TESTAMERICA

Analytical Data Package Prepared For

CH2M Hill Plateau Remediation

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Radiochemical Analysis By

TestAmerica TARL

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

Data Package Contains _____ Pages

Report Nbr: 39971

RECEIVED OCTOBER 13, 2008

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05492	I08-053	B1WDX8	J8H250199-1	KVQW11AA	9KVQW110	8246311
		B1WDP8	J8H250199-2	KVQW31AA	9KVQW310	8246311
		B1WDP9	J8H250199-3	KVQW41AA	9KVQW410	8246311
		B1WDY9	J8H250199-4	KVQW61AA	9KVQW610	8246311
		B1WDX5	J8H250199-5	KVQW71AA	9KVQW710	8246311
		B1WDY1	J8H250199-6	KVQW81AA	9KVQW810	8246311
		B1WDY3	J8H250199-7	KVQW91AA	9KVQW910	8246311
		B1WDY4	J8H250199-8	KVQXC1AA	9KVQXC10	8246311
	A08-007	B1W1H0	J8H270231-1	KVWF01AA	9KVWF010	8246311
	I08-052	B1WPW2	J8H270234-1	KVWF91AA	9KVWF910	8246322
		B1WR36	J8H270234-2	KVWGL1AA	9KVWGL10	8246322
	W08-006	B1VR99	J8H270304-1	KVW081AA	9KVW0810	8246318
		B1VRB0	J8H270304-2	KVW091AA	9KVW0910	8246318
	W08-008	B1WKW7	J8H270305-1	KVW1F1AA	9KVW1F10	8246318
		B1WJK7	J8H270305-2	KVW1G1AA	9KVW1G10	8246315

Comments:

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Report Nbr: 39971

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05492	W08-008	B1WKL5	J8H290231-1	KV2VJ1AA	9KV2VJ10	8246325
		B1WKK5	J8H290231-2	KV2VN1AA	9KV2VN10	8246325
	I08-053	B1WDP0	J8H290323-1	KV3KF1AA	9KV3KF10	8246316
		B1WDP0	J8H290323-1	KV3KF1AC	9KV3KF10	8246322
		B1WDP0	J8H290323-1	KV3KF1AD	9KV3KF10	8246315
		B1WDP0	J8H290323-1	KV3KF1AE	9KV3KF10	8246311
		B1WDP0	J8H290323-1	KV3KF1AF	9KV3KF10	8246320
		B1WDP0	J8H290323-1	KV3KF1AG	9KV3KF10	8246314
		B1WDP0	J8H290323-1	KV3KF2AF	9KV3KF20	8275303
		B1WDW2	J8H290323-2	KV3KG1AA	9KV3KG10	8246311
	A08-007	B1W1D8	J8H290331-1	KV3LR1AA	9KV3LR10	8246311

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

October 13, 2008

Attention: Mike Neely

SAF Number	:	I08-053, A08-007, I08-052, W08-006, W08-008
Date SDG Closed	:	August 29, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05492
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

Between August 25, 2008 and August 29, 2008 twenty 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
B1WDX8	KVQW1	8/25/08	WATER
B1WDP8	KVQW3	8/25/08	WATER
B1WDP9	KVQW4	8/25/08	WATER
B1WDY9	KVQW6	8/25/08	WATER
B1WDX5	KVQW7	8/25/08	WATER
B1WDY1	KVQW8	8/25/08	WATER
B1WDY3	KVQW9	8/25/08	WATER
B1WDY4	KVQXC	8/25/08	WATER
B1W1H0	KVWF0	8/27/08	WATER
B1WPW2	KVWF9	8/27/08	WATER
B1WR36	KVWGL	8/27/08	WATER
B1VR99	KVW08	8/27/08	WATER
B1VRB0	KVW09	8/27/08	WATER

B1WKW7	KVW1F	8/27/08	WATER
B1WJK7	KVW1G	8/27/08	WATER
B1WKL5	KV2VJ	8/29/08	WATER
B1WKK5	KV2VN	8/29/08	WATER
B1WDP0	KV3KF	8/29/08	WATER
B1WDW2	KV3KG	8/29/08	WATER
B1W1D8	KV3LR	8/29/08	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Uranium 234, 235 and 238 by method RL-ALP-015 (RICH-RC-5039)*
Neptunium-237 by method RL-ALP-013 (RICH-RC-5009)*
Gamma Spectroscopy
Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017)*
Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025)*
Liquid Scintillation Counting
Selenium-79 by method RL-LSC-012 (RICH-RC-5043)*
Technetium-99 by method RL-LSC-013 (RICH-RC-5078)*
Carbon-14 by method RL-LSC-008 (RICH-RC-5022)*
Chemical Analysis
Total Coliform by method 9223

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

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RL-ALP-015 (RICH-RC-5039):
The LCS, batch blank, sample and sample duplicate (B1WDP0) results are within contractual requirements.

Neptunium-237 by method RL-ALP-013 (RICH-RC-5009):
The LCS, batch blank, sample and sample duplicate (B1WDP0) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017):
Sample B1WJK7 DUP was analyzed with a reduced aliquot due to insufficient sample volume. Except as noted, the LCS, batch blank, samples and sample duplicate (B1WJK7) results are within contractual requirements.

Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025):
Sample B1W1D8, the batch blank and LCS received only one 75ml carbon tetra-chloride extraction instead of two as stated in the procedure due to a technician over site. The one extraction did not negatively affect the samples; data will be accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1WDX8) 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 (B1VR99), and sample matrix spike (B1VRB0) results are within contractual requirements.

Selenium-79 by method RL-LSC-012 (RICH-RC-5043):
The duplicate sample failed due to an unacceptable tracer yield. The samples were reanalyzed. The duplicate sample failed again due to an unacceptable tracer yield. The reanalysis data was accepted based on the following criteria:

- There was only one sample (B1WDP0) being analyzed for selenium-79 in this SDG.
- The original result and the reanalysis result for sample B1WDP0 are in agreement.
- The original sample activity and the reanalysis sample activity for B1WDP0 is well below the CRDL

There is no LCS for selenium-79. Except as noted, the batch blank, samples and sample duplicate (B1) results are within contractual requirements.

Carbon-14 by method RL-LSC-008 (RICH-RC-5022):
The LCS, batch blank, samples and sample duplicate (B1WPW2) results are within contractual requirements.

