TESTAMERICA

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: 40399

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05547	W09-010	B1XDX0	J8J230360-1	K1HAF1AA	9K1HAF10	8309386
		B1XDX0	J8J230360-1	K1HAF1AC	9K1HAF10	8309387
		B1XC94	J8J230360-2	K1HA81AA	9K1HA810	8309386
		B1XDW9	J8J230360-3	K1HCA1AA	9K1HCA10	8309387
		B1XDW1	J8J230360-4	K1HCC1AA	9K1HCC10	8309386
		B1XDW1	J8J230360-4	K1HCC1AC	9K1HCC10	8309387
		B1XDV4	J8J230360-5	K1HCF1AA	9K1HCF10	8309386
	S09-010	B1X6T2	J8J230367-1	K1HCN1AA	9K1HCN10	8309390
		B1X6W4	J8J230367-2	K1HCR1AA	9K1HCR10	8309390
		B1X6W4	J8J230367-2	K1HCR1AC	9K1HCR10	8309391
	I09-003	B1XC23	J8J230369-1	K1HDX1AA	9K1HDX10	8309387
		B1XC38	J8J230369-2	K1HD81AA	9K1HD810	8309387
	W09-010	B1XDY8	J8J230372-1	K1HEH1AA	9K1HEH10	8309386
		B1XDY8	J8J230372-1	K1HEH1AC	9K1HEH10	8309387
		B1XF03	J8J230372-2	K1HEJ1AA	9K1HEJ10	8309386

Comments:

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RECEIVED DECEMBER 18, 2008

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05547	W09-010	B1XF03	J8J230372-2	K1HEJ1AC	9K1HEJ10	8309387
		B1XDT0	J8J230372-3	K1HEL1AA	9K1HEL10	8309386
		B1XDR7	J8J230372-4	K1HEN1AA	9K1HEN10	8309386
		B1XCC5	J8J230372-5	K1HEQ1AA	9K1HEQ10	8309386
		B1XC66	J8J230372-6	K1HEV1AA	9K1HEV10	8309386
		B1XDX6	J8J230372-7	K1HEX1AA	9K1HEX10	8309386
		B1XCB8	J8J230372-8	K1HE11AA	9K1HE110	8309387
		B1XCB5	J8J230372-9	K1HE31AA	9K1HE310	8309387

Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop - B6-06
Richland, WA 99352

December 18, 2008

Attention: Mike Neely

SAF Number	:	W09-010, S09-010, I09-003
Date SDG Closed	:	November 3, 2008
Number of Samples	:	Eighteen (18)
Sample Type	:	Water
SDG Number	:	W05547
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

October 20, 2008 eighteen water samples were received at TestAmerica (TARL) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	TARL ID#	DATE OF RECEIPT	MATRIX
B1XDX0	K1HAF	10/20/08	WATER
B1XC94	K1HA8	10/20/08	WATER
B1XDW9	K1HCA	10/20/08	WATER
B1XDW1	K1HCC	10/20/08	WATER
B1XDV4	K1HCF	10/20/08	WATER
B1X6T2	K1HCN	10/20/08	WATER
B1X6W4	K1HCR	10/20/08	WATER
B1XC23	K1HDX	10/20/08	WATER
B1XC38	K1HD8	10/20/08	WATER
B1XDY8	K1HEH	10/20/08	WATER
B1XF03	K1HEJ	10/20/08	WATER
B1XDT0	K1HEL	10/20/08	WATER
B1XDR7	K1HEN	10/20/08	WATER
B1XCC5	K1HEQ	10/20/08	WATER

B1XC66	K1HEV	10/20/08	WATER
B1XDX6	K1HEX	10/20/08	WATER
B1XCB8	K1HE1	10/20/08	WATER
B1XCB5	K1HE3	10/20/08	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gamma Spectroscopy
Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017)*
Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025)*
Iodine-129 by method RL-GAM-002 (RICH-RC-5025)*
Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013 (RICH-RC-5078)*

*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

Gamma Spectroscopy
Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017):
There was insufficient volume for a duplicate. Sample B1XDY8 was recounted on a different detector for the duplicate (B1XDY8 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B1XDY8) results are within contractual requirements.

Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025):
The samples were analyzed with reduced aliquots due to insufficient sample volumes. Except as noted, the LCS, batch blank, samples and sample duplicate (B1XC23) results are within contractual requirements.

Iodine-129 by method RL-GAM-002 (RICH-RC-5025):
The LCS, batch blank, samples and sample duplicate (B1X6T2) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013 (RICH-RC-5078):
The LCS, batch blank, samples, sample duplicate (B1X6W4), and sample matrix spike (B1X6W4) results are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 00-02	Gross Alpha (Coprecipitation)	RICH-RC-5021
EPA 903.0	Total Alpha Radium (Ra-226)	RICH-RC-5027
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr-89/90	RICH-RC-5006
ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007

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

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

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

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

Report Definitions

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

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 Microsopy 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-0001	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 / DOE00089T	URINE AND WATER SAMPLE PREPARATION BY CALCIUM PHOSPHATE PRECIPITATION
Prep - Water	RL-PRP-010	RICH-RC-5086	AnalyticaChemActa1992 RP800 / DOE00089T	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 / DOE00089T	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, Lundeell, 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

TESTAMERICA

12/18/2008 10:38:04 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 40399 File Name: h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.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:
9K1HA810	B1XC94		MW6-SBB-A1	W09-010	W05547					10/20/2008 09:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	3.01E-01	pCi/L	1.3E+01	1.3E+01	U	2.35E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	CO-60	10198-40-0	6.81E-01	pCi/L	1.4E+00	1.4E+00	U	2.87E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	CS-134	13967-70-9	5.81E-01	pCi/L	1.3E+00	1.3E+00	U	2.52E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	CS-137	10045-97-3	-8.49E-02	pCi/L	1.4E+00	1.4E+00	U	2.44E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	EU-152	14683-23-9	-1.14E+00	pCi/L	3.2E+00	3.2E+00	U	5.52E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	EU-154	15585-10-1	-3.64E+00	pCi/L	3.7E+00	3.7E+00	U	5.69E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	EU-155	14391-16-3	-2.67E-01	pCi/L	2.5E+00	2.5E+00	U	4.31E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	K-40	13966-00-2	-1.58E+01	pCi/L	2.1E+01	2.1E+01	U	3.99E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	RU-106	13967-48-1	1.04E+01	pCi/L	1.2E+01	1.2E+01	U	2.33E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I
8309386	SB-125	14234-35-6	-1.10E+00	pCi/L	3.3E+00	3.3E+00	U	5.53E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9K1HAF10	B1XDX0		MW6-SBB-A1	W09-010	W05547					10/20/2008 10:17

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	-8.08E+00	pCi/L	1.6E+01	1.6E+01	U	2.59E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	CO-60	10198-40-0	-2.77E-02	pCi/L	1.5E+00	1.5E+00	U	2.79E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	CS-134	13967-70-9	5.18E-01	pCi/L	1.6E+00	1.6E+00	U	2.87E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	CS-137	10045-97-3	-9.03E-01	pCi/L	1.5E+00	1.5E+00	U	2.45E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	EU-152	14683-23-9	2.75E+00	pCi/L	4.2E+00	4.2E+00	U	7.28E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	EU-154	15585-10-1	3.44E+00	pCi/L	5.1E+00	5.1E+00	U	9.62E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	EU-155	14391-16-3	4.44E+00	pCi/L	4.3E+00	4.3E+00	U	7.74E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	K-40	13966-00-2	-7.09E+01	pCi/L	4.7E+01	4.7E+01	U	9.16E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	RU-106	13967-48-1	-4.31E+00	pCi/L	1.3E+01	1.3E+01	U	2.16E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309386	SB-125	14234-35-6	-2.17E+00	pCi/L	4.0E+00	4.0E+00	U	6.77E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 17:43	I
8309387	I-129L	15046-84-1	2.81E-01	pCi/L	1.6E-01	1.6E-01	U	3.29E-01	103.0	I129LL_SEP_LEPS	3.8939E+00	L	12/03/2008 15:57	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:
9K1HCA10	B1XDW9		MW6-SBB-A1	W09-010	W05547					10/20/2008 11:26

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309387	I-129L	15046-84-1	3.33E-01	pCi/L	1.6E-01	1.6E-01	U	3.15E-01	99.2	I129LL_SEP_LEPS	3.8817E+00	L	12/03/2008 17:40	I

TestAmerica

rptFeadRadSummaryEdd v3.48

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

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 40399 File Name: h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.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:
9K1HCC10	B1XDW1		MW6-SBB-A1	W09-010	W05547					10/20/2008 12:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	-5.44E+00	pCi/L	1.5E+01	1.5E+01	U	2.58E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	CO-60	10198-40-0	2.59E-01	pCi/L	1.4E+00	1.4E+00	U	2.53E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	CS-134	13967-70-9	4.29E-01	pCi/L	1.4E+00	1.4E+00	U	2.63E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	CS-137	10045-97-3	7.92E-01	pCi/L	1.4E+00	1.4E+00	U	2.52E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	EU-152	14683-23-9	5.26E-01	pCi/L	3.7E+00	3.7E+00	U	6.35E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	EU-154	15585-10-1	-2.80E-04	pCi/L	3.6E+00	3.6E+00	U	6.62E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	EU-155	14391-16-3	-2.10E+00	pCi/L	3.1E+00	3.1E+00	U	5.15E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	K-40	13966-00-2	1.07E+01	pCi/L	2.3E+01	2.3E+01	U	2.48E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	RU-106	13967-48-1	8.41E+00	pCi/L	1.2E+01	1.2E+01	U	2.29E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309386	SB-125	14234-35-6	2.92E-01	pCi/L	3.3E+00	3.3E+00	U	5.89E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 17:45	I
8309387	I-129L	15046-84-1	1.65E+00	pCi/L	3.9E-01	3.9E-01	U	6.04E-01	100.5	I129LL_SEP_LEPS	3.8751E+00	L	12/03/2008 19:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9K1HCF10	B1XDV4		MW6-SBB-A1	W09-010	W05547					10/20/2008 13:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	1.18E+01	pCi/L	1.5E+01	1.5E+01	U	2.84E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	CO-60	10198-40-0	-8.48E-01	pCi/L	1.7E+00	1.7E+00	U	2.86E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	CS-134	13967-70-9	1.81E+00	pCi/L	1.7E+00	1.7E+00	U	3.46E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	CS-137	10045-97-3	-4.10E-01	pCi/L	1.6E+00	1.6E+00	U	2.83E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	EU-152	14683-23-9	-1.32E+00	pCi/L	4.0E+00	4.0E+00	U	6.66E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	EU-154	15585-10-1	9.70E-04	pCi/L	4.3E+00	4.3E+00	U	8.09E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	EU-155	14391-16-3	2.03E+00	pCi/L	3.0E+00	3.0E+00	U	5.60E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	K-40	13966-00-2	3.23E+01	pCi/L	3.6E+01	3.6E+01	U	3.23E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	RU-106	13967-48-1	3.81E+00	pCi/L	1.4E+01	1.4E+01	U	2.67E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I
8309386	SB-125	14234-35-6	-9.67E-01	pCi/L	4.0E+00	4.0E+00	U	6.91E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:46	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9K1HCN10	B1X6T2		MW6-SBB-A1	S09-010	W05547					10/20/2008 12:07

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309390	I-129L	15046-84-1	3.63E+00	pCi/L	1.5E+00	1.5E+00	U	2.83E+00	102.2	I129_SEP_LEPS_G	5.00E-01	L	11/07/2008 14:18	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.

12/18/2008 10:38:04 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 40399 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.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:
9K1HCR10	B1X6W4		MW6-SBB-A1	S09-010	W05547					10/16/2008 13:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309390	I-129L	15046-84-1	3.88E-01	pCi/L	1.1E+00	1.1E+00	U	2.16E+00	98.1	I129_SEP_LEPS_G	5.00E-01	L	11/07/2008 17:45	I
8309391	TC-99	14133-76-7	3.51E+01	pCi/L	5.3E+00	7.9E+00		1.00E+01	100.0	TC99_SEP_LSC	1.251E-01	L	11/20/2008 06:15	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:
9K1HD810	B1XC38		MW6-SBB-A1	I09-003	W05547					10/20/2008 08:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309387	I-129L	15046-84-1	1.43E-01	pCi/L	1.3E-01	1.3E-01	U	2.59E-01	101.4	I129LL_SEP_LEPS	3.8786E+00	L	12/04/2008 01:42	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:
9K1HDX10	B1XC23		MW6-SBB-A1	I09-003	W05547					10/16/2008 08:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309387	I-129L	15046-84-1	1.14E-01	pCi/L	1.3E-01	1.3E-01	U	2.70E-01	101.6	I129LL_SEP_LEPS	3.8175E+00	L	12/03/2008 21:34	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:
9K1HE110	B1XCB8		MW6-SBB-A1	W09-010	W05547					10/20/2008 08:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309387	I-129L	15046-84-1	-1.84E-02	pCi/L	1.5E-01	1.5E-01	U	2.64E-01	99.2	I129LL_SEP_LEPS	3.8812E+00	L	12/04/2008 05:48	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:
9K1HE310	B1XCB5		MW6-SBB-A1	W09-010	W05547					10/20/2008 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309387	I-129L	15046-84-1	4.97E-01	pCi/L	1.7E-01	1.7E-01	U	3.58E-01	99.7	I129LL_SEP_LEPS	3.8932E+00	L	12/04/2008 05:48	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:
9K1HEH10	B1XDY8		MW6-SBB-A1	W09-010	W05547					10/20/2008 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	4.81E+00	pCi/L	1.5E+01	1.5E+01	U	2.81E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:47	I
8309386	CO-60	10198-40-0	1.00E+00	pCi/L	1.9E+00	1.9E+00	U	3.78E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:47	I
8309386	CS-134	13967-70-9	9.15E-01	pCi/L	1.7E+00	1.7E+00	U	3.20E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:47	I
8309386	CS-137	10045-97-3	-4.74E-01	pCi/L	1.5E+00	1.5E+00	U	2.65E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008 17:47	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.

8309386	EU-152	14683-23-9	1.60E+00	pCi/L	3.9E+00	3.9E+00	U	7.19E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309386	EU-154	15585-10-1	3.78E+00	pCi/L	4.5E+00	4.5E+00	U	9.40E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309386	EU-155	14391-16-3	1.19E+00	pCi/L	3.2E+00	3.2E+00	U	5.61E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309386	K-40	13966-00-2	-3.18E+01	pCi/L	3.4E+01	3.4E+01	U	6.98E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309386	RU-106	13967-48-1	-2.65E+00	pCi/L	1.5E+01	1.5E+01	U	2.64E+01		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309386	SB-125	14234-35-6	-6.75E-01	pCi/L	4.1E+00	4.1E+00	U	7.11E+00		GAMMALL_GS	1.9999E+00	L	11/17/2008	17:47	I
8309387	I-129L	15046-84-1	1.08E-01	pCi/L	1.5E-01	1.5E-01	U	2.82E-01	101.1	I129LL_SEP_LEPS	3.9005E+00	L	12/04/2008	03:25	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:
9K1HEJ10	B1XF03		MW6-SBB-A1	W09-010	W05547					10/20/2008 08:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8309386	BE-7	13966-02-4	8.06E+00	pCi/L	1.7E+01	1.7E+01	U	3.14E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	CO-60	10198-40-0	1.80E+00	pCi/L	2.0E+00	2.0E+00	U	3.99E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	CS-134	13967-70-9	-2.72E-01	pCi/L	1.7E+00	1.7E+00	U	3.12E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	CS-137	10045-97-3	-7.28E-02	pCi/L	1.7E+00	1.7E+00	U	2.91E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	EU-152	14683-23-9	-4.49E+00	pCi/L	4.9E+00	4.9E+00	U	7.93E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	EU-154	15585-10-1	-1.36E+00	pCi/L	4.3E+00	4.3E+00	U	7.54E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	EU-155	14391-16-3	-1.14E+00	pCi/L	3.5E+00	3.5E+00	U	5.77E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	K-40	13966-00-2	-2.37E+01	pCi/L	4.2E+01	4.2E+01	U	8.64E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	RU-106	13967-48-1	-9.80E-01	pCi/L	1.6E+01	1.6E+01	U	2.86E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309386	SB-125	14234-35-6	2.29E+00	pCi/L	4.3E+00	4.3E+00	U	7.72E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	17:47	I
8309387	I-129L	15046-84-1	-4.40E-02	pCi/L	1.4E-01	1.4E-01	U	2.33E-01	102.4	I129LL_SEP_LEPS	3.7569E+00	L	12/04/2008	05:12	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:
9K1HEL10	B1XDT0		MW6-SBB-A1	W09-010	W05547					10/16/2008 07:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8309386	BE-7	13966-02-4	4.23E+00	pCi/L	1.8E+01	1.8E+01	U	3.24E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	CO-60	10198-40-0	-1.45E+00	pCi/L	1.6E+00	1.6E+00	U	2.45E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	CS-134	13967-70-9	-7.13E-02	pCi/L	1.8E+00	1.8E+00	U	3.22E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	CS-137	10045-97-3	-1.10E+00	pCi/L	1.7E+00	1.7E+00	U	2.82E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	EU-152	14683-23-9	4.93E+00	pCi/L	4.1E+00	4.1E+00	U	7.72E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	EU-154	15585-10-1	2.10E+00	pCi/L	4.4E+00	4.4E+00	U	8.92E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	EU-155	14391-16-3	3.35E-01	pCi/L	3.2E+00	3.2E+00	U	5.44E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	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.

8309386	K-40	13966-00-2	-1.58E+01	pCi/L	3.7E+01	3.7E+01	U	7.58E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	RU-106	13967-48-1	-1.06E+01	pCi/L	1.6E+01	1.6E+01	U	2.62E+01		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	I
8309386	SB-125	14234-35-6	-7.22E-02	pCi/L	4.1E+00	4.1E+00	U	7.25E+00		GAMMALL_GS	2.00E+00	L	11/17/2008	21:18	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:
9K1HEN10	B1XDR7		MW6-SBB-A1	W09-010	W05547					10/16/2008 09:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	-1.97E+00	pCi/L	1.6E+01	1.6E+01	U	2.67E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	CO-60	10198-40-0	6.35E-01	pCi/L	1.4E+00	1.4E+00	U	2.69E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	CS-134	13967-70-9	7.18E-01	pCi/L	1.7E+00	1.7E+00	U	2.98E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	CS-137	10045-97-3	-1.99E-02	pCi/L	1.4E+00	1.4E+00	U	2.50E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	EU-152	14683-23-9	1.42E+00	pCi/L	4.0E+00	4.0E+00	U	6.97E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	EU-154	15585-10-1	2.63E+00	pCi/L	4.3E+00	4.3E+00	U	8.33E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	EU-155	14391-16-3	-1.10E+00	pCi/L	4.2E+00	4.2E+00	U	7.14E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	K-40	13966-00-2	-2.42E+01	pCi/L	4.8E+01	4.8E+01	U	9.69E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	RU-106	13967-48-1	8.20E+00	pCi/L	1.3E+01	1.3E+01	U	2.42E+01		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	I
8309386	SB-125	14234-35-6	1.54E+00	pCi/L	3.8E+00	3.8E+00	U	6.77E+00		GAMMALL_GS	2.0001E+00	L	11/17/2008 21:19	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:
9K1HEQ10	B1XCC5		MW6-SBB-A1	W09-010	W05547					10/16/2008 10:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	-5.33E+00	pCi/L	1.5E+01	1.5E+01	U	2.60E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	CO-60	10198-40-0	3.53E+00	pCi/L	1.7E+00	1.7E+00	U	3.60E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	CS-134	13967-70-9	4.04E-01	pCi/L	1.4E+00	1.4E+00	U	2.58E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	CS-137	10045-97-3	-1.03E-01	pCi/L	1.3E+00	1.3E+00	U	2.32E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	EU-152	14683-23-9	1.91E+00	pCi/L	3.6E+00	3.6E+00	U	6.44E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	EU-154	15585-10-1	7.43E-01	pCi/L	4.0E+00	4.0E+00	U	7.38E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	EU-155	14391-16-3	4.10E-01	pCi/L	3.1E+00	3.1E+00	U	5.42E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	K-40	13966-00-2	-3.86E+00	pCi/L	1.9E+01	1.9E+01	U	3.73E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	RU-106	13967-48-1	-1.03E+00	pCi/L	1.3E+01	1.3E+01	U	2.33E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	I
8309386	SB-125	14234-35-6	-1.45E-02	pCi/L	3.5E+00	3.5E+00	U	6.11E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:20	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.

12/18/2008 10:38:04 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 40399 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

9K1HEV10 B1XC66 MW6-SBB-A1 W09-010 W05547 10/16/2008 09:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	-8.61E+00	pCi/L	1.4E+01	1.4E+01	U	2.44E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CO-60	10198-40-0	-1.32E-01	pCi/L	1.1E+00	1.1E+00	U	2.14E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CS-134	13967-70-9	-1.25E-01	pCi/L	1.2E+00	1.2E+00	U	2.21E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CS-137	10045-97-3	8.59E-01	pCi/L	1.2E+00	1.2E+00	U	2.42E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-152	14683-23-9	-1.06E+00	pCi/L	3.6E+00	3.6E+00	U	6.14E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-154	15585-10-1	1.06E+00	pCi/L	3.7E+00	3.7E+00	U	7.48E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-155	14391-16-3	2.44E-01	pCi/L	2.4E+00	2.4E+00	U	4.16E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	K-40	13966-00-2	-1.15E+01	pCi/L	1.8E+01	1.8E+01	U	3.59E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	RU-106	13967-48-1	6.44E+00	pCi/L	1.2E+01	1.2E+01	U	2.28E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	SB-125	14234-35-6	1.89E+00	pCi/L	3.3E+00	3.3E+00	U	6.08E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	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:
9K1HEX10	B1XDX6		MW6-SBB-A1	W09-010	W05547					10/20/2008 12:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8309386	BE-7	13966-02-4	7.83E+00	pCi/L	1.5E+01	1.5E+01	U	2.87E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CO-60	10198-40-0	3.65E-01	pCi/L	1.7E+00	1.7E+00	U	3.30E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CS-134	13967-70-9	5.66E-01	pCi/L	1.5E+00	1.5E+00	U	2.85E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	CS-137	10045-97-3	-1.20E+00	pCi/L	1.6E+00	1.6E+00	U	2.59E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-152	14683-23-9	3.83E-01	pCi/L	3.8E+00	3.8E+00	U	6.59E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-154	15585-10-1	-2.34E+00	pCi/L	4.4E+00	4.4E+00	U	7.60E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	EU-155	14391-16-3	5.42E-01	pCi/L	3.2E+00	3.2E+00	U	5.67E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	K-40	13966-00-2	7.71E+01	pCi/L	4.2E+01	4.2E+01		3.12E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	RU-106	13967-48-1	-5.27E+00	pCi/L	1.5E+01	1.5E+01	U	2.53E+01		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	I
8309386	SB-125	14234-35-6	-2.53E+00	pCi/L	3.7E+00	3.7E+00	U	6.16E+00		GAMMALL_GS	2.00E+00	L	11/17/2008 21:21	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.

Thursday, December 18, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K17L01AB	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/20/2008 12:07
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AS	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
8309390	I-129L	1.95E-02	pCi/L	1.1E+00	U	1.99E+00	99.5		I129_SEP_LEP	5.00E-01	11/08/2008				D
BLK	15046-84-1			1.1E+00						L	05:34				

TestAmerica
rptFeadRadEdd v3.68

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

1

Thursday, December 18, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K17L21AB **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/16/2008 13:33

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/20/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8309391	TC-99	-1.02E+00	pCi/L	5.9E+00	U	9.98E+00	100.0		TC99_SEP_LS	1.251E-01	11/20/2008				D
BLK	14133-76-7			4.1E+00						L	09:22				

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.

Thursday, December 18, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K17LM1AB **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/20/2008 10:00

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/20/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8309386	BE-7	5.47E+00	pCi/L	1.9E+01	U	3.41E+01			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	13966-02-4			1.9E+01						L	01:26				
8309386	CO-60	-6.63E-01	pCi/L	1.8E+00	U	3.22E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	10198-40-0			1.8E+00						L	01:26				
8309386	CS-134	1.53E+00	pCi/L	1.8E+00	U	3.53E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	13967-70-9			1.8E+00						L	01:26				
8309386	CS-137	-3.92E-01	pCi/L	1.6E+00	U	2.86E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	10045-97-3			1.6E+00						L	01:26				
8309386	EU-152	-2.38E+00	pCi/L	4.5E+00	U	7.52E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	14683-23-9			4.5E+00						L	01:26				
8309386	EU-154	-3.38E-01	pCi/L	5.3E+00	U	9.55E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	15585-10-1			5.3E+00						L	01:26				
8309386	EU-155	-2.32E+00	pCi/L	3.2E+00	U	5.23E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	14391-16-3			3.2E+00						L	01:26				
8309386	K-40	2.70E+01	pCi/L	4.4E+01	U	2.32E+01			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	13966-00-2			4.4E+01						L	01:26				
8309386	RU-106	3.08E+00	pCi/L	1.5E+01	U	2.69E+01			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	13967-48-1			1.5E+01						L	01:26				
8309386	SB-125	-3.65E-01	pCi/L	4.2E+00	U	7.23E+00			GAMMALL_GS	1.999E+00	11/18/2008				D
BLK	14234-35-6			4.2E+00						L	01:26				

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.

Thursday, December 18, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K17LR1AB **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/16/2008 08:23

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/20/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8309387	I-129L	-1.09E-02	pCi/L	1.3E-01	U	2.35E-01	97.8		I129LL_SEP_L	4.00E+00	12/04/2008				D
BLK	15046-84-1			1.3E-01						L	06:55				

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

TESTAMERICA

Thursday, December 18, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K17L01CS	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/20/2008 12:07
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
8309390	I-129L	4.68E+01	pCi/L	6.9E+00		2.66E+00	100.2	4.57E+01	I129_SEP_LEP	5.00E-01	11/08/2008			70	D
BS	15046-84-1			6.9E+00				102.4		L	05:34			130	

21

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.

Thursday, December 18, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K17L21CS	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/16/2008 13:33
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 10/20/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8309391	TC-99	4.73E+02	pCi/L	3.4E+01		9.96E+00	100.0	5.46E+02	TC99_SEP_LS	1.251E-01	11/20/2008			70	D
BS	14133-76-7			1.2E+01				86.6		L	10:24			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.

Thursday, December 18, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K17LM1CS	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/20/2008 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 10/20/2008

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
8309386	CO-60	3.98E+01	pCi/L	7.4E+00		2.83E+00		3.73E+01	GAMMALL_GS	2.0001E+00	11/18/2008			75	D
BS	10198-40-0			7.4E+00				106.6		L	01:27			125	
8309386	CS-137	5.59E+01	pCi/L	8.9E+00		3.69E+00		4.93E+01	GAMMALL_GS	2.0001E+00	11/18/2008			70	D
BS	10045-97-3			8.9E+00				113.5		L	01:27			130	
8309386	EU-152	7.75E+01	pCi/L	1.5E+01		8.68E+00		7.63E+01	GAMMALL_GS	2.0001E+00	11/18/2008			70	D
BS	14683-23-9			1.5E+01				101.6		L	01:27			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.

Thursday, December 18, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K17LR1CS **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/16/2008 08:23

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/20/2008

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
8309387	I-129L	1.07E+01	pCi/L	1.3E+00		3.86E-01	99.5	9.60E+00	I129LL_SEP_L	3.9993E+00	12/04/2008			70	D
BS	15046-84-1			1.3E+00				111.4		L	08:38			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.

Thursday, December 18, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K1HCN1CR	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/20/2008 12:07
Client Id:	B1X6T2	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S09-010	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
8309390	I-129L	4.85E+00	pCi/L	1.6E+00	U	2.99E+00	104.9		I129_SEP_LEP	5.00E-01	11/07/2008	28.7	1.1		D
DUP	15046-84-1	3.63E+00		1.6E+00						L	16:02	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

Thursday, December 18, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K1HCR1ER **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/16/2008 13:33

Client Id: B1X6W4 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S09-010	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
8309391	TC-99	3.86E+01	pCi/L	8.2E+00		1.01E+01	100.0		TC99_SEP_LS	1.251E-01	11/20/2008	9.5	0.6		D
DUP	14133-76-7	3.51E+01		5.4E+00						L	08:20	20.0	3		

26

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.

Thursday, December 18, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K1HDX1CR	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/16/2008 08:23
Client Id:	B1XC23	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I09-003	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
8309387	I-129L	1.10E-01	pCi/L	1.5E-01	U	2.90E-01	101.9		I129LL_SEP_L	3.814E+00	12/03/2008	4.3	0.		D
DUP	15046-84-1	1.14E-01		1.5E-01						L	23:38	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.

Thursday, December 18, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id: K1HEH1DR **Sdg/Rept Nbr:** W05547 40399 **Collection Date:** 10/20/2008 10:00

Client Id: B1XDY8 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W09-010	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
8309386	BE-7	3.14E+00	pCi/L	1.8E+01	U	3.17E+01			GAMMALL_GS	1.9999E+00	11/17/2008	42.1	0.1		D
DUP	13966-02-4	4.81E+00		1.8E+01						L	21:18	20.0	3		
8309386	CO-60	2.08E+00	pCi/L	1.8E+00	U	3.76E+00			GAMMALL_GS	1.9999E+00	11/17/2008	70.3	0.9		D
DUP	10198-40-0	1.00E+00		1.8E+00						L	21:18	20.0	3		
8309386	CS-134	6.96E-01	pCi/L	1.8E+00	U	3.33E+00			GAMMALL_GS	1.9999E+00	11/17/2008	27.2	0.2		D
DUP	13967-70-9	9.15E-01		1.8E+00						L	21:18	20.0	3		
8309386	CS-137	-1.90E-01	pCi/L	1.9E+00	U	3.24E+00			GAMMALL_GS	1.9999E+00	11/17/2008	0.0	0.2		D
DUP	10045-97-3	-4.74E-01		1.9E+00						L	21:18	20.0	3		
8309386	EU-152	-2.21E+00	pCi/L	4.4E+00	U	7.39E+00			GAMMALL_GS	1.9999E+00	11/17/2008	0.0	1.2		D
DUP	14683-23-9	1.60E+00		4.4E+00						L	21:18	20.0	3		
8309386	EU-154	-2.17E-01	pCi/L	5.0E+00	U	9.17E+00			GAMMALL_GS	1.9999E+00	11/17/2008	224.3	1.1		D
DUP	15585-10-1	3.78E+00		5.0E+00						L	21:18	20.0	3		
8309386	EU-155	-7.72E-01	pCi/L	3.4E+00	U	5.71E+00			GAMMALL_GS	1.9999E+00	11/17/2008	941.5	0.8		D
DUP	14391-16-3	1.19E+00		3.4E+00						L	21:18	20.0	3		
8309386	K-40	-2.03E+01	pCi/L	4.2E+01	U	8.61E+01			GAMMALL_GS	1.9999E+00	11/17/2008	0.0	0.4		D
DUP	13966-00-2	-3.18E+01		4.2E+01						L	21:18	20.0	3		
8309386	RU-106	3.78E+00	pCi/L	1.5E+01	U	2.71E+01			GAMMALL_GS	1.9999E+00	11/17/2008	1137.5	0.6		D
DUP	13967-48-1	-2.65E+00		1.5E+01						L	21:18	20.0	3		
8309386	SB-125	1.61E+00	pCi/L	4.3E+00	U	7.69E+00			GAMMALL_GS	1.9999E+00	11/17/2008	489.9	0.7		D
DUP	14234-35-6	-6.75E-01		4.3E+00						L	21:18	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.

Thursday, December 18, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05547.Edd, h:\Reportdb\edd\FeadIV\Rad\40399.Edd

Lab Sample Id:	K1HCR1DW	**Sdg/Rept Nbr:**	W05547	40399	**Collection Date:** 10/16/2008 13:33
Client Id:	B1X6W4	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 10/20/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S09-010	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
8309391	TC-99	3.28E+03	pCi/L	2.0E+02		9.98E+00	100.0	3.60E+03	TC99_SEP_LS	1.25E-01	11/20/2008			60	D
MS	14133-76-7			3.1E+01				91.0		L	07:17			140	

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

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/18/2008 11:21:40 AM

Lot No., Due Date: J8J230360,J8J230372; 12/18/2008,12/15/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8309386; RGAMMA Gamma by GER

SDG, Matrix: W05547; WATER

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

6.0 Comments on any No response:

The sample was re-counted on a different detector in order to provide a duplicate.

First Level Review John Fox **Date** 11-18-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 83093886

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

Comments on any "No" response: _____

Second Level Review: Erika Jed Date: 11/18/8

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

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

12/5/2008 8:36:13 AM

Lot No., Due Date: J8J230360,J8J230369,J8J230372; 12/18/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No.. Method Test: 8309387; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05547; WATER

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

6.0 Comments on any No response:

First Level Review [signature] **Date** 12-5-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8309387

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: 12/8/08

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/10/2008 3:58:21 PM

Lot No., Due Date: J8J230367; 12/15/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8309390; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05547; WATER

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

6.0 Comments on any No response:

First Level Review Alma E. Mitchell **Date** 11/10/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8309390

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: 11/14/08

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

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

11/21/2008 9:46:02 AM

Lot No., Due Date: J8J230367; 12/15/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8309391; RTC99 Tc-99 by LSC

SDG, Matrix: W05547; WATER

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

6.0 Comments on any No response:

First Level Review [signature] **Date** 11-21-5

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8309391

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: Jodi G Date: 11/24/08

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

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W09-010-289
	J8J230360 W05547 DUE 111908 KIHAF	Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N 506-19	Ice Chest No. GW8-063 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDX0		W	10/20/08	1017	1x20-mL P	Activity Scan	6 Months	None
B1XDX0		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B1XDX0		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	D. Woehle	[signature]	OCT 20 2008 15:10	[signature]	David Hanson		OCT 20 2008 15:10
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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230360 W05547 DUE 111908

C.O.C. # **W09-010-246**

Page 1 of 1

Collector D. Woehle	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA OCTOBER 2008	HWF-N-506-19	**Ice Chest No.** GW5063 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XC94	K1HA8	W	10/24/08	0983	1x20-mL P	Activity Scan	6 Months	None
B1XC94	↓	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 20 2008 15:10	David Hano			OCT 20 2008 15:10
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

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8J230360 W05547 DUE 111908	C.O.C. # W09-010-288 Page 1 of 1

Collector D. Woehle	Contact/Requester Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. W09-010	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA OCTOBER 2008	HWF-N-306-19	Ice Chest No. GW5063 Temp.
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDW9	KIHCA	W	10/20/08	1126	1x20-mL P	Activity Scan	6 Months	None
B1XDW9	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle	D. Woehle	D. Woehle	OCT 20 2008 15:10	DAVID HARDIN			OCT 20 2008 15:10
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 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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230360 W05547 DUE 111908

C.O.C. # **W09-010-282**

Page 1 of 1

Collector D. Woehle	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA OCTOBER 2008	HNF-N-506-19	**Ice Chest No.** GW3-063 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDW1	KIHCC	W	10/20/08	1225	1x20-mL P	Activity Scan	6 Months	None
B1XDW1	↓	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B1XDW1	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			15:10 OCT 20 2008	David Hardison			15:2 OCT 20 2008
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 Liqui	
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

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8J230360 W05547 DUE 111908	C.O.C. # W09-010-277 Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA OCTOBER 2008	HNF-N-5049	Ice Chest No.: GW3067 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDV4	KIHCF	W	10/20/08	1322	1x20-mL P	Activity Scan	6 Months	None
B1XDV4	↓	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 20 2008 1510		David Hanbinson		OCT 20 2008 1510
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 = 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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 10-22-08 17:00 GM Screen Result 0.10 mR/hr

Client: Flour SDG #: W05547 NA[ ] SAF #: W09-010 NA[ ]

Work Order Number: J8J230360 Chain of Custody # W09-010-289,-246,-288, 282,277

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5 ~~4~~ RR 102308
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ___ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 10-22-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230367 W05547 DUE 111908

C.O.C. # **S09-010-124**

Page 1 of 1

Collector KE Hamilton	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. S09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV. OCTOBER 2008	HNF-N-500-20-1	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X6T2	KIHCN	W	10-20-08	1207	1x20-mL P	Activity Scan	6 Months	None
B1X6T2	↓	W	↓	↓	2x4000-mL G/P	I129_SEP_LEPS_GS: I-129 (1)	6 Months	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
KE Hamilton	OCT 20 2008 1430	RJR WLANE TAL	OCT 20 2008 1430

Matrix *

S = Soil		DS = Drum Solid	
SF = 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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230367 W05547 DUE 111908

C.O.C. # **S09-010-148**

Page 1 of 1

Collector D. Woehle	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. S09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV. OCTOBER 2008	HNF-N-5067	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X6W4	KIHCR	W	10-16-08	1333	1x20-mL P	Activity Scan	6 Months	None
B1X6W4	↓	W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	6 Months	HCl to pH <2
B1X6W4		W	↓	↓	2x4000-mL G/P	I129_SEP_LEPS_GS: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 20 2008 1430		L VLANE	TAC	OCT 20 2008 1430
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	= 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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 10-20-08 14:30 GM Screen Result 0.10mn/hr

Client: Flour SDG #: W05547 NA[ ] SAF #: S09-010 NA [ ]

Work Order Number: J8J230367 Chain of Custody # S09-010-148,-124

Shipping Container ID: _____ Air Bill # _____

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

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

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

4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6. Number of samples in shipping container: ~~3~~ 2 RR 102308

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

8 Samples have:
- ___ Tape
- ✓ Custody Seals
- ___ Hazard Lables
- ✓ Appropriate Sample Lables

9. Samples are:
- ✓ In Good Condition
- ___ Broken
- ___ Leaking
- ___ Have Air Bubbles

(Only for samples requiring no head space.)

10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____

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

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

13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 10-20-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

TESTAMERICA Project Manager _____ Date _____

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230369 W05547 DUE 111908

C.O.C. # **I09-003-5**

Page 1 of 1

Collector Scott E. Hamaker	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. I09-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1, OCTOBER 2008	HNF-N-506-19	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XC23	K1HDX	W	10/16/08	0823	1x20-mL P	Activity Scan	6 Months	None
B1XC23	↓	W	"	"	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker	Scott Hamaker OCT 20 2008	1430	RJP	LJ LANE TAL		OCT 20 2008 1430
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 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

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TESTAMERICA

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230369 W05547 DUE 111908

C.O.C. # **I09-003-18**

Page 1 of 1

Collector R. A. Shepard	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. I09-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1, OCTOBER 2008	HNF-N-606-18	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XC38	KIHD8	W	102008	0555	1x20-mL P	Activity Scan	6 Months	None
B1XC38	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			OCT 20 2008 1430		CULANE TAL		OCT 20 2008 1430
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 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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 10-20-08 14:30 GM Screen Result 0.10mn/hr

Client: Flour SDG #: W05547 NA[ ] SAF #: I09-003 NA [ ]

Work Order Number: J8J230369 Chain of Custody # I09-003-5,-18

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3-2 RR 102308
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 10-20-08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8J230372 W05547 DUE 111908	C.O.C. # W09-010-300 Page 1 of 1

Collector: R. A. Shepard	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA OCTOBER 2008	HNF-N 506-15	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDY8	KIHEH	W	102008	1000	1x20-mL P	Activity Scan	6 Months	None
B1XDY8	↓	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B1XDY8	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			OCT 20 2008 1430		LILANE	TAL	OCT 20 2008 1430
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 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

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TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-305**

Page 1 of 1

Collector RA Shepard	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, OCTOBER 2008	HNF-N-526-185	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority: 45 Days**	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XF03	KIHEJ	W	102008	0825	1x20-mL P	Activity Scan	6 Months	None
B1XF03	↓	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B1XF03	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Received By
Print: RA Shepard Sign: [signature] Date/Time: OCT 2 1 2008 1430	Print: RJ LANE TAL Sign: [signature] Date/Time: OCT 2 1 2008 1430
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	= 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

TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8J230372 W05547 DUE 111908	C.O.C. # W09-010-266 Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506 18	Ice Chest No.: AFS-04-053 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDT0	KIHEL	W	10/16/08	0745	1x20-mL P	Activity Scan	6 Months	None
B1XDT0	↓	W	10/16/08	0745	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

OCT 20 2008

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle			10/16/08 ~~OCT 16 2008~~ 1430		R LLANE	TAL	OCT 20 2008 1430
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 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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-265**

Page 1 of 1

Collector Roy Sickle	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, OCTOBER 2008	HNF-N-506-18	**Ice Chest No.** AFS-04-053 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDR7	KIHEN	W	10/16/08	0916	1x20-mL P	Activity Scan	6 Months	None
B1XDR7	↓	W	10/16/08	0916	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Roy Sickle		OCT 20 2008 1430		LANE TAL		OCT 20 2008 1430
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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-261**

Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA OCTOBER 2008	HNF-N-506-18	Ice Chest No.: AFS-04-053 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XCC5	KIHEQ	W	10/16/08	1022	1x20-mL P	Activity Scan	6 Months	None
B1XCC5	Y	W	10/16/08	1022	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Sickle			OCT 20 2008 1430		L J LANE		OCT 20 2008 1430
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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-226**

Page 1 of 1

Collector Scott E. Hamaker	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, OCTOBER 2008	MLF-N-506-19	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority: 45 Days**	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XC66	KIHEV	W	10/10/08	0935	1x20-mL P	Activity Scan	6 Months	None
B1XC66	✓	W	"	"	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker		Scott Hamaker	OCT 20 2008 1430		L.J. LANE	TAL	OCT 20 2008 1430
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 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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-293**

Page 1 of 1

Collector R. A. Shepard	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA OCTOBER 2008	HNF-N-506-18	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XDX6	KLHEX	W	102008	1223	1x20-mL P	Activity Scan	6 Months	None
B1XDX6	✓	W	✓	✓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

Relinquished By R. A. Shepard Print Sign Date/Time 1430 OCT 20 2008	Received By Print Sign LILANE TAL Date/Time 1430 OCT 20 2008	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liqui, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

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

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8J230372 W05547 DUE 111908

C.O.C. # **W09-010-256**

Page 1 of 1

Collector KE Hamilton	**Contact/Requester** Mike Neely	**Telephone No.** 509-373-0654 **MSIN** **FAX**
SAF No. W09-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA OCTOBER 2008	HNF-N-506-20/1	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority: 45 Days**	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XCB8	KIHE1	W	10-20-08	0845	1x20-mL P	Activity Scan	6 Months	None
B1XCB8	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KE Hamilton			OCT 20 2008 1430		LJ LANE	TAL	OCT 20 2008 1430
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

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TESTAMERICA

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8J230372 W05547 DUE 111908	C.O.C. # W09-010-255 Page 1 of 1

Collector: KE Hamilton	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-20/1	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

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

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1XCB5	K1HE3	W	10-20-08	1027	1x20-mL P	Activity Scan	6 Months	None
B1XCB5	↓	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KE Hamilton	Kevin E Hamilton		OCT 20 2008 1430		L J LANE	TAL	OCT 20 2008 1430
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 = 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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 102008 1430 GM Screen Result 0.1K

Client: PGW SDG #: W05547 NA[ ] SAF #: W09-010 NA [ ]

Work Order Number: J8J230372 Chain of Custody # W09-010-300, -305, -266, -265, -261, -226, -256, -255, -293

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 9
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ✓ Custody Seals
   - ____ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ____ Broken
   - ____ Leaking
   - ____ Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: _____ Date: 102008

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA
LS-023 Rev 7 1/08

PGW WATER

TESTAMERICA

11/12/2008 9:35:38 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 11/19/2008 WO5547

Sep1 DT/Tm Tech:

Batch: 8309386 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL Bolly.

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 K1HAF-1-AA J8J230360-1-SAMP 10/20/2008 10:17		2000.10g,in AmtRec: VIAL20,3X4LP #Containers: 4			100mls	200 min. 100% 11.17.08	G13	2103	11/17/08	Scr: Alpha: 2.05E-03 uCi/Sa Beta: 8.56E-04 uCi/Sa
2 K1HA8-1-AA J8J230360-2-SAMP 10/20/2008 09:03		2000.10g,in AmtRec: VIAL20,4LP #Containers: 2					G8	2104		Scr: Alpha: 1.65E-04 uCi/Sa Beta: 6.76E-04 uCi/Sa
3 K1HCC-1-AA J8J230360-4-SAMP 10/20/2008 12:25		2000.00g,in AmtRec: VIAL20,3X4LP #Containers: 4					G10 11/17/08	2105		Scr: Alpha: 1.06E-03 uCi/Sa Beta: 1.12E-03 uCi/Sa
4 K1HCF-1-AA J8J230360-5-SAMP 10/20/2008 13:22		1999.90g,in AmtRec: VIAL20,4LP #Containers: 2					G7	2106		Scr: Alpha: 2.34E-05 uCi/Sa Beta: 6.32E-04 uCi/Sa
5 K1HEH-1-AA J8J230372-1-SAMP 10/20/2008 10:00		1999.90g,in AmtRec: VIAL20,3X4LP #Containers: 4					G5	2107		Scr: Alpha: 2.23E-03 uCi/Sa Beta: 3.22E-03 uCi/Sa
6 K1HEH-1-AD-X J8J230372-1-DUP 10/20/2008 10:00		1999.9 11-15-8 AmtRec: VIAL20,3X4LP #Containers: 4					G15 11/17/08	0038		Scr: Alpha: 2.23E-03 uCi/Sa Beta: 3.22E-03 uCi/Sa
7 K1HEJ-1-AA J8J230372-2-SAMP 10/20/2008 08:25		2000.00g,in AmtRec: VIAL20,3X4LP #Containers: 4					G15	2107		Scr: Alpha: 7.93E-04 uCi/Sa Beta: 2.71E-03 uCi/Sa

TestAmerica Richland Wa.

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

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep SamplePrep v4.8.34

TESTAMERICA

11/12/2008 9:35:39 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #:

AnalyDueDate: 11/19/2008

Sep1 DT/Tm Tech:

Batch: 8309386 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

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 K1HEL-1-AA J8J230372-3-SAMP 10/16/2008 07:45		2000.00g,in AmtRec: VIAL20,4LP #Containers: 2			100mls	200 ~~100~~	G5	0038	11/17/0800	
								Scr:	Alpha:	Beta:
9 K1HEN-1-AA J8J230372-4-SAMP 10/16/2008 09:16		2000.10g,in AmtRec: VIAL20,4LP #Containers: 2					G13	0039		
								Scr:	Alpha: 3.50E-04 uCi/Sa	Beta: 8.96E-04 uCi/Sa
10 K1HEQ-1-AA J8J230372-5-SAMP 10/16/2008 10:22		2000.00g,in AmtRec: VIAL20,4LP #Containers: 2					G10	0040		
								Scr:	Alpha: -1.71E-04 uCi/Sa	Beta: 1.97E-04 uCi/Sa
11 K1HEV-1-AA J8J230372-6-SAMP 10/16/2008 09:35		2000.00g,in AmtRec: VIAL20,4LP #Containers: 2					G8	0041		
								Scr:	Alpha: 3.89E-04 uCi/Sa	Beta: -1.97E-04 uCi/Sa
12 K1HEX-1-AA J8J230372-7-SAMP 10/20/2008 12:23		2000.00g,in AmtRec: VIAL20,4LP #Containers: 2					G7	0042		
								Scr:	Alpha: -4.50E-04 uCi/Sa	Beta: 6.83E-04 uCi/Sa
13 K17LM-1-AA-B J8K040000-386-BLK 10/20/2008 10:00		1999.90g,in AmtRec: #Containers: 1					G5	0046	11/18/0800	
								Scr:	Alpha:	Beta:
14 K17LM-1-AC-C J8K040000-386-LCS 10/20/2008 10:00		2000.10g,in AmtRec: #Containers: 1	QCAG1513 08/26/08,pd 07/15/00				G5	0047		
								Scr:	Alpha:	Beta:

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TESTAMERICA

11/12/2008 9:35:40 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,LaneL

AnalyDueDate: 11/19/2008

Batch: 8309386 pCi/L
SEQ Batch, Test: None

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

Comments: K1HEH-SAMP "Comments No dup d/t ISV. LJL 111208"

PH<2.0. RJK 111208

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

K1HAF1AA-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:

K17LM1AA-BLK:

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

K17LM1AC-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						

K1HAF1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

K17LM1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

K17LM1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/18/2008 11:17 12 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/19/2007, 11/23/2008, Batch: '8309386', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8309386						
AC		Rev1C	LaneL	11/12/2008 9:07:43		
SC			wagarr	IsBatched	11/4/2008 1:44:37 PM	ICOC_RADCALC v4.8.35
SC			LaneL	InPrep	11/12/2008 9:07:43 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	11/12/2008 9:36:49 AM	RL-PRP-004 REVISION 0
SC			BockJ	Prep2C	11/17/2008 3:34:19 PM	RL-GAM-001 REVISION 0
SC			DAWKINSO	InCnt1	11/17/2008 3:43:53 PM	RL-CI-007 REVISION 0
SC			ClarkR	CalcC	11/18/2008 7:39:15 AM	RL-CI-007 REVISION 0
SC			nortonj	Rev1C	11/18/2008 11:16:59 AM	RL-DR-001 REV 0
AC			LaneL	11/12/2008 9:36:49		
AC			BockJ	11/17/2008 3:34:19		
AC			DAWKINSO	11/17/2008 3:43:53		
AC			ClarkR	11/18/2008 7:39:15		
AC			nortonj	11/18/2008 11:16:59		

AC: Accepting Entry; SC: Status Change

TESTAMERICA

11/12/2008 8:18:20 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:

AnalyDueDate: 11/19/2008 W05547

Batch: 8309387 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

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

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 K1HAF-1-AC J8J230360-1-SAMP 10/20/2008 10:17		3893.90g,in AmtRec: VIAL20,3X4LP	ITA7718 11/07/08 #Containers: 4		38.1	100	L2	1737 Scr: Alpha: 2.05E-03 uCi/Sa	12/3/08 CR Beta: 8.56E-04 uCi/Sa	
2 K1HCA-1-AA J8J230360-3-SAMP 10/20/2008 11:26		3881.70g,in AmtRec: VIAL20,2X4LP	ITA7719 11/07/08 #Containers: 3		36.7		L2	1920 Scr: Alpha: -5.23E-04 uCi/Sa	12/3/08 PD Beta: 7.49E-04 uCi/Sa	
3 K1HCC-1-AC J8J230360-4-SAMP 10/20/2008 12:25		3875.10g,in AmtRec: VIAL20,3X4LP	ITA7720 11/07/08 #Containers: 4		37.2		L2	2115 Scr: Alpha: 1.06E-03 uCi/Sa	12/3/08 Beta: 1.12E-03 uCi/Sa	
4 K1HDX-1-AA J8J230369-1-SAMP 10/16/2008 08:23		3817.50g,in AmtRec: VIAL20,2X4LP	ITA7721 11/07/08 #Containers: 3		37.6		L2	2314 Scr: Alpha: -3.01E-04 uCi/Sa	12/3/08 PD Beta: 5.73E-04 uCi/Sa	
5 K1HDX-1-AC-X J8J230369-1-DUP 10/16/2008 08:23		3814.00g,in AmtRec: VIAL20,2X4LP	ITA7722 11/07/08 #Containers: 3		37.7		L2	0114 Scr: Alpha: -3.01E-04 uCi/Sa	Beta: 5.73E-04 uCi/Sa	
6 K1HD8-1-AA J8J230369-2-SAMP 10/20/2008 08:55		3878.60g,in AmtRec: VIAL20,2X4LP	ITA7723 11/07/08 #Containers: 3		37.5		L2	0322 Scr: Alpha: 4.00E-04 uCi/Sa	12/4/08 Beta: 1.28E-03 uCi/Sa	
7 K1HEH-1-AC J8J230372-1-SAMP 10/20/2008 10:00		3900.50g,in AmtRec: VIAL20,3X4LP	ITA7724 11/07/08 #Containers: 4		37.4		L2	0505 Scr: Alpha: 2.23E-03 uCi/Sa	12/4/08 PD Beta: 3.22E-03 uCi/Sa	

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TESTAMERICA

11/12/2008 8:18:21 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:

AnalyDueDate: 11/19/2008

Sep1 DT/Tm Tech:

Batch: 8309387 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

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 K1HEJ-1-AC J8J230372-2-SAMP 10/20/2008 08:25		3756.90g,in AmtRec: VIAL20,3X4LP	ITA7725 11/07/08 #Containers: 4		37.9	100	L2	0652 Scr:	12/4/5 Alpha: 7.93E-04 uCi/Sa	Beta: 2.71E-03 uCi/Sa
9 K1HE1-1-AA J8J230372-8-SAMP 10/20/2008 08:45		3881.20g,in AmtRec: VIAL20,2X4LP	ITA7726 11/07/08 #Containers: 3		36.7		L4 Scr:	0728 Alpha: -1.17E-03 uCi/Sa		Beta: 1.72E-03 uCi/Sa
10 K1HE3-1-AA J8J230372-9-SAMP 10/20/2008 10:27		3893.20g,in AmtRec: VIAL20,2X4LP	ITA7727 11/07/08 #Containers: 3		36.9		L5 Scr:	0728 Alpha: 1.09E-04 uCi/Sa		Beta: 1.88E-03 uCi/Sa
11 K17LR-1-AA-B J8K040000-387-BLK 10/16/2008 08:23		4000.00g,in AmtRec:	ITA7728 11/07/08 #Containers: 1		36.2		L2 Scr:	0835 Alpha:	12/4/08 5 Beta:	
12 K17LR-1-AC-C J8K040000-387-LCS 10/16/2008 08:23		3999.30g,in AmtRec:	ISD0887 10/08/08 #Containers: 1		37.7		L2 Scr:	1018 Alpha:	12/4/08 Beta:	

Comments: REDUCED VOLS D/T ISV. LJR 111208

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

K1HAF1AC-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:

12/5/2008 8:35:18 AM

ICOC Fraction Transfer/Status Report

ByDate: 12/6/2007, 12/10/2008, Batch: '8309387', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8309387						
AC		Rev1C	LaneL	11/12/2008 7:47:50		
SC			wagarr	IsBatched	11/4/2008 1:44:37 PM	ICOC_RADCALC v4.8.35
SC			LaneL	InPrep	11/12/2008 7:47:50 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	11/12/2008 8:18:57 AM	RL-PRP-004 REVISION 0
SC			BostedD	Prep2C	12/3/2008 3:49:05 PM	RL-GAM-002 REVISION 0
SC			DAWKINSO	InCnt1	12/3/2008 3:57:40 PM	RL-CI-007 REVISION 0
SC			ClarkR	CalcC	12/4/2008 1:19:17 PM	RL-CI-007 REVISION 0
SC			ClarkR	CalcC	12/4/2008 1:24:02 PM	RL-CI-007 REVISION 0
SC			nortonj	Rev1C	12/5/2008 8:35:11 AM	RL-DR-001 REV 0
AC			LaneL	11/12/2008 8:18:57		
AC			BostedD	12/3/2008 3:49:05 PM		
AC			DAWKINSO	12/3/2008 3:57:40 PM		
AC			ClarkR	12/4/2008 1:19:17 PM		
AC			ClarkR	12/4/2008 1:24:02 PM		
AC			nortonj	12/5/2008 8:35:11		

AC: Accepting Entry, SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.35

TESTAMERICA

11/5/2008 12:46:37 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:

AnalyDueDate: 11/19/2008 WO5547

Batch: 8309390 WATER pCi/L PM, Quote: SS , 57671

SEQ Batch, Test: None

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

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 K1HCN-1-AA J8J230367-1-SAMP 10/20/2008 12:07	AmtRec: VIAL20,2X4LP	500.00g,in	ITA7693 10/23/08	#Containers: 3	37.8	100	L2	1558	11/7/08 ME	Scr: Alpha: -3.61E-04 uCi/Sa Beta: 2.87E-03 uCi/Sa
2 K1HCN-1-AC-X J8J230367-1-DUP 10/20/2008 12:07	AmtRec: VIAL20,2X4LP	500.00g,in	ITA7694 10/23/08	#Containers: 3	38.8		L2	1742	11/7/08 ME	Scr: Alpha: -3.61E-04 uCi/Sa Beta: 2.87E-03 uCi/Sa
3 K1HCR-1-AA J8J230367-2-SAMP 10/16/2008 13:33	AmtRec: VIAL20,3XLP,2X4LP	500.00g,in	ITA7695 10/23/08	#Containers: 6	36.3		L2	1924	11/7/08 ME	Scr: Alpha: 2.79E-03 uCi/Sa Beta: -4.23E-04 uCi/Sa
4 K17L0-1-AA-B J8K040000-390-BLK 10/20/2008 12:07	AmtRec:	500.00g,in	ITA7696 10/23/08	#Containers: 1	36.8		L2	0714	11/8/08	Scr: Alpha: Beta:
5 K17L0-1-AC-C J8K040000-390-LCS 10/20/2008 12:07	AmtRec:	500.00g,in	ISB0300 10/08/08	#Containers: 1	37.6		L4	0714		Scr: Alpha: Beta:

Comments:

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

K1HCN1AA-SAMP Constituent List:
I-129 RDL:5.00E+00 pCi/L LCL:70 UCL:130 RPD:20

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11/5/2008 12:46:37 PM

Sample Preparation/Analysis

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____

AnalyDueDate: 11/19/2008

Sep1 DT/Tm Tech:

Batch: 8309390 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,LaneL

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:

```
K17L01AA-BLK:
  I-129        RDL:5.00E+00    pCi/L    LCL:        UCL:        RPD:
K17L01AC-LCS:
  I-129        RDL:5           pCi/L    LCL:70      UCL:130     RPD:20
K1HCN1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
K17L01AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
K17L01AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

11/10/2008 3:57:42 PM

ICOC Fraction Transfer/Status Report

ByDate: 11/11/2007, 11/15/2008, Batch: '8309390', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8309390						
AC		**Rev1C**	**LaneL**	11/5/2008 12:35:05		
SC			wagarr	IsBatched	11/4/2008 1:44:37 PM	ICOC_RADCALC v4.8.35
SC			LaneL	InPrep	11/5/2008 12:35:05 PM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	11/5/2008 12:48:59 PM	RL-PRP-004 REVISION 0
SC			BostedD	InPrep2	11/6/2008 3:11:48 PM	RL-GAM-002 REVISION 0
SC			BostedD	Prep2C	11/7/2008 2:06:32 PM	RL-GAM-002 REVISION 0
SC			ClarkR	InCnt1	11/7/2008 2:18:53 PM	RL-CI-007 REVISION 0
SC			BlackCL	CalcC	11/8/2008 8:19:34 AM	RL-CI-007 REVISION 0
SC			whelands	Rev1C	11/10/2008 3:57:36 PM	RL-DR-001 REV 0
AC			**LaneL**	11/5/2008 12:48:59		
AC			**BostedD**	11/6/2008 3:11:48 PM		
AC			**BostedD**	11/7/2008 2:06:32 PM		
AC			**ClarkR**	11/7/2008 2:18:53 PM		
AC			**BlackCL**	11/8/2008 8:19:34		
AC			**whelands**	11/10/2008 3:57:36		

AC: Accepting Entry; SC: Status Change

TESTAMERICA

11/13/2008 8:45:16 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868. Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 11/19/2008 W05547

Sep1 DT/Tm Tech:

Batch: 8309391 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 8309390 BNTB, 8309391 AMS5,

Prep Tech: ,LaneL

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 K1HCR-1-AC J8J230367-2-SAMP 10/16/2008 13:33		125.10g,in AmtRec: VIAL20,3XLP,2X4LP #Containers: 6		60		Scr:	Alpha: 2.79E-03 uCi/Sa	Beta: -4.23E-04 uCi/Sa
2 K1HCR-1-AD-S J8J230367-2-MS 10/16/2008 13:33		125.00g,in AmtRec: VIAL20,3XLP,2X4LP #Containers: 6	TCSG2262 10/10/08,pd 07/01/05,r			Scr:	Alpha: 2.79E-03 uCi/Sa	Beta: -4.23E-04 uCi/Sa
3 K1HCR-1-AE-X J8J230367-2-DUP 10/16/2008 13:33		125.10g,in AmtRec: VIAL20,3XLP,2X4LP #Containers: 6				Scr:	Alpha: 2.79E-03 uCi/Sa	Beta: -4.23E-04 uCi/Sa
4 K17L2-1-AA-B J8K040000-391-BLK 10/16/2008 13:33		125.10g,in AmtRec: #Containers: 1				Scr:	Alpha:	Beta:
5 K17L2-1-AC-C J8K040000-391-LCS 10/16/2008 13:33		125.10g,in AmtRec: #Containers: 1	TCSE2262 08/28/08,pd 07/01/05,r			Scr:	Alpha:	Beta:
6 K17L2-1-AD-BN J8K040000-391-IBLK 10/16/2008 13:33		AmtRec: #Containers: 1				Scr:	Alpha:	Beta:

70

TESTAMERICA

11/13/2008 8:45:17 AM

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 11/19/2008

Batch: 8309391 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:

Comments: PH< C.O. KJR 111308

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

K1HCR1AC-SAMP Constituent List:
Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20
K1HCR1AD-MS Constituent List:

K17L21AA-BLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:
K17L21AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
K17L21AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

K1HCR1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
K1HCR1AD-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
K17L21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
K17L21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
K17L21AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

11/21/2008 9:44:05 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/22/2007, 11/26/2008, Batch: '8309391', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8309391						
AC		Rev1C	LaneL	11/13/2008 8:38:30		
SC			wagarr	IsBatched	11/4/2008 1:44:37 PM	ICOC_RADCALC v4.8.35
SC			LaneL	InPrep	11/13/2008 8:38:30 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	11/13/2008 8:45:56 AM	RL-PRP-004 REVISION 0
SC			Barcotl	InPrep	11/19/2008 4:00:29 PM	RL-LSC-013 REVISION 0
SC			Barcotl	Prep1C	11/19/2008 4:00:44 PM	RL-LSC-013 REVISION 0
SC			DAWKINSO	InCnt1	11/19/2008 4:17:07 PM	RL-CI-005 REVISION 0
SC			ClarkR	CalcC	11/20/2008 1:34:20 PM	RL-CI-005 REVISION 0
SC			nortonj	Rev1C	11/21/2008 7:12:30 AM	RL-DR-001 REV 0
AC			LaneL	11/13/2008 8:45:56		
AC			Barcotl	11/19/2008 4:00:29		
AC			Barcotl	11/19/2008 4:00:44		
AC			DAWKINSO	11/19/2008 4:17:07		
AC			ClarkR	11/20/2008 1:34:20		
AC			nortonj	11/21/2008 7:12:30		

AC: Accepting Entry; SC: Status Change