REV 2)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PGW

Sample Check-in List

Date/Time Received: Dec 02 10 @ 1050 GM Screen Result (out) .3 (in) .4 Initials [ ]

Client: PGW SDG #: W06066 NA [ ] SAF #: X11-005 NA [ ]

Work Order Number: JOL030566 Chain of Custody # X11-005-109,110

Shipping Container ID: Hand Delivery NA [✓] Air Bill # _____ NA [✓]

Item 1 through 5 for shipping container only. Initial appropriate response.

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2 @ multiple containers
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ tape
   - ✓ custody seals
   - ✓ hazard labels
   - ✓ appropriate sample labels
9. Samples:
   - ✓ are in good condition
   - ____ are broken
   - ____ are leaking
   - ____ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: Dec 02 10 @ 1050 TKR

Client Informed on N/A by N/A Person contacted N/A

[✓] No action necessary, process as is

Project Manager: [signature] Date 12/5/10

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CHPRC J0L070525

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-017-5

Page 1 of 1

Collector: KE Hamilton	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: CHPRC X11-017	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM, D&D Final sampling events, November 2010	Logbook No: HNF-N-506 33/78	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: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
100 Area 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
B29L82	N	W	12/02/10	1060	1x20-mL P	Activity Scan MAD5D	6 Months	None
B29L82	N	W			2x1-L G/P	C14_LSC: C-14 (1)	6 Months	None
B29L82	N	W	12/02/10	1000	1x1-L G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

Quote#57671
SDG# ~~W06074~~-WCB60066 SKS 12/9/10
LOT# J0L070525
Report: 1/17/11
PGW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KE Hamilton CHPRC			DEC 02 2010 1430	SSU-1			DEC 02 2010 1430
SSU-1			DEC 03 2010 0800	B.E. Briggs CHPRC			DEC 03 2010 0800
B.E. Briggs CHPRC			DEC 03 2010 1330	ANGEL Garcia			DEC 03 2010 1330
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = 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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-017-2
		Page 1 of 1

Collector: KE Hamilton CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: X11-017	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM, D&D Final sampling events, November 2010	Logbook No: HNF-N-506 33 / 78	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: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
100 Area 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
B29L78	N	W	12/02/10	1220	1x20-mL P	Activity Scan MA05K	6 Months	None
B29L78	N	W			2x1-L G/P	C14_LSC: C-14 (1)	6 Months	None
B29L78	N	W	12/02/10	1220	1x1-L G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

SDG# ~~W06074~~ W06066 SKS 12/9/10
LOT# JOL070525

Relinquished By	Date/Time	Received By	Date/Time
KE Hamilton CHPRC (Print) Karen Hamilton (Sign)	DEC 02 2010 1430	SSU-1 (Print) (Sign)	DEC 02 2010 1430
SSU-1	DEC 03 2010 0800	B.E. Briggs CHPRC	DEC 03 2010 0800
B.E. Briggs CHPRC	DEC 03 2010 1330	ANGEL Garcia	DEC 03 2010 1330

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

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

A-6004-842 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 12/3/10@1330 GM Screen Result (out) .3 (in) .1 Initials LL

Client: PGW SDG #: ~~W06074~~ W06066 NA [ ] SAF #: X11-017 NA

SKS 12/9/10

Work Order Number: JOL070525 Chain of Custody # X11-017-5;2

Shipping Container ID: Hand Delivery NA ~~#~~ Air Bill # ~~NA~~

Item 1 through 5 for shipping container only. Initial appropriate response.

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2@3-1LP 1-vial
7. Sample holding times exceeded? NA [ ] Yes [ ] No [LV]
8. Samples have:
   - ____ tape
   - LV custody seals
   - ____ hazard labels
   - LV appropriate sample labels
9. Samples:
   - SKS are in good condition
   - ____ are broken
   - ____ are leaking
   - ____ have air bubbles (Only for samples requiring no head spac
10. Sample pH appropriate for analysis requested Yes [LV] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : ____
11. Sample Location, Sample Collector Listed? * Yes [LV] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [LV]
13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: 12/3/10

Client Informed on N/A by N/A Person contacted N/A

[ ] No action necessary; process as is

Project Manager [signature] Date 12/9/10

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CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-006-84
		Page 1 of 1

Collector S.J. Southerland CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-006	Sampling Origin Hanford Site	Purchase Order/Charge Code 300206ES20
Project Title 300DURA, OCTOBER 2010	Logbook No: HNF-N-506 25 / 89	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: 30 Days **PRIORITY**	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine samples from this SAF with other data sets. Need SDG to be stand alone.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401930.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B286F0	N	W	12/5/10	1153	1x20-mL P	Activity Scan MA1DK	6 Months	None
B286F0	N	W	12/5/10	1153	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Quote # 57671
SDG # ~~W06075~~ W06066
LOT # JOL070554 SKS 12/9/10
Report: 1/20/11
PGW

JOL070554

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.J. Southerland CHPRC			1430 DEC 05 2010	SSU- 1			1430 DEC 05 2010
SSU- 1			0800 DEC 06 2010	B.E. Briggs CHPRC			0800 DEC 06 2010
B.E. Briggs CHPRC			1340 DEC 06 2010	Lucas Velazquez TAR			1340 DEC 06 2010

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date-Time Received: 12/06/10 @ 1340 GM Screen Result (out) .3 (in) .5 Initials [LV]

Client: PBW SDG #: W060066 ~~W060075~~ NA [ ] SAF #: X11-006 NA [ ]

Work Order Number: JQ070554 Chain of Custody # X11-006-84 12/9/10

Shipping Container ID: Hand Delivery NA [ ] Air Bill # NA

Item 1 through 5 for shipping container only. Initial appropriate response.

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 1-vial 2-4L
7. Sample holding times exceeded? NA [ ] Yes [ ] No [LV]
8. Samples have:
   ____ tape ____ hazard labels
   LV custody seals LV appropriate sample labels
9. Samples:
   LV are in good condition ____ are leaking
   ____ are broken ____ have air bubbles (Only for samples requiring no head space
10. Sample pH appropriate for analysis requested Yes [LV] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : ____

11. Sample Location, Sample Collector Listed? * Yes [LV] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [LV]
13. Description of anomalies (include sample numbers): NA [LV]

See other side for additional comments

Sample Custodian: [signature] Date: 12/06/10

Client Informed on N/A by N/A Person contacted N/A

[ ] No action necessary, process as is

Project Manager [signature] Date 12/9/10

LS-023, Rev. 12, 10/10

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-012-97

Page 1 of 1

Collector ~~KG Patterson~~ CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. X11-012	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20
Project Title SPECIAL SAMPLING, NOVEMBER 2010	Logbook No: HNF-N-506 25191	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: 30 Days **PRIORITY**	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine samples from this SAF with other data sets. Need SDG to be stand alone.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.

MA17H

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B29583	N	W	0855	12/8/10	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B29583	N	W	0855	12/8/10	1x20-mL P	Activity Scan	6 Months	None

(PGW) JOL080477
SDG-W06066

JOL080477

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
KC Patterson CHPRC		DEC 08 2010 1010	Angel Garcia Ortiz		DEC 08 2010 1010
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

A-6004-842 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

PGW

Sample Check-in List

Date/Time Received: DEC 08 10 @ 1010 GM Screen Result (out) .3 (in) .5 Initials

Client: PGW SDG #: WW6066 NA [ ] SAF #: X11-012 NA

Work Order Number: JOL080477 Chain of Custody # X11-012-97

Shipping Container ID: Hand Delivery NA [ ] Air Bill # _____ NA

Item 1 through 5 for shipping container only. Initial appropriate response.

1. Custody Seals on shipping container intact? Yes [✓] No [ ] No Custody Seal [ ]

2. Custody Seals dated and signed? Yes [✓] No [ ] No Custody Seal [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature: 4°C NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1

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

8. Samples have:
   - ✓ tape
   - ✓ custody seals
   - ✓ hazard labels
   - ✓ appropriate sample labels

   JOL080477

9. Samples:
   - ✓ are in good condition
   - ____ are broken
   - ____ are leaking
   - ____ have air bubbles (Only for samples requiring no head spac

10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : _____

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

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

13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: DEC 08 10 @ 1010

Client Informed on N/A by N/A Person contacted N/A

[ ] No action necessary; proceed as is

Project Manager: [signature] Date 12/9/10

LS-023, Rev. 12, 10/10

CHPRC JOL100650

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-279

Page 1 of 1

Collector: CA Snyder CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 33 / 82	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: 30 Days PRIORITY	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
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27XC8	N	W	12/09/10	1159	1x20-mL P	Activity Scan MA7XX	6 Months	None
B27XC8	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27XC8	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27XC8	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Quote #57671
SDG# WD6066
LOT #JOL100650
Report: 1/24/10
PGW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 0 9 2010 1320	AR McIntyre			DEC 0 9 2010 1320
AR McIntyre			12-9-10 1420	Lucas Velazquez		TALR	12-9-10 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
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

A-6004-842 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 12/9/10 @1420 GM Screen Result (out) .3 (in) .41 Initials: L

Client: PGW SDG #: W06066 NA [ ] SAF #: X11-005 NA

Work Order Number: J0H00650 Chain of Custody # X11-005-279

Shipping Container ID: Hand Delivery NA [ ] Air Bill # NA

Item 1 through 5 for shipping container only. Initial appropriate response.

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1@ 2x1LP; 3x4LP (1x vial)
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   ____ tape ____ hazard labels
   ✓ custody seals ✓ appropriate sample labels
9. Samples:
   ✓ are in good condition ____ are leaking
   ____ are broken ____ have air bubbles (Only for samples requiring no head spac
10. Sample pH appropriate for analysis requested Yes [✓] No [ ] N/A [ ] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : N/A
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: 12/9/10

Client Informed on N/A by N/A Person contacted N/A

[✓] No action necessary, process as is

Project Manager [signature] Date 12/13/10

LS-023, Rev. 12, 10/10

12/15/2010 9:05:39 AM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

9N Thiso Prp PRP004, Sep ALP005(ALP016)
S1 Thorium-228,230,232 by Alpha Spec
01 STANDARD TEST SET

Pipet #: _____

AnalyDueDate: 01/10/2011 WO6006

Sep1 DT/Tm Tech:

Batch: 0347402 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MARA3-1-AA J0L020502-1-SAMP 11/29/2010 11:36		AmtRec: VIAL,3XLP,3X4LP	199.40g,in #Containers: 7	199.40g	THTC20477 11/30/10,pd 11/19/10,r	200	Scr:	Alpha: -1.12E-03 uCi/Sa		Beta: 2.29E-03 uCi/Sa
2 MARA3-1-AF-X J0L020502-1-DUP 11/29/2010 11:36		AmtRec: VIAL,3XLP,3X4LP	200.70g,in #Containers: 7	200.70g	THTC20478 11/30/10,pd 11/19/10,r		Scr:	Alpha: -1.12E-03 uCi/Sa		Beta: 2.29E-03 uCi/Sa
3 MARCK-1-AA J0L020502-2-SAMP 11/29/2010 09:00		AmtRec: VIAL,3XLP,3X4LP	200.40g,in #Containers: 7	200.40g	THTC20479 11/30/10,pd 11/19/10,r		Scr:	Alpha: -2.09E-03 uCi/Sa		Beta: 1.49E-03 uCi/Sa
4 MA9VK-1-AA-B J0L130000-402-BLK 12/14/2010 10:55 pd		AmtRec:	203.90g,in #Containers: 1	203.90g	THTC20480 11/30/10,pd 11/19/10,r		Scr:	Alpha:		Beta:
5 MA9VK-1-AC-C J0L130000-402-LCS 12/14/2010 10:55 pd		AmtRec:	204.70g,in #Containers: 1	204.70g	THSI2655 11/30/10,pd 11/19/10,r		Scr:	Alpha:		Beta:

171 173 174 175 176

Comments: pH<2.0 JB 12-15-10

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

MARA31AA-SAMP Constituent List:

Th-228	RDL:1	pCi/L	LCL:	UCL:	RPD:	Th-230	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20

12/15/2010 9:05:40 AM

Sample Preparation/Analysis

9N Thiso Prp PRP004, Sep ALP005(ALP016)
S1 Thorium-228,230,232 by Alpha Spec
01 STANDARD TEST SET

Balance Id:1117411003

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0347402 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Th-232	RDL:1	pCi/L	LCL:	UCL:	RPD:	Th-234	RDL:	pCi/L	LCL:20	UCL:115 RPD:20
MA9VK1AA-BLK:										
Th-228	RDL:1	pCi/L	LCL:	UCL:	RPD:	Th-230	RDL:1	pCi/L	LCL:	UCL: RPD:
Th-232	RDL:1	pCi/L	LCL:	UCL:	RPD:	Th-234	RDL:	pCi/L	LCL:20	UCL:115 RPD:20
MA9VK1AC-LCS:										
Th-230	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20	Th-234	RDL:	pCi/L	LCL:20	UCL:115 RPD:20

MARA31AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA9VK1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA9VK1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

12/28/2010 3:13:10 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/28/2009, 1/2/2011, Batch: '0347402', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0347402						
AC		Rev1C	BockJ	12/15/2010 8:58:42		
SC			wagarr	IsBatched	12/14/2010 10:58:50 AM	ICOC_RADCALC v4.8.49
SC			BockJ	InPrep	12/15/2010 8:58:42 AM	RL-PRP-004 REVISION 1
SC			BockJ	Prep1C	12/15/2010 9:07:45 AM	RL-PRP-004 REVISION 1
SC			HoganH	Sep2C	12/16/2010 9:55:08 AM	ALP-001 REVISION 2
SC			AshworthA	Sep2C	12/23/2010 5:01:01 PM	RL-ALP-016 REVISION 1
SC			DAWKINSO	InCnt1	12/24/2010 10:11:04 AM	RL-CI-008 REVISION 1
SC			ClarkR	CalcC	12/27/2010 7:21:03 AM	RL-CI-008 REVISION 1
SC			whelands	Rev1C	12/28/2010 3:13:03 PM	RL-DR-001 Rev 2
AC			BockJ	12/15/2010 9:07:45		
AC			HoganH	12/16/2010 9:55:08		
AC			AshworthA	12/23/2010 5:01:01		
AC			DAWKINSO	12/24/2010 10:11:04		
AC			ClarkR	12/27/2010 7:21:03		
AC			whelands	12/28/2010 3:13:03		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

12/16/2010 5:26:49 PM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma Prp GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/10/2011 4/06/06

Sep1 DT/Tm Tech:

Batch: 0347400 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MAQ3H-1-AC J0L020474-1-SAMP 11/30/2010 10:10			2001.80g,in AmtRec: VIAL20,2XLP,3X4LP	2001.80g #Containers: 6		100mL	200	613	1512	12/22/10m	
								Scr:	Alpha: 4.79E-04 uCi/Sa	Beta: 7.91E-04 uCi/Sa	
2 MAQ3H-1-AE-X J0L020474-1-DUP ISV 11/30/2010 10:10			AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6				610	1841	12/22/10m	
								Scr:	Alpha: 4.79E-04 uCi/Sa	Beta: 7.91E-04 uCi/Sa	
3 MAQ4M-1-AC J0L020474-2-SAMP 11/29/2010 13:04			2000.00g,in AmtRec: VIAL20,2XLP,3X4LP	2000.00g #Containers: 6				610	1513	12/22/10m	
								Scr:	Alpha: -7.49E-04 uCi/Sa	Beta: 1.39E-03 uCi/Sa	
4 MAQ5G-1-AC J0L020474-3-SAMP 12/01/2010 08:48			2000.10g,in AmtRec: VIAL20,2XLP,3X4LP	2000.10g #Containers: 6				67	1513		
								Scr:	Alpha: 1.51E-04 uCi/Sa	Beta: 1.39E-03 uCi/Sa	
5 MAQ5T-1-AC J0L020474-4-SAMP 12/01/2010 10:30			2003.90g,in AmtRec: VIAL20,2XLP,3X4LP	2003.90g #Containers: 6				64	1514		
								Scr:	Alpha: -1.08E-03 uCi/Sa	Beta: -1.01E-03 uCi/Sa	
6 MAQ54-1-AC J0L020474-5-SAMP 11/29/2010 10:30			2002.00g,in AmtRec: VIAL20,2XLP,3X4LP	2002.00g #Containers: 6				611	1514		
								Scr:	Alpha: -3.08E-03 uCi/Sa	Beta: 2.44E-03 uCi/Sa	
7 MAQ59-1-AC J0L020474-6-SAMP 11/29/2010 14:13			2000.10g,in AmtRec: VIAL20,2XLP,3X4LP	2000.10g #Containers: 6				65	1515		
								Scr:	Alpha: 1.09E-03 uCi/Sa	Beta: -7.11E-04 uCi/Sa	

12/16/2010 5:26:50 PM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma Prp GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0347400 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MAQ6C-1-AC J0L020474-7-SAMP 11/29/2010 09:50			2000.80g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2000.80g		100mL	200	G15	1515	12/22/10	
								Scr:	Alpha: -1.44E-03 uCi/Sa	Beta: 9.43E-04 uCi/Sa	
9 MAQ6G-1-AC J0L020474-8-SAMP 11/29/2010 12:07			1999.70g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	1999.70g				G13	1842	12/22/10	
								Scr:	Alpha: -2.10E-03 uCi/Sa	Beta: 6.42E-04 uCi/Sa	
10 MAQ6Q-1-AC J0L020474-9-SAMP 11/29/2010 12:46			2005.00g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2005.00g				G7	1842		
								Scr:	Alpha: -8.06E-04 uCi/Sa	Beta: 3.34E-03 uCi/Sa	
11 MAQ7G-1-AC J0L020474-10-SAMP 11/29/2010 13:58			2000.70g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2000.70g				G14	1842		
								Scr:	Alpha: -2.09E-03 uCi/Sa	Beta: 1.39E-03 uCi/Sa	
12 MARA3-1-AD J0L020502-1-SAMP 11/29/2010 11:36			2000.10g,in AmtRec: VIAL,3XLP,3X4LP #Containers: 7	2000.10g				G11	1844		
								Scr:	Alpha: -1.12E-03 uCi/Sa	Beta: 2.29E-03 uCi/Sa	
13 MARCK-1-AD J0L020502-2-SAMP 11/29/2010 09:00			1999.60g,in AmtRec: VIAL,3XLP,3X4LP #Containers: 7	1999.60g				G5	1844		
								Scr:	Alpha: -2.09E-03 uCi/Sa	Beta: 1.49E-03 uCi/Sa	
14 MAVG3-1-AC J0L030566-1-SAMP 12/01/2010 12:30			2003.80g,in AmtRec: VIAL20,2XLP,1X4LP #Containers: 4	2003.80g				G15	1844		
								Scr:	Alpha: -3.49E-05 uCi/Sa	Beta: 2.57E-04 uCi/Sa	

12/16/2010 5:26:51 PM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma Prp GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0347400 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MAVHD-1-AC J0L030566-2-SAMP 12/01/2010 12:30			2006.50g,in AmtRec: VIAL20,2XLP,1X4LP	2006.50g #Containers: 4		100mL	200	G14 Scr: Alpha: 1.82E-05 uCi/Sa	22 11	12/22/10 OMP Beta: -4.49E-04 uCi/Sa	
16 MA7XX-1-AC J0L100650-1-SAMP 12/09/2010 11:59			2002.40g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2002.40g #Containers: 6				G11 Scr: Alpha: 7.04E-04 uCi/Sa	22 11	Beta: 4.97E-05 uCi/Sa	
17 MA9VH-1-AA-B J0L130000-400-BLK 12/14/2010 10:55 pd			2003.50g,in AmtRec:	2003.50g #Containers: 1				G15 Scr: Alpha:	22 12	Beta:	
18 MA9VH-1-AC-C J0L130000-400-LCS 12/14/2010 10:55 pd			2002.90g,in AmtRec:	2002.90g #Containers: 1	QCAG1688 09/16/10,pd 11/07/03,r			G5 Scr: Alpha:	22 12	Beta:	

Comments: PH <2 OK 12-16-10

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

MAQ3H1AC-SAMP Constituent List:

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

MA9VH1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

12/16/2010 5:26:51 PM

Sample Preparation/Analysis

AW Gamma Prp GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1117411003

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0347400 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
MA9VH1AC-LCS:											
Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

MAQ3H1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MA9VH1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MA9VH1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

12/28/2010 10:50:15 AM

ICOC Fraction Transfer/Status Report

ByDate: 12/28/2009, 1/2/2011, Batch: '0347400', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0347400						
AC		**Rev1C**	**BockJ**	12/16/2010 4:44:59		
SC			wagarr	IsBatched	12/14/2010 10:58:50 AM	ICOC_RADCALC v4.8.49
SC			BockJ	InPrep	12/16/2010 4:44:59 PM	RL-PRP-004 REVISION 1
SC			WagarC	Prep1C	12/16/2010 5:28:13 PM	RL-PRP-004 REVISION 1
SC			BockJ	InPrep2	12/17/2010 7:46:49 AM	RL-GAM-001 REVISION 1
SC			BockJ	Prep2C	12/22/2010 11:28:32 AM	RL-GAM-001 REVISION 1
SC			ClarkR	InCnt1	12/22/2010 11:48:17 AM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	12/23/2010 5:18:26 AM	RL-CI-007 REVISION 1
SC			whelands	Rev1C	12/28/2010 10:50:00 AM	RL-DR-001 Rev 2
AC			**WagarC**	12/16/2010 5:28:13		
AC			**BockJ**	12/17/2010 7:46:49		
AC			**BockJ**	12/22/2010 11:28:32		
AC			**ClarkR**	12/22/2010 11:48:17		
AC			**BlackCL**	12/23/2010 5:18:26		
AC			**whelands**	12/28/2010 10:50:00		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt:7

ICOCFractions v4.8.44

12/19/2010 9:48:59 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011 W06066

Sep1 DT/Tm Tech:

Batch: 0347399 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 0347399 BNTB, 0347400 AWTA, 0347404 5SS3,

Prep Tech: ,ONeilID

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MAQ3H-1-AD J0L020474-1-SAMP 11/30/2010 10:10		3714.90g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10264 11/03/10 #Containers: 6		37.0	200	LS	1634	12/29/10	Scr: Alpha: 4.79E-04 uCi/Sa Beta: 7.91E-04 uCi/Sa
2 MAQ4M-1-AD J0L020474-2-SAMP 11/29/2010 13:04		3861.80g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10265 11/03/10 #Containers: 6		34.6		LS	2043	12/29/10	Scr: Alpha: -7.49E-04 uCi/Sa Beta: 1.39E-03 uCi/Sa
3 MAQ5G-1-AD J0L020474-3-SAMP 12/01/2010 08:48		3812.40g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10266 11/03/10 #Containers: 6		39.4		LS	0014	12/29/10	Scr: Alpha: 1.51E-04 uCi/Sa Beta: 1.39E-03 uCi/Sa
4 MAQ5T-1-AD J0L020474-4-SAMP 12/01/2010 10:30		3850.10g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10267 11/03/10 #Containers: 6		33.8		LS	0027	12/30/10	Scr: Alpha: -1.08E-03 uCi/Sa Beta: -1.01E-03 uCi/Sa
5 MAQ54-1-AD J0L020474-5-SAMP 11/29/2010 10:30		3849.80g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10268 11/03/10 #Containers: 6		34.2		LS	0951		Scr: Alpha: -3.08E-03 uCi/Sa Beta: 2.44E-03 uCi/Sa
6 MAQ59-1-AD J0L020474-6-SAMP 11/29/2010 14:13		3887.90g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10269 11/03/10 #Containers: 6		35.1		LS	1314	12/30/10	Scr: Alpha: 1.09E-03 uCi/Sa Beta: -7.11E-04 uCi/Sa
7 MAQ6C-1-AD J0L020474-7-SAMP 11/29/2010 09:50		3761.30g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10270 11/03/10 #Containers: 6		34.3		LS	1638	12/30/10	Scr: Alpha: -1.44E-03 uCi/Sa Beta: 9.43E-04 uCi/Sa

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

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.49

12/19/2010 9:49:02 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0347399 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ONeilID

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MAQ6G-1-AD J0L020474-8-SAMP 11/29/2010 12:07		3889.30g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10271 11/03/10 #Containers: 6		34.7	200	L5	2100 Scr: Alpha: -2.10E-03 uCi/Sa	12/30/10 [illegible] Beta: 6.42E-04 uCi/Sa	
9 MAQ6Q-1-AD J0L020474-9-SAMP 11/29/2010 12:46		3869.90g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10272 11/03/10 #Containers: 6		32.7		L5	0927 Scr: Alpha: -8.06E-04 uCi/Sa	12/30/10 Beta: 3.34E-03 uCi/Sa	
10 MAQ7G-1-AD J0L020474-10-SAMP 11/29/2010 13:58		3886.70g,in AmtRec: VIAL20,2XLP,3X4LP	ITA10273 11/03/10 #Containers: 6		39.4		L5	1250 Scr: Alpha: -2.09E-03 uCi/Sa	↓ Beta: 1.39E-03 uCi/Sa	
11 MARA3-1-AE J0L020502-1-SAMP 11/29/2010 11:36		3888.60g,in AmtRec: VIAL,3XLP,3X4LP	ITA10274 11/03/10 #Containers: 7		33.7		L4	1157 Scr: Alpha: -1.12E-03 uCi/Sa	1/3/11 Beta: 2.29E-03 uCi/Sa	
12 MARCK-1-AE J0L020502-2-SAMP 11/29/2010 09:00		3845.20g,in AmtRec: VIAL,3XLP,3X4LP	ITA10275 11/03/10 #Containers: 7		33.2		L5	1157 Scr: Alpha: -2.09E-03 uCi/Sa	↓ Beta: 1.49E-03 uCi/Sa	
13 MAREV-1-AA J0L020518-1-SAMP 11/30/2010 10:24		3866.00g,in AmtRec: 1XVIAL20,2X4LP	ITA10276 11/03/10 #Containers: 3		42.1		L4	1620 Scr: Alpha: -2.39E-04 uCi/Sa	1/3/11 Beta: 1.31E-03 uCi/Sa	
14 MAREV-1-AC-X J0L020518-1-DUP 11/30/2010 10:24		3872.40g,in AmtRec: 1XVIAL20,2X4LP	ITA10277 11/03/10 #Containers: 3		38.3		L5	1520 Scr: Alpha: -2.39E-04 uCi/Sa	↓ Beta: 1.31E-03 uCi/Sa	

12/19/2010 9:49:03 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

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

AnalyDueDate: 01/10/2011

Batch: 0347399 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MA1DK-1-AA J0L070554-1-SAMP 12/05/2010 11:53		3807.40g,in AmtRec: 1XVIAL;2X4LP #Containers: 3	ITA10278 11/03/10		34.9	200	L4	1949 Scr: Alpha: 0.00E+00 uCi/Sa	1/3/11 DD Beta: 0.00E+00 uCi/Sa	
16 MA7XX-1-AD J0L100650-1-SAMP 12/09/2010 11:59		3838.50g,in AmtRec: 1XVIAL;2X1LP;3X4LP #Containers: 6	ITA10279 11/03/10		26.3		L5	1951 Scr: Alpha: 7.04E-04 uCi/Sa	Beta: 4.97E-05 uCi/Sa	
17 MA9VC-1-AA-B J0L130000-399-BLK 12/14/2010 10:55 pd		3893.90g,in AmtRec: #Containers: 1	ITA10280 11/03/10		34.1		L4	2318 Scr: Alpha:	Beta:	
18 MA9VC-1-AC-C J0L130000-399-LCS 12/14/2010 10:55 pd		3899.50g,in AmtRec: #Containers: 1	ISD1170 10/16/10		37.8		L5	2320 Scr: Alpha:	Beta:	

Comments: 16) MA7XX : Estimate 15-20% of sample was lost while transferring to a leaky funnel. DO~ 12-28-10

: All samples in this batch were over-cooked to near-dryness. It would appear that this affected the final weight on many of the samples. DO 12-28-10

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

MAQ3H1AD-SAMP Constituent List:

I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
MA9VC1AA-BLK:					
I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
MA9VC1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

MAQ3H1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

1/11/2011 2:05:15 PM

ICOC Fraction Transfer/Status Report

ByDate: 1/11/2010, 1/16/2011, Batch: '0347399', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
0347399						
AC		**Rev1C**	**ONeillD**	12/19/2010 8:52:57		
SC			wagarr	IsBatched	12/14/2010 10:58:50 AM	ICOC_RADCALC v4.8.49
SC			ONeillD	InPrep	12/19/2010 8:52:57 PM	RL-PRP-004 REVISION 1
SC			ONeillD	InPrep2	12/22/2010 10:56:30 AM	RL-GAM-002 REVISION 1
SC			ONeillD	Prep2C	12/29/2010 8:57:11 AM	RL-GAM-002 REVISION 1
SC			BlackCL	InCnt1	12/29/2010 9:01:22 AM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	1/4/2011 7:10:33 AM	RL-CI-007 REVISION 1
SC			whelands	Rev1C	1/11/2011 2:05:00 PM	RL-DR-001 Rev 2
AC			**ONeillD**	12/22/2010 10:56:30		
AC			**ONeillD**	12/29/2010 8:57:11		
AC			**BlackCL**	12/29/2010 9:01:22		
AC			**BlackCL**	1/4/2011 7:10:33 AM		
AC			**whelands**	1/11/2011 2:05:00 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

54, 4

12/14/2010 10:55:28 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 01/10/2011 WWdd

Priority

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

Batch: 0347404 WATER pCi/L PM, Quote: SS , 57671
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MAQ3H-1-AA								
J0L020474-1-SAMP								
11/30/2010 10:10		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 4.79E-04 uCi/Sa	Beta: 7.91E-04 uCi/Sa
2 MAQ4M-1-AA								
J0L020474-2-SAMP								
11/29/2010 13:04		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -7.49E-04 uCi/Sa	Beta: 1.39E-03 uCi/Sa
3 MAQ5G-1-AA								
J0L020474-3-SAMP								
12/01/2010 08:48		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 1.51E-04 uCi/Sa	Beta: 1.39E-03 uCi/Sa
4 MAQ5T-1-AA								
J0L020474-4-SAMP								
12/01/2010 10:30		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -1.06E-03 uCi/Sa	Beta: -1.01E-03 uCi/Sa
5 MAQ54-1-AA								
J0L020474-5-SAMP								
11/29/2010 10:30		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -3.08E-03 uCi/Sa	Beta: 2.44E-03 uCi/Sa
6 MAQ59-1-AA								
J0L020474-6-SAMP								
11/29/2010 14:13		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 1.09E-03 uCi/Sa	Beta: -7.11E-04 uCi/Sa
7 MAQ6C-1-AA								
J0L020474-7-SAMP								
11/29/2010 09:50		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -1.44E-03 uCi/Sa	Beta: 9.43E-04 uCi/Sa

12/14/2010 10:55:28 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 01/10/2011

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Batch: 0347404 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MAQ6G-1-AA								
J0L020474-8-SAMP								
11/29/2010 12:07		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -2.10E-03 uCi/Sa	Beta: 6.42E-04 uCi/Sa
9 MAQ6Q-1-AA								
J0L020474-9-SAMP								
11/29/2010 12:46		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -8.06E-04 uCi/Sa	Beta: 3.34E-03 uCi/Sa
10 MAQ7G-1-AA								
J0L020474-10-SAMP								
11/29/2010 13:58		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -2.09E-03 uCi/Sa	Beta: 1.39E-03 uCi/Sa
11 MARA3-1-AC								
J0L020502-1-SAMP								
11/29/2010 11:36		AmtRec: VIAL,3XLP,3X4LP	#Containers: 7			Scr:	Alpha: -1.12E-03 uCi/Sa	Beta: 2.29E-03 uCi/Sa
12 MARCK-1-AC								
J0L020502-2-SAMP								
11/29/2010 09:00		AmtRec: VIAL,3XLP,3X4LP	#Containers: 7			Scr:	Alpha: -2.09E-03 uCi/Sa	Beta: 1.49E-03 uCi/Sa
13 MAVG3-1-AA								
J0L030566-1-SAMP								
12/01/2010 12:30		AmtRec: VIAL20,2XLP,1X4LP	#Containers: 4			Scr:	Alpha: -3.49E-05 uCi/Sa	Beta: 2.57E-04 uCi/Sa
14 MAVG3-1-AD-X								
J0L030566-1-DUP								
12/01/2010 12:30		AmtRec: VIAL20,2XLP,1X4LP	#Containers: 4			Scr:	Alpha: -3.49E-05 uCi/Sa	Beta: 2.57E-04 uCi/Sa

12/14/2010 10:55:29 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 01/10/2011

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

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

Batch: 0347404 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MAVHD-1-AA								
J0L030566-2-SAMP								
12/01/2010 12:30		AmtRec: VIAL20,2XLP,1X4LP	#Containers: 4			Scr:	Alpha: 1.82E-05 uCi/Sa	Beta: -4.49E-04 uCi/Sa
16 MA05D-1-AA								
J0L070525-1-SAMP								
12/02/2010 10:00		AmtRec: 1XVIAL;3X1LP	#Containers: 4			Scr:	Alpha: -9.46E-05 uCi/Sa	Beta: 2.24E-04 uCi/Sa
17 MA05K-1-AA								
J0L070525-2-SAMP								
12/02/2010 12:20		AmtRec: 1XVIAL;3X1LP	#Containers: 4			Scr:	Alpha: -3.25E-04 uCi/Sa	Beta: 3.52E-04 uCi/Sa
18 MA7XX-1-AA								
J0L100650-1-SAMP								
12/09/2010 11:59		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
19 MA9VM-1-AA-B								
J0L130000-404-BLK								
12/14/2010 10:55 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
20 MA9VM-1-AC-C								
J0L130000-404-LCS								
12/14/2010 10:55 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
21 MA9VM-1-AD-BN								
J0L130000-404-IBLK								
12/14/2010 10:55 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

12/14/2010 10:55:29 AM

Sample Preparation/Analysis

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 01/10/2011

Batch: 0347404 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22 MA9VM-1-AE-BN								
J0L130000-404-IBLK								
12/14/2010 10:55 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MAQ3H1AA-SAMP Constituent List:
  C-14        RDL:2.00E+02    pCi/L    LCL:70      UCL:130     RPD:20
MA9VM1AA-BLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:        UCL:        RPD:
MA9VM1AC-LCS:
  C-14        RDL:200         pCi/L    LCL:70      UCL:130     RPD:20
MA9VM1AD-IBLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:        UCL:        RPD:
MA9VM1AE-IBLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:        UCL:        RPD:
MAQ3H1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MA9VM1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MA9VM1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MA9VM1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MA9VM1AE-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

12/28/2010 10:05:57 AM

ICOC Fraction Transfer/Status Report

ByDate: 12/28/2009, 1/2/2011, Batch: '0347404', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0347404						
AC		**Rev1C**	**WagnerF**	12/16/2010 1:41:13		
SC			wagarr	IsBatched	12/14/2010 10:58:50 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	12/16/2010 1:41:13 PM	RL-LSC-008 REVISION 1
SC			BlackCL	InCnt1	12/17/2010 9:25:38 AM	RL-CI-005 REVISION 1
SC			BlackCL	CalcC	12/20/2010 7:02:29 AM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	12/28/2010 10:05:45 AM	RL-DR-001 Rev 2
AC			**BlackCL**	12/17/2010 9:25:38		
AC			**BlackCL**	12/20/2010 7:02:29		
AC			**antonsonl**	12/28/2010 10:05:45		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.8.44

12/15/2010 8:01:20 AM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AA Ni-63 Prp PRP004, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 01/10/2011 W0leddo

Sep1 DT/Tm Tech:

Batch: 0347403 WATER pCi/L

PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MA05D-1-AC J0L070525-1-SAMP 12/02/2010 10:00		AmtRec: 1XVIAL;3X1LP	405.10g,in	405.10g #Containers: 4	NITA3682 10/01/10	100	Scr:	Alpha: -9.46E-05 uCi/Sa	Beta: 2.24E-04 uCi/Sa	
2 MA05D-1-AD-X J0L070525-1-DUP 12/02/2010 10:00		AmtRec: 1XVIAL;3X1LP	400.10g,in	400.10g #Containers: 4	NITA3683 10/01/10		Scr:	Alpha: -9.46E-05 uCi/Sa	Beta: 2.24E-04 uCi/Sa	
3 MA9VL-1-AA-B J0L130000-403-BLK 12/14/2010 10:55 pd		AmtRec:	401.20g,in	401.20g #Containers: 1	NITA3684 10/01/10		Scr:	Alpha:	Beta:	
4 MA9VL-1-AC-C J0L130000-403-LCS 12/14/2010 10:55 pd		AmtRec:	399.10g,in	399.10g #Containers: 1	NISA1314 10/27/10		Scr:	Alpha:	Beta:	
5 MA9VL-1-AD-BN J0L130000-403-IBLK 12/14/2010 10:55 pd		AmtRec:		#Containers: 1			Scr:	Alpha:	Beta:	

Comments: PH<2.0 JB 12-15-10

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

MA05D1AC-SAMP Constituent List:
Ni-63 RDL:15 pCi/L LCL:70 UCL:130 RPD:20

12/15/2010 8:01:20 AM

Sample Preparation/Analysis

AA Ni-63 Prp PRP004, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 01/10/2011

Batch: 0347403 pCi/L
SEQ Batch, Test: None

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

```
MA9VL1AA-BLK:
  Ni-63        RDL:15          pCi/L    LCL:        UCL:        RPD:
MA9VL1AC-LCS:
  Ni-63        RDL:15          pCi/L    LCL:70      UCL:130     RPD:20
MA9VL1AD-IBLK:
  Ni-63        RDL:15          pCi/L    LCL:        UCL:        RPD:
MA05D1AC-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MA9VL1AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MA9VL1AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MA9VL1AD-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

12/30/2010 12:46:55 PM

ICOC Fraction Transfer/Status Report

ByDate: 12/30/2009, 1/4/2011, Batch: '0347403', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0347403						
AC		**Rev1C**	**BockJ**	12/15/2010 7:55:10		
SC			wagarr	IsBatched	12/14/2010 10:58:50 AM	ICOC_RADCALC v4.8.49
SC			BockJ	InPrep	12/15/2010 7:55:10 AM	RL-PRP-004 REVISION 1
SC			BockJ	Prep1C	12/15/2010 8:01:35 AM	RL-PRP-004 REVISION 1
SC			JorgensonD	Sep2C	12/28/2010 10:28:32 AM	RL-LSC-017 REVISION 1
SC			ClarkR	InCnt1	12/28/2010 11:03:00 AM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	12/30/2010 12:36:22 PM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	12/30/2010 12:46:42 PM	RL-DR-001 Rev 2
AC			**BockJ**	12/15/2010 8:01:35		
AC			**JorgensonD**	12/28/2010 10:28:32		
AC			**ClarkR**	12/28/2010 11:03:00		
AC			**ClarkR**	12/30/2010 12:36:22		
AC			**antonsonl**	12/30/2010 12:46:42		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

12/8/2010 12:44:21 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 01/07/2011

Batch: 0342318 WATER mg/L
SEQ Batch, Test: None All Tests: 0342318 88EA,

PM, Quote: SS , 57671

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MA17H-1-AA J0L080477-1-SAMP 12/08/2010 08:55		AmtRec: VIAL20,1X500MLAG	#Containers: 2			Scr:	Alpha:	Beta:
2 MA17H-1-AC-S J0L080477-1-MS 12/08/2010 08:55		AmtRec: VIAL20,1X500MLAG	#Containers: 2			Scr:	Alpha:	Beta:
3 MA17H-1-AD-D J0L080477-1-MSD 12/08/2010 08:55		AmtRec: VIAL20,1X500MLAG	#Containers: 2			Scr:	Alpha:	Beta:
4 MA17H-1-AE-X J0L080477-1-DUP 12/08/2010 08:55		AmtRec: VIAL20,1X500MLAG	#Containers: 2			Scr:	Alpha:	Beta:
5 MA2KC-1-AA-B J0L080000-318-BLK 12/08/2010 12:44 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 MA2KC-1-AC-C J0L080000-318-LCS 12/08/2010 12:44 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

12/8/2010 12:44:22 PM

Sample Preparation/Analysis

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

AnalyDueDate: 01/07/2011

Batch: 0342318 mg/L
SEQ Batch, Test: None

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

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

Comments:

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

MA17H1AA-SAMP Constituent List:

MA17H1AC-MS Constituent List:

MA17H1AD-MSD:

MA2KC1AA-BLK:

MA2KC1AC-LCS:

MA17H1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA17H1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA17H1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA2KC1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MA2KC1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B