Chemical Analysis

Total Coliform by method 9223

The LCS, batch blank, samples and sample duplicate (B1WKL5) 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-RE-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

10/13/2008 1:54:57 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 39971 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.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:
9KV3KF10	B1WDP0		MW6-SBB-A1	I08-053	W05492					08/29/2008 13:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246322	C-14	14762-75-5	1.16E+01	pCi/L	3.7E+00	4.4E+00		7.98E+00	100.0	C14_LSC	2.00E-01	L	09/09/2008 05:28	I
8246315	BE-7	13966-02-4	5.72E+00	pCi/L	8.8E+00	8.8E+00	U	1.66E+01		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	CO-60	10198-40-0	3.81E-01	pCi/L	1.1E+00	1.1E+00	U	2.18E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	CS-134	13967-70-9	8.77E-01	pCi/L	9.6E-01	9.6E-01	U	1.94E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	CS-137	10045-97-3	4.28E-01	pCi/L	1.2E+00	1.2E+00	U	2.15E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	EU-152	14683-23-9	7.76E-01	pCi/L	2.3E+00	2.3E+00	U	4.21E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	EU-154	15585-10-1	1.39E+00	pCi/L	3.4E+00	3.4E+00	U	6.62E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	EU-155	14391-16-3	6.61E-01	pCi/L	2.2E+00	2.2E+00	U	3.99E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	K-40	13966-00-2	6.45E+00	pCi/L	2.5E+01	2.5E+01	U	1.67E+01		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	RU-106	13967-48-1	1.63E-01	pCi/L	8.9E+00	8.9E+00	U	1.60E+01		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246315	SB-125	14234-35-6	2.47E+00	pCi/L	2.6E+00	2.6E+00	U	4.91E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:29	I
8246311	I-129L	15046-84-1	2.32E-01	pCi/L	1.7E-01	1.7E-01	U	3.40E-01	97.3	I129LL_SEP_LEPS	3.8843E+00	L	09/26/2008 14:13	I
8246316	NP-237	13994-20-2	-6.37E-03	pCi/L	6.5E-02	6.5E-02	U	1.52E-01	98.2	NP237_LLE_PLAT	2.00E-01	L	09/23/2008 15:59	I
8246320	Se-79	15758-45-9	4.01E+00	pCi/L	5.9E+00	1.2E+01	U	1.41E+01	61.8	SE79_SEP_IE_LS	2.00E-01	L	09/24/2008 09:40	I
8246314	U-234	13966-29-5	6.43E-01	pCi/L	2.8E-01	3.0E-01		1.48E-01	98.5	UISO_PLATE_AEA	2.00E-01	L	09/23/2008 00:04	I
8246314	U-235	15117-96-1	-6.19E-03	pCi/L	6.3E-02	6.3E-02	U	1.48E-01	98.5	UISO_PLATE_AEA	2.00E-01	L	09/23/2008 00:04	I
8246314	U-238	U-238	1.18E-01	pCi/L	1.4E-01	1.4E-01	U	2.41E-01	98.5	UISO_PLATE_AEA	2.00E-01	L	09/23/2008 00:04	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:
9KV3KF20	B1WDP0		MW6-SBB-A1	I08-053	W05492					08/29/2008 13:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8275303	Se-79	15758-45-9	8.46E-01	pCi/L	2.9E+00	1.1E+01	U	6.73E+00	62.9	SE79_SEP_IE_LS	2.00E-01	L	10/06/2008 23:52	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:
9KV3KG10	B1WDW2		MW6-SBB-A1	I08-053	W05492					08/27/2008 12:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	1.07E+00	pCi/L	2.8E-01	2.8E-01	U	5.19E-01	99.7	I129LL_SEP_LEPS	3.8493E+00	L	09/26/2008 16:03	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KV3LR10	B1W1D8		MW6-SBB-A1	A08-007	W05492					08/27/2008 10:44

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.

10/13/2008 1:54:57 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 39971 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-1.83E-02	pCi/L	1.0E-01	1.0E-01	U	1.92E-01	110.8	I129LL_SEP_LEPS	3.9073E+00	L	09/26/2008 17:49	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:
9KVQW110	B1WDX8		MW6-SBB-A1	I08-053	W05492					08/22/2008 13:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	3.83E-01	pCi/L	1.9E-01	1.9E-01	U	3.92E-01	93.2	I129LL_SEP_LEPS	3.8772E+00	L	09/25/2008 12:14	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KVQW310	B1WDP8		MW6-SBB-A1	I08-053	W05492					08/22/2008 10:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-5.33E-02	pCi/L	8.1E-02	8.1E-02	U	1.38E-01	153.2	I129LL_SEP_LEPS	3.8957E+00	L	09/25/2008 15:47	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:
9KVQW410	B1WDP9		MW6-SBB-A1	I08-053	W05492					08/22/2008 07:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-6.22E-02	pCi/L	1.3E-01	1.3E-01	U	2.28E-01	93.8	I129LL_SEP_LEPS	3.8568E+00	L	09/25/2008 17:30	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KVQW610	B1WDY9		MW6-SBB-A1	I08-053	W05492					08/22/2008 14:11

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	6.10E+00	pCi/L	8.5E-01	8.5E-01		3.34E-01	96.2	I129LL_SEP_LEPS	3.8827E+00	L	09/25/2008 19:13	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:
9KVQW710	B1WDX5		MW6-SBB-A1	I08-053	W05492					08/22/2008 11:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-8.69E-02	pCi/L	1.5E-01	1.5E-01	U	2.50E-01	96.8	I129LL_SEP_LEPS	3.8641E+00	L	09/26/2008 08:38	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:
9KVQW810	B1WDY1		MW6-SBB-A1	I08-053	W05492					08/22/2008 13:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-1.24E-01	pCi/L	1.4E-01	1.4E-01	U	2.24E-01	98.9	I129LL_SEP_LEPS	3.8581E+00	L	09/26/2008 08:39	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.

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39971 File Name: h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

9KVQW910 B1WDY3 MW6-SBB-A1 I08-053 W05492 08/24/2008 13:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	2.11E-02	pCi/L	1.5E-01	1.5E-01	U	2.86E-01	92.2	I129LL_SEP_LEPS	3.8693E+00	L	09/26/2008 08:40	I

Lab Sample Id: 9KVQXC10 Client Id: B1WDY4 Test User Contract Nbr MW6-SBB-A1 SAF Nbr I08-053 Sdg Nbr: W05492 QC Type: Moisture/ Solids%*: Distilled Volume Sample On Date: Collection Date: 08/24/2008 13:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-6.40E-02	pCi/L	1.2E-01	1.2E-01	U	2.12E-01	100.5	I129LL_SEP_LEPS	3.8767E+00	L	09/26/2008 10:27	I

Lab Sample Id: 9KVW0810 Client Id: B1VR99 Test User Contract Nbr MW6-SBB-A1 SAF Nbr W08-006 Sdg Nbr: W05492 QC Type: Moisture/ Solids%*: Distilled Volume Sample On Date: Collection Date: 08/27/2008 12:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246318	TC-99	14133-76-7	2.81E+01	pCi/L	5.0E+00	7.5E+00		9.73E+00	100.0	TC99_SEP_LSC	1.25E-01	L	09/25/2008 19:58	I

Lab Sample Id: 9KVW0910 Client Id: B1VRB0 Test User Contract Nbr MW6-SBB-A1 SAF Nbr W08-006 Sdg Nbr: W05492 QC Type: Moisture/ Solids%*: Distilled Volume Sample On Date: Collection Date: 08/27/2008 09:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246318	TC-99	14133-76-7	1.58E+00	pCi/L	4.2E+00	6.0E+00	U	9.76E+00	100.0	TC99_SEP_LSC	1.25E-01	L	09/25/2008 22:03	I

Lab Sample Id: 9KVW1F10 Client Id: B1WKW7 Test User Contract Nbr MW6-SBB-A1 SAF Nbr W08-008 Sdg Nbr: W05492 QC Type: Moisture/ Solids%*: Distilled Volume Sample On Date: Collection Date: 08/27/2008 13:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246318	TC-99	14133-76-7	1.57E+03	pCi/L	2.2E+01	9.9E+01		9.82E+00	100.0	TC99_SEP_LSC	1.25E-01	L	09/26/2008 00:08	I

Lab Sample Id: 9KVW1G10 Client Id: B1WJK7 Test User Contract Nbr MW6-SBB-A1 SAF Nbr W08-008 Sdg Nbr: W05492 QC Type: Moisture/ Solids%*: Distilled Volume Sample On Date: Collection Date: 08/27/2008 13:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246315	BE-7	13966-02-4	8.48E+00	pCi/L	1.6E+01	1.6E+01	U	2.95E+01		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	CO-60	10198-40-0	5.45E-01	pCi/L	1.9E+00	1.9E+00	U	3.68E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	CS-134	13967-70-9	4.52E-01	pCi/L	1.8E+00	1.8E+00	U	3.32E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	CS-137	10045-97-3	2.73E-01	pCi/L	1.7E+00	1.7E+00	U	3.02E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	EU-152	14683-23-9	-2.34E+00	pCi/L	4.1E+00	4.1E+00	U	7.00E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	EU-154	15585-10-1	1.25E+00	pCi/L	3.9E+00	3.9E+00	U	7.81E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	I
8246315	EU-155	14391-16-3	1.10E+00	pCi/L	3.2E+00	3.2E+00	U	5.65E+00		GAMMALL_GS	2.00E+00	L	09/17/2008 09:27	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.

8246315	K-40	13966-00-2	5.05E+00	pCi/L	4.1E+01	4.1E+01	U	8.67E+01	GAMMALL_GS	2.00E+00	L	09/17/2008	09:27	I
8246315	RU-106	13967-48-1	-6.66E+00	pCi/L	1.5E+01	1.5E+01	U	2.53E+01	GAMMALL_GS	2.00E+00	L	09/17/2008	09:27	I
8246315	SB-125	14234-35-6	-9.93E-01	pCi/L	3.8E+00	3.8E+00	U	6.55E+00	GAMMALL_GS	2.00E+00	L	09/17/2008	09:27	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:
9KVWF010	B1W1H0		MW6-SBB-A1	A08-007	W05492					08/26/2008 12:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246311	I-129L	15046-84-1	-8.40E-02	pCi/L	1.4E-01	1.4E-01	U	2.37E-01	98.9	I129LL_SEP_LEPS	3.8656E+00	L	09/26/2008 12:29	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KVWF910	B1WPW2		MW6-SBB-A1	I08-052	W05492					08/20/2008 11:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246322	C-14	14762-75-5	1.34E+01	pCi/L	3.8E+00	4.5E+00		7.98E+00	100.0	C14_LSC	2.00E-01	L	09/09/2008 03:20	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:
9KVWGL10	B1WR36		MW6-SBB-A1	I08-052	W05492					08/20/2008 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8246322	C-14	14762-75-5	1.46E+01	pCi/L	3.8E+00	4.5E+00		7.98E+00	100.0	C14_LSC	2.00E-01	L	09/09/2008 04:46	I

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5J41AB	**Sdg/Rept Nbr:**	W05492 39971	**Collection Date:**	08/22/2008 13:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	08/25/2008

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
8246311	I-129L	1.61E-02	pCi/L	1.2E-01	U	2.33E-01	106.2		I129LL_SEP_L	4.00E+00	09/26/2008				D
BLK	15046-84-1			1.2E-01						L	19:33				

TestAmerica
rptFeadRadEdd v3.68

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

/

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5J61AB	**Sdg/Rept Nbr:**	W05492 39971	**Collection Date:**	08/29/2008 13:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	08/29/2008

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
8246314	U-234	3.93E-02	pCi/L	9.7E-02	U	2.25E-01	91.4		UISO_PLATE_	2.00E-01	09/23/2008				D
BLK	13966-29-5			9.6E-02						L	00:04				
8246314	U-235	3.28E-02	pCi/L	6.7E-02	U	1.57E-01	91.4		UISO_PLATE_	2.00E-01	09/23/2008				D
BLK	15117-96-1			6.7E-02						L	00:04				
8246314	U-238	2.62E-02	pCi/L	6.7E-02	U	1.57E-01	91.4		UISO_PLATE_	2.00E-01	09/23/2008				D
BLK	U-238			6.7E-02						L	00:04				

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5J71AB	**Sdg/Rept Nbr:**	W05492	39971	**Collection Date:** 08/27/2008 13:50
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/27/2008

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
8246315	BE-7	5.97E+00	pCi/L	1.9E+01	U	3.43E+01			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	13966-02-4			1.9E+01						L	09:30				
8246315	CO-60	-2.04E-01	pCi/L	1.8E+00	U	3.22E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	10198-40-0			1.8E+00						L	09:30				
8246315	CS-134	-2.15E+00	pCi/L	2.2E+00	U	3.53E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	13967-70-9			2.2E+00						L	09:30				
8246315	CS-137	1.92E-01	pCi/L	1.9E+00	U	3.40E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	10045-97-3			1.9E+00						L	09:30				
8246315	EU-152	-1.12E+00	pCi/L	5.0E+00	U	8.68E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	14683-23-9			5.0E+00						L	09:30				
8246315	EU-154	4.08E+00	pCi/L	6.1E+00	U	1.18E+01			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	15585-10-1			6.1E+00						L	09:30				
8246315	EU-155	1.11E+00	pCi/L	4.0E+00	U	6.99E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	14391-16-3			4.0E+00						L	09:30				
8246315	K-40	-3.89E+01	pCi/L	4.5E+01	U	9.23E+01			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	13966-00-2			4.5E+01						L	09:30				
8246315	RU-106	6.41E+00	pCi/L	1.8E+01	U	3.17E+01			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	13967-48-1			1.8E+01						L	09:30				
8246315	SB-125	2.08E+00	pCi/L	4.9E+00	U	8.84E+00			GAMMALL_GS	2.0001E+00	09/17/2008				D
BLK	14234-35-6			4.9E+00						L	09:30				

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5J91AB **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/29/2008 13:04

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 08/29/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246316	NP-237	-1.09E-02	pCi/L	1.1E-01	U	2.61E-01	63.6		NP237_LLE_P	2.00E-01	09/23/2008				D
BLK	13994-20-2			1.1E-01						L	16:00				

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5KE1AB	**Sdg/Rept Nbr:**	W05492	39971	**Collection Date:** 08/27/2008 12:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/27/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246318	TC-99	-1.36E+00	pCi/L	5.8E+00	U	9.69E+00	100.0		TC99_SEP_LS	1.25E-01	09/26/2008				D
BLK	14133-76-7			4.1E+00						L	01:10				

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5KT1AB	**Sdg/Rept Nbr:**	W05492 39971	**Collection Date:**	08/29/2008 13:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	08/29/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246320	Se-79	-4.97E-01	pCi/L	9.6E+00	U	1.23E+01	71.2		SE79_SEP_IE_	2.00E-01	09/24/2008				D
BLK	15758-45-9			5.0E+00						L	11:26				

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.

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5KT2AB **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/29/2008 13:04

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 08/29/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8275303	Se-79	1.84E+00	pCi/L	8.6E+00	U	5.39E+00	78.5		SE79_SEP_IE_	2.00E-01	10/07/2008				D
BLK	15758-45-9			2.3E+00						L	06:38				

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

Monday, October 13, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5KX1AB **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/20/2008 11:06

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 08/27/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246322	C-14	5.24E+00	pCi/L	4.1E+00	U	7.98E+00	100.0		C14_LSC	2.00E-01	09/09/2008				D
BLK	14762-75-5			3.5E+00						L	01:55				

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.

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5J41CS	**Sdg/Rept Nbr:**	W05492 39971	**Collection Date:**	08/22/2008 13:04
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	08/25/2008

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
8246311	I-129L	1.02E+01	pCi/L	1.2E+00		3.67E-01	105.0	9.60E+00	I129LL_SEP_L	4.00E+00	09/26/2008			70	D
BS	15046-84-1			1.2E+00				106.1		L	21:22			130	

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

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5J61CS **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/29/2008 13:04

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/29/2008

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
8246314	U-234	9.78E+00	pCi/L	2.0E+00		2.42E-01	91.0	8.96E+00	UISO_PLATE_	2.00E-01	09/23/2008			70	D
BS	13966-29-5			1.1E+00				109.2		L	00:04			130	
8246314	U-238	9.39E+00	pCi/L	1.9E+00		2.26E-01	91.0	9.38E+00	UISO_PLATE_	2.00E-01	09/23/2008			70	D
BS	U-238			1.1E+00				100.1		L	00:04			130	

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

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5J71CS **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/27/2008 13:50

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/27/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246315	CO-60	4.42E+01	pCi/L	7.9E+00		3.19E+00		3.81E+01	GAMMALL_GS	2.00E+00	09/17/2008			70	D
BS	10198-40-0			7.9E+00				116.1		L	09:30			130	
8246315	CS-137	5.11E+01	pCi/L	8.2E+00		3.77E+00		4.96E+01	GAMMALL_GS	2.00E+00	09/17/2008			70	D
BS	10045-97-3			8.2E+00				103.0		L	09:30			130	
8246315	EU-152	8.35E+01	pCi/L	1.6E+01		8.35E+00		7.70E+01	GAMMALL_GS	2.00E+00	09/17/2008			70	D
BS	14683-23-9			1.6E+01				108.4		L	09:30			130	

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

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KV5J91CS	**Sdg/Rept Nbr:**	W05492	39971	**Collection Date:** 08/29/2008 13:04
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 08/29/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246316	NP-237	8.83E+00	pCi/L	1.9E+00		3.31E-01	80.5	9.25E+00	NP237_LLE_P	2.00E-01	09/23/2008			70	D
BS	13994-20-2			1.4E+00				95.5		L	16:00			130	

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

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5KE1CS **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/27/2008 12:01

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/27/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246318	TC-99	4.90E+02	pCi/L	3.5E+01		9.75E+00	100.0	5.59E+02	TC99_SEP_LS	1.25E-01	09/26/2008			70	D
BS	14133-76-7			1.3E+01				87.7		L	02:13			130	

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

Monday, October 13, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV5KX1CS **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/20/2008 11:06

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/27/2008

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246322	C-14	4.93E+01	pCi/L	5.9E+00		7.98E+00	100.0	4.48E+01	C14_LSC	2.00E-01	09/09/2008			70	D
BS	14762-75-5			4.8E+00				110.1		L	02:38			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.

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV3KF1HR **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/29/2008 13:04

Client Id: B1WDP0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 08/29/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-053	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
8246314	U-234	8.56E-01	pCi/L	3.6E-01		1.58E-01	93.5		UISO_PLATE_	2.00E-01	09/23/2008	28.3	0.8		D
DUP	13966-29-5	6.43E-01		3.4E-01						L	00:04	20.0	3		
8246314	U-235	0.00E+00	pCi/L	6.7E-02	U	1.58E-01	93.5		UISO_PLATE_	2.00E-01	09/23/2008	0.0	0.1		D
DUP	15117-96-1	-6.19E-03		6.7E-02						L	00:04	20.0	3		
8246314	U-238	5.26E-01	pCi/L	2.8E-01		1.58E-01	93.5		UISO_PLATE_	2.00E-01	09/23/2008	127.0	2.1		D
DUP	U-238	1.18E-01		2.6E-01						L	00:04	20.0	3		

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

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KV3KF1JR
Client Id: B1WDP0
Moisture/Solids%*:

Sdg/Rept Nbr: W05492 39971
Matrix: WATER WATER
QC Type: DUP

Collection Date: 08/29/2008 13:04
Sample On Date:
Received Date: 08/29/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-053	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
8246316	NP-237	0.00E+00	pCi/L	8.5E-02	U	2.01E-01	91.7		NP237_LLE_P	2.00E-01	09/23/2008	0.0	0.1		D
DUP	13994-20-2	-6.37E-03		8.5E-02						L	16:00	20.0	3		

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

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KVQW11CR
Client Id: B1WDX8
Moisture/Solids%*:

Sdg/Rept Nbr: W05492 39971
Matrix: WATER WATER
QC Type: DUP

Collection Date: 08/22/2008 13:04
Sample On Date:
Received Date: 08/25/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-053	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246311	I-129L	2.86E-01	pCi/L	1.7E-01	U	3.43E-01	106.2		I129LL_SEP_L	3.8873E+00	09/25/2008	29.0	0.8		D
DUP	15046-84-1	3.83E-01		1.7E-01						L	13:56	20.0	3		

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

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KVW081CR **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/27/2008 12:01

Client Id: B1VR99 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 08/27/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-006	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246318	TC-99	3.75E+01	pCi/L	8.1E+00		9.86E+00	100.0		TC99_SEP_LS	1.25E-01	09/25/2008	28.6	1.6		D
DUP	14133-76-7	2.81E+01		5.3E+00						L	21:00	20.0	3		

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

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KVW1G1CR **Sdg/Rept Nbr:** W05492 39971 **Collection Date:** 08/27/2008 13:50

Client Id: B1WJK7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 08/27/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-008	MW6-SBB-A19981								BM	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
8246315	BE-7	4.78E+00	pCi/L	1.5E+01	U	2.70E+01			GAMMALL_GS	1.9093E+00	09/17/2008	55.8	0.4		D
DUP	13966-02-4	8.48E+00		1.5E+01						L	09:28	20.0	3		
8246315	CO-60	1.28E+00	pCi/L	1.7E+00	U	3.62E+00			GAMMALL_GS	1.9093E+00	09/17/2008	80.7	0.6		D
DUP	10198-40-0	5.45E-01		1.7E+00						L	09:28	20.0	3		
8246315	CS-134	1.77E+00	pCi/L	1.9E+00	U	3.67E+00			GAMMALL_GS	1.9093E+00	09/17/2008	118.5	1.		D
DUP	13967-70-9	4.52E-01		1.9E+00						L	09:28	20.0	3		
8246315	CS-137	-6.83E-01	pCi/L	1.6E+00	U	2.72E+00			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	0.9		D
DUP	10045-97-3	2.73E-01		1.6E+00						L	09:28	20.0	3		
8246315	EU-152	-3.21E-01	pCi/L	4.0E+00	U	7.02E+00			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	0.7		D
DUP	14683-23-9	-2.34E+00		4.0E+00						L	09:28	20.0	3		
8246315	EU-154	-4.62E-01	pCi/L	4.0E+00	U	7.50E+00			GAMMALL_GS	1.9093E+00	09/17/2008	434.0	0.6		D
DUP	15585-10-1	1.25E+00		4.0E+00						L	09:28	20.0	3		
8246315	EU-155	-1.72E+00	pCi/L	3.1E+00	U	5.05E+00			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	1.3		D
DUP	14391-16-3	1.10E+00		3.1E+00						L	09:28	20.0	3		
8246315	K-40	-1.90E+01	pCi/L	3.2E+01	U	6.65E+01			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	1.1		D
DUP	13966-00-2	5.05E+00		3.2E+01						L	09:28	20.0	3		
8246315	RU-106	-1.38E+01	pCi/L	1.4E+01	U	2.23E+01			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	0.7		D
DUP	13967-48-1	-6.66E+00		1.4E+01						L	09:28	20.0	3		
8246315	SB-125	-1.89E+00	pCi/L	3.9E+00	U	6.67E+00			GAMMALL_GS	1.9093E+00	09/17/2008	0.0	0.3		D
DUP	14234-35-6	-9.93E-01		3.9E+00						L	09:28	20.0	3		

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

Monday, October 13, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id: KVWF91CR
Client Id: B1WPW2
Moisture/Solids%*:

Sdg/Rept Nbr: W05492 39971
Matrix: WATER WATER
QC Type: DUP

Collection Date: 08/20/2008 11:06
Sample On Date:
Received Date: 08/27/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-052	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246322	C-14	1.69E+01	pCi/L	4.6E+00		7.98E+00	100.0		C14_LSC	2.00E-01	09/09/2008	22.8	1.1		D
DUP	14762-75-5	1.34E+01		3.9E+00						L	04:03	20.0	3		

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

Monday, October 13, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05492.Edd, h:\Reportdb\edd\FeadIV\Rad\39971.Edd

Lab Sample Id:	KVW091CW	**Sdg/Rept Nbr:**	W05492	39971	**Collection Date:** 08/27/2008 09:30
Client Id:	B1VRB0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 08/27/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-006	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8246318	TC-99	3.27E+03	pCi/L	2.0E+02		9.82E+00	100.0	3.68E+03	TC99_SEP_LS	1.25E-01	09/25/2008			60	D
MS	14133-76-7			3.1E+01				88.8		L	23:05			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.

RQC050

TestAmerica Laboratories, Inc.
WET CHEM BATCHSHEET

Run Date: 9/03/08
Time: 10:12:00

TestAmerica Richland

PRODUCTION FIGURES - WET CHEM

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

METHOD: IZ COLIFORM BY METHOD 9223
QC BATCH #: **8246325**
PREP DATE: 9/02/08
COMP DATE: 9/02/08
USER: WAGARR

INITIALS:
PREP DM
ANAL

DATA ENTRY:
INITIALS
DATE

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:	
KV2VJ-1-AA	J-8H290231-001	XX I 88 IZ 5I	E	9/2/08	B1WKL5	<1 COL/100mL
KV2VJ-1-AC	J-8H290231-001-X	XX I 88 IZ 5I	E		B1WKL5 DUP	
KV2VN-1-AA	J-8H290231-002	XX I 88 IZ 5I	E		B1WKK5	
KV5K1-1-AA	J-8I020000-325-B	XX I 88 IZ 5I			INTRA-LAB BLANK	
KV5K1-1-AC	J-8I020000-325-C	XX I 88 IZ 5I			INTRA-LAB CHECK	11

Control Limits

(0-0)

TestAmerica

RADIOCHEMISTRY, First Level Review

Lot No., Due Date:	**[redacted]; 09/29/2008**
Client, Site:	**384868; PGW 615HANFORD HANFORD**
QC Batch No., Method Test:	**8246314; RUISO Uiso by ALP**
SDG, Matrix:	**W05492; 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 John Porter **Date** 9-23-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246314

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: No Non

Second Level Review: Dan Lotz Date: 09-25-08

Lot No., Due Date: J8H290323; 09/29/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8246316; RNP237 Np-237 w/tracer

SDG, Matrix: W05492; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8 14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => NP-237 OK; No Callin Level Found => NP-237	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => KV5J91AC NP-237 62.5>0 Q:V1		✓	

8.27 Correct Count Library Used. **Yes No N/A**

Library Not Specified => KV3KF1AA I:[NUC_LIBR]ALPHA Q:
KV3KF1AJ I:[NUC_LIBR]ALPHA Q:
KV5J91AA I:[NUC_LIBR]ALPHA Q:
KV5J91AC I:[NUC_LIBR]ALPHA Q:

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) **Yes No N/A**

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) **Yes No N/A**

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. **Yes No N/A**

OK ✓

First Level Review Lisa Anderson **Date** 9/24/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246316

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: 9/25/08

Lot No., Due Date: J8H290323,J8H270305; 09/29/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8246315; RGAMMA Gamma by GER

SDG, Matrix: W05492; WATER

1.0 COC

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

2.0 QC Batch

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

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

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

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

3.0 QC & Samples

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

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

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

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

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

4.0 Raw Data

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

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

4.3 Were Yields entered correctly? Yes ✓ No N/A

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

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

5.0 Other

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

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

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

5.4 Was transcription checked? Yes ✓ No N/A

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

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

6.0 Comments on any No response:

First Level Review John Norton **Date** 9-17-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246315

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: No-Non This batch

Second Level Review: [signature] Date: 09-17-08

Lot No., Due Date: J8H290323,J8H290331,J8H250199,J8H270231; 09/29/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8246311; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05492; WATER

1.0 COC

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

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A

5.0 Other

5.1 Are all nonconformances included and noted?	Yes ✓	No	N/A
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:
Please see NCM # 10-13044

First Level Review John Norton **Date** 9-29-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246311

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

Comments on any "No" response: See nar

Second Level Review: Erika Jod Date: 9/29/11

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

Clouseau
Nonconformance Memo

TestAmerica

NCM #:	**10-13044**		
NCM Initiated By:	John Norton	Classification:	**Anomaly**
Date Opened:	09/29/2008	Status:	**GLREVIEW**
Date Closed:		Production Area:	Environmental - Sep
		Tests:	None
		Lot #'s (Sample #'s):	J8H250199 (2), J8H290331 (1),
		QC Batches:	None.,
Nonconformance:	Other (describe in detail)		
Subcategory:	Other (explanation required)		

Problem Description / Root Cause

Name	Date	Description
John Norton	09/29/2008	1: The technician noted unusual sample appearance during processing. 2: Sample J8H290331-1 and the blank and LCS received only one 75ml carbon tetra-chloride extraction (a second 50ml extraction is called for in the procedure.)

Corrective Action

Name	Date	Corrective Action
John Norton	09/29/2008	Neither of these points appear to negatively affect the data.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J8H270304,J8H270305; 09/29/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8246318; RTC99 Tc-99 by LSC
SDG, Matrix: W05492; WATER

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

6.0 Comments on any No response:

First Level Review John Nostrand **Date** 9-29-8

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246318

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: No Non

Second Level Review: [signature] Date: 09-29-08

Lot No., Due Date: J8H290323; 09/29/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8275303; RSE79 Se-79 by LSC
SDG, Matrix: W05492; WATER

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

6.0 Comments on any No response:
Please see NCM # 10-13088

First Level Review [signature] **Date** 10-8-8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 8275303

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

Comments on any "No" response: See NCR

Second Level Review: Erika Ford Date: 10/10/08

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

Clouseau
Nonconformance Memo

TestAmerica

NCM #:	**10-13088**		
NCM Initiated By:	John Norton	Classification:	**Anomaly**
Date Opened:	10/08/2008	Status:	**GLREVIEW**
Date Closed:		Production Area:	Environmental - Sep
		Tests:	Se-79 by LSC
		Lot #'s (Sample #'s):	J8H290323 (1), J8I020000 (320),
		QC Batches:	8246320,
Nonconformance:	Dups not within acceptance limits		
Subcategory:	Other (explanation required)		

Problem Description / Root Cause

Name	Date	Description
John Norton	10/08/2008	The duplicate sample provided an unacceptably low tracer yield of 8%.

Corrective Action

Name	Date	Corrective Action
John Norton	10/08/2008	When re-counting the sample did not improve the yield, the batch was re-analyzed, however the duplicate sample in this re-analysis batch (# 8275303) also provided a very low tracer yield. In each of these batches the sample activity is found to be well below the RDL.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 10/8/2008

Lot No., Due Date: J8H290323,J8H270234; 09/29/2008
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 8246322; RC14 C-14 by LSC
SDG, Matrix: W05492; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> KVWF91AC C-14 23.0 (RPD) Below CRDL		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => C-14 OK; No Callin Level Found => C-14	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes ✓ No N/A
OK

First Level Review Lisa Anderson **Date** 9/10/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246322

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: NO- NCM

Second Level Review: D. Petty Date: 09-10-08

Lot No., Due Date: J8H290231; 09/29/2008

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 8246325;

SDG, Matrix: W05492; 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 Lisa Anderson **Date** 9/11/08

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 8246325

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: No-Non

Second Level Review: [signature] Date: 09-11-08

TESTAMERICA

58

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8H250199 W05492 Due 09.24.08

C.O.C. # **I08-053-130**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-053	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1, AUGUST 2008	HNF-N-506-14	Ice Chest No.: GW5-015 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDX8		W	8-22-08	1304	1x20-mL P	Activity Scan	None
B1WDX8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW1	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R. Ellingsworth		1330 8-25-08		S. Smith	S. Smith	1330 8-25-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

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

59

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8H250199 W05492 Due 092408

C.O.C. # **I08-053-54**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-053	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1, AUGUST 2008	HWIFN-50986-14	Ice Chest No.: GWS-015 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDP8		W	8-22-08	1043	1x20-mL P	Activity Scan	None
B1WDP8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW3	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
R. Ellingsworth	R. Ellingsworth	1330 8-25-08	S. Smith	S. Smith	1350 8-25-08
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

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

J8H250199 WO5492 Due 09-24-08

C.O.C. # **I08-053-55**

Page 1 of 1

Collector R. Ellingsworth	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. 108-053	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2UPL AUGUST 2008	-NF-N-506-14	Ice Chest No. GWS-015 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 30 Days **PRIORITY**	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 ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDP9		W	8-22-08	0745	1x20-mL P	Activity Scan	None
B1WDP9		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW4	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R. Ellingsworth	R. Ellingsworth	1330 8-25-08	S. Smith	S. Smith	S. Smith	1330 8-25-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

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

60

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8H250199 W05492 Due 09-24-08

C.O.C. # **I08-053-148**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-053	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1, AUGUST 2008	HNF-N-506-14	Ice Chest No.: 100-KR-4 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDY9		W	8-22-08	1411	1x20-mL P	Activity Scan	None
B1WDY9		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW6	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
R. Ellingsworth	R. Ellingsworth	1330 8-25-08	S. Smith	S. Smith	1330 8-25-08
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

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

J8H250199 W05492 Due 09-24-08

C.O.C. # **I08-053-124**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-053	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UPL AUGUST 2008	HNF-N-506-18	**Ice Chest No.** 100-KR-4 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 30 Days **PRIORITY**	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis		Preservative
B1WDX5		W	8/24/08	1132	1x20-mL P	Activity Scan		None
B1WDX5		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)		None
						KVQW7		
			9/24/08					

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	J. P. Herrick		1330 8-25-08		S. Smith	S. Smith	1330 8-25-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

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

J8H250199 W05492 Due 09.24.08

C.O.C. # **I08-053-136**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-053	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1, AUGUST 2008	HNF-N-506-14	Ice Chest No.: 100-KR-4 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDY1		W	8-22-08	1338	1x20-mL P	Activity Scan	None
B1WDY1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW8	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
R. Ellingsworth	R Ellingsworth	1330 8-25-08	S. Smith	S. Smith	1330 8-25-08
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

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

JSH250199 WO5492 Due 09-24-08

C.O.C. # **I08-053-142**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. I08-053	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2UP1, AUGUST 2008	HNF-N-506-14	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDY3		W	8-24-08	1306	1x20-mL P	Activity Scan	None
B1WDY3		W	8-24-08	1306	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVQW9	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	E K. Brewington		1330 8-25-08	S. Smith	S. Smith		1330 8-25-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

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

J8H250199 W05492 Due 09.24.08

C.O.C. # **108-053-143**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. 108-053	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2UPL AUGUST 2008	HNF-N-506-14	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDY4		W	8-24-08	1306	1x20-mL P	Activity Scan	None
B1WDY4		W	8-24-08	1306	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

KVQXC

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington for		1330 8-25-08		S. Smith	S. Smith	1330 8-25-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

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

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 08/25/08 1330 GM Screen Result .01

Client: PGW SDG #: W05492 NA[ ] SAF #: I08-053 NA [ ]

Work Order Number: J8H250199 Chain of Custody # I08-053-130, 54, 55, 148, 124, 136, 142, 143

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? NA [ ] Yes [X] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 8
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 none
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Sm. Vk Date: 08/25/08

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 J8H270231 W05492 Due 10.10.08	C.O.C. # A08-007-19 Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. A08-007	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title LLWMA(4) - PA JULY 2008	HNF-N-506-14	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol Other	Priority: 30 Days PRIORITY	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W1H0		W	8-26-08	1242	1x20-mL P	Activity Scan	None
B1W1H0		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KVWFO	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington	0900 AUG 27 2008	R. D. Julian	R. D. Julian	0900 AUG 27 2008
R. D. Julian	R. D. Julian	1100 AUG 27 2008	S. Smith	S. Smith	1100 AUG 27 2008
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

67

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 08/27/08 11:00 GM Screen Result .01

Client: PBW SDG #: W05492 NA[ ] SAF #: A08-007 NA [ ]

Work Order Number: J8H270231 Chain of Custody # A08-007-19

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - 1 Appropriate Sample Lables
9. Samples are:
   - 1 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 None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 08/27/08

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

J8H270234 W05492 Due 10.10.08

C.O.C. # **108-052-65**

Page 1 of 1

Collector: Fluor Hanford D. R. EREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-052	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), AUGUST 2008	HNF-N-506-14	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time**
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WPW2		W	8/20	1106	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1WPW2		W	↓	↓	1x20-mL P	Activity Scan	None
						KVWF9	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D. R. EREWINGTON	D. R. Erewington	AUG 27 2008 0900	R. D. Julian	R. D. Julian	R. D. Julian	AUG 27 2008 0900
R. D. Julian	R. D. Julian	R. D. Julian	AUG 27 2008 1100	S. Smith	S. Smith	S. Smith	AUG 27 2008 1100

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 J8H270334 W05492 Due 10-10-08	C.O.C. # I08-052-69 Page 1 of 1

Collector: Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: D. R. BREWINGTON I08-052	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), AUGUST 2008	HNF-N-506.14	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WR36		W	8/26/08	0933	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1WR36		W	1	1	1x20-mL P	Activity Scan	None
						KVWGL	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		0900 AUG 27 2008	R. D. Julian			0900 AUG 27 2008
R. D. Julian			11:00 AUG 27 2008	S. Smith		S. Smith	11:00 AUG 27 2008
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

70

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 08·27·08 11:00 GM Screen Result .07

Client: POW SDG #: W05492 NA[ ] SAF #: I08-052 NA [ ]

Work Order Number: J8H270234 Chain of Custody # I08-052-65,69

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ____ Custody Seals
   - ____ Hazard 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 None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): This COC looks like it reads 08/20/08 – it was verified with date + time on bottles.

Sample Custodian: S. Smith Date: 08/27/08

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 J8H270304 W05492 Due 10-10-08	C.O.C. # W08-006-26 Page 1 of 1

Collector: D. Woehle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA JUNE 2008	HNF-N-506-19	Ice Chest No.: CWO-07-002 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 30 Days PRIORITY	Offsite Property No.

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

SPECIAL INSTRUCTIONS Hold Time
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1VR99		W	8/27/08	1201	1x20-mL P	Activity Scan	None
B1VR99		W	"	"	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KVW08	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			AUG 27 2008 1445		S. Smith	S. Smith	AUG 27 2008 1445
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 J8H270304 W05492 Due 10-10-08	C.O.C. # W08-006-27 Page 1 of 1

Collector: D. Woehle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA JUNE 2008	HNF-N-506-19/6	Ice Chest No.: 4W0-07-002 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 30 Days PRIORITY	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 ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1VRB0		W	8/27/08	0930	1x20-mL P	Activity Scan	None
B1VRB0		W	"	"	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KVW09	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			AUG 27 2008 1445		S. Smith	S. Smith	AUG 27 2008 1445
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

73

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Sample Check-in List

Date/Time Received: 08/27/08 1445 GM Screen Result .01

Client: PGW SDG #: W05492 NA[ ] SAF #: W08-006 NA [ ]

Work Order Number: J8H270304 Chain of Custody # W08-006-26, 27

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard Lables
   - 1 Appropriate Sample Lables
9. Samples are:
   - 1 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 none
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 08/27/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J811270305 WO5492 Due 10·10·08

C.O.C. # **W08-008-166**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2008	HNF-N-506-19	Ice Chest No.: GWO-07-002 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 30 Days **PRIORITY**	Offsite Property No.

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

SPECIAL INSTRUCTIONS **Hold Time**
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WKW7		W	8/27/08	1306	1x20-mL P	Activity Scan	None
B1WKW7		W	"	"	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
						KVWIF	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			1445 AUG 27 2008		S. Smith	S. Smith	1445 AUG 27 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 = 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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FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST J8H270305 W05492 Due 10.10.08	C.O.C. # W08-008-108 Page 1 of 1

Collector D. Woehle	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W08-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA AUGUST 2008	HNF-N-506-19	Ice Chest No. GWC-07-002 Temp.
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 30 Days PRIORITY	Offsite Property No.

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

SPECIAL INSTRUCTIONS Hold Time
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WJK7		W	8/27/08	1350	1x20-mL P	Activity Scan	None
B1WJK7		W	"	"	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						KNWIG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			1445 AUG 27 2008		S. Smith	S. Smith	1445 AUG 27 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 = 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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Sample Check-in List

Date/Time Received: 08/27/08 1445 GM Screen Result .07

Client: PEW SDG #: W05492 NA[ ] SAF #: W08-008 NA [ ]

Work Order Number: J8H270305 Chain of Custody # W08-008-166, 108

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ Tape
   _____ Custody Seals
   _____ Hazard 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 none
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 08/27/08

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

J8H290231 W05492 Due 10·13·08

C.O.C. # **W08-008-467**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2008		**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 30 Days **PRIORITY**	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WKL5		W	8/29/08	0810	1x20-mL P	Activity Scan	None
B1WKL5		W	8/29/08	0810	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C

KV2VJ

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Pablo Cano	[illegible]	[illegible]	08/29/08 1122	KB Hulse		[illegible]	8/29/08 1122
KB Hulse		[illegible]	8/29/08 1143	S. Smith		S. Smith	08/29/08 1143

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

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8H290231 W05492 Due 10-13-08

C.O.C. # **W08-008-450**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA AUGUST 2008	HNF N 506-17	**Ice Chest No.** C19 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 30 Days **PRIORITY**	**Offsite Property No.**

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

SPECIAL INSTRUCTIONS **Hold Time**
Site-Wide Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ___

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WKK5		W	8/29/08	1105	1x20-mL P	Activity Scan	None
B1WKK5		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C
						KV2VN	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Pat L. Em			8/29/08 1120	KB Hulse			8/29/08 1120
KB Hulse			8/29/08 1145	S. Smith			08/29/08 1145

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

19

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Sample Check-in List

Date/Time Received: 08/29/08 11:45 GM Screen Result .01

Client: PGW SDG #: W05497 NA[ ] SAF #: W08-008 NA [ ]

Work Order Number: J8H290231 Chain of Custody # W08-008-467, 450

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - _____ Tape
   - _____ Custody Seals
   - _____ Hazard 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 None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Smith Date: 08/29/08

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

J8H290323 W05492 Due 10/13/08

C.O.C. # **I08-053-34**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. 108-053	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UP1 AUGUST 2008	MNF-N-506-14	**Ice Chest No.** SML-60C **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 30 Days **PRIORITY**	**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 ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDP0		W	8/29/08	1304	1x20-mL P	Activity Scan	None
B1WDP0		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1WDP0		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1WDP0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1WDP0		W			1x1000-mL G/P	NP237_LLE_PLATE_AEA:Np-237(1)	HNO3 to pH <2
B1WDP0		W			2x1000-mL G/P	Selenium-79	HNO3 to pH <2
B1WDP0		W			1x1000-mL G/P	UISO_PLATE_AEA: List-1 (3)	HNO3 to pH <2
						KV3KF	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford D. R. BREWINGTON	AUG 29 2008 1400		AUG 29 2008 1400
	8/29/08 1445	S. Smith S. Smith	08/29/08 1445

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

J8H290323 W05492 10/13/08

C.O.C. # **I08-053-104**

Page 1 of 1

Collector: RM Arnold	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-053	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1, AUGUST 2008	HWF-N-506-17	Ice Chest No.: B7G 10 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 30 Days **PRIORITY**	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) All Samples filtered per project scientist

SPECIAL INSTRUCTIONS **Hold Time**
200 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1WDW2		W	8/27/08	1215	1x20-mL P	Activity Scan	None
B1WDW2		W	1	1	2x4000-mL G/P 08 8/27/08	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KV3KG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RM Arnold	RM Arnold	RM Arnold	8/28/08 1400				8/28/08 1400
			8/29/08 1445				08/29/08 1445

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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Sample Check-in List

Date/Time Received: 08/29/08 1445 GM Screen Result .01

Client: PGW SDG #: W05492 NA[ ] SAF #: I08-053 NA [ ]

Work Order Number: T8H290323 Chain of Custody # I08-053-34, 104

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ Tape
   - ____ Custody Seals
   - ____ Hazard 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: S. Smith Date: 08/29/08

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 J8H290331 W0549J Due 10 13 08	C.O.C. # A08-007-1 Page 1 of 1

Collector: Roy Shepard, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-007	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(4) - PA JULY 2008	HNF-N-506-14	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 30 Days **PRIORITY**	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 ☐
200 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W1D8		W	8-27-08	1044	1x20-mL P	Activity Scan	None
B1W1D8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						KV3LR	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Shepard, Fluor Hanford			8/27/08				8/29/08 1400
Relinquished By			Date/Time	Received By			Date/Time
			8/29/08 1445	S. Smith			08/29/08 1445
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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Sample Check-in List

Date/Time Received: 08/29/08 1445 GM Screen Result .01

Client: PGW SDG #: W05492 NA[ ] SAF #: A08-007 NA [ ]

Work Order Number: J8H290331 Chain of Custody # A08-007-1

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ Tape
   _____ Custody Seals
   _____ Hazard 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 None
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian [signature] Date: 08/29/08

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

TESTAMERICA

9/15/2008 10:45:49 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

7Y Uiso PrpRC5016/5086, SepRC5067(5039)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 09/29/2008 W05492

Sep1 DT/Tm Tech:

Batch: 8246314 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KV3KF-1-AG J8H290323-1-SAMP 08/29/2008 13:04		AmtRec: 20ML,6XLP,3X4LP	200.00g,in #Containers: 10	200.00g	UITC20201 09/02/08,pd 06/15/01,r	200		Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa
2 KV3KF-1-AH-X J8H290323-1-DUP 08/29/2008 13:04		AmtRec: 20ML,6XLP,3X4LP	200.00g,in #Containers: 10	200.00g	UITC20202 09/02/08,pd 06/15/01,r			Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa
3 KV5J6-1-AA-B J8I020000-314-BLK 08/29/2008 13:04		AmtRec:	200.00g,in #Containers: 1	200.00g	UITC20203 09/02/08,pd 06/15/01,r			Scr:	Alpha:	Beta:
4 KV5J6-1-AC-C J8I020000-314-LCS 08/29/2008 13:04		AmtRec:	200.00g,in #Containers: 1	200.00g	UISG1666 08/13/08,pd 02/12/04,r			Scr:	Alpha:	Beta:

Comments:

pH < 2.0. [illegible] 9 15 08

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

KV3KF1AG-SAMP Constituent List:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

KV5J61AA-BLK:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

9/15/2008 10:45:49 AM

Sample Preparation/Analysis

7Y Uiso PrpRC5016/5086, SepRC5067(5039)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 09/29/2008

Sep1 DT/Tm Tech:

Batch: 8246314 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

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

KV5J61AC-LCS:
U-232 RDL: pCi/L LCL:20 UCL:105 RPD:20 Uranium RDL: pCi/L LCL:70 UCL:130 RPD:20

KV3KF1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5J61AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5J61AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 9/24/2007, 9/28/2008, Batch: '8246314', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8246314						
AC		**Rev1C**	**LaneL**	9/15/2008 10:28:09		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_RADCALC v4.8.34
SC			LaneL	InPrep	9/15/2008 10:28:09 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	9/15/2008 10:46:06 AM	RL-PRP-004 REVISION 0
SC			AshworthA	Sep1C	9/17/2008 5:35:57 PM	ALP-004 REVISION 0
SC			AshworthA	Sep2C	9/22/2008 7:41:20 PM	ALP-015 REVISION 0
SC			DAWKINSO	InCnt1	9/22/2008 10:16:25 PM	RL-CI-008 REVISION 0
SC			BlackCL	CalcC	9/23/2008 4:50:07 AM	RL-CI-008 REVISION 0
SC			nortonj	Rev1C	9/23/2008 10:22:17 AM	RL-DR-001 REV 0
AC			**LaneL**	9/15/2008 10:46:06		
AC			**AshworthA**	9/17/2008 5:35:57 PM		
AC			**AshworthA**	9/22/2008 7:41:20 PM		
AC			**DAWKINSO**	9/22/2008 10:16:25		
AC			**BlackCL**	9/23/2008 4:50:07		
AC			**nortonj**	9/23/2008 10:22:17		

AC: Accepting Entry; SC: Status Change

TESTAMERICA

9/15/2008 11:01:49 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

KO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
5I CLIENT: HANFORD

Pipet #: 9-22-08 10:29:45

AnalyDueDate: 09/29/2008 W05492

Sep1 DT/Tm Tech:

Batch: 8246316 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

Work Ord. Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KV3KF-1-AA J8H290323-1-SAMP 08/29/2008 13:04			200.00g,in AmtRec: 20ML,6XLP,3X4LP	200.00g	NPTA7153 08/25/08,pd 06/01/01,r #Containers: 10			200	Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa	
2 KV3KF-1-AJ-X J8H290323-1-DUP 08/29/2008 13:04			200.00g,in AmtRec: 20ML,6XLP,3X4LP	200.00g	NPTA7154 08/25/08,pd 06/01/01,r #Containers: 10				Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa	
3 KV5J9-1-AA-B J8I020000-316-BLK 08/29/2008 13:04			200.00g,in AmtRec:	200.00g	NPTA7155 08/25/08,pd 06/01/01,r #Containers: 1				Scr:	Alpha:	Beta:	
4 KV5J9-1-AC-C J8I020000-316-LCS 08/29/2008 13:04			200.00g,in AmtRec:	200.00g	NPSE0484 08/25/08,pd 06/01/01,r #Containers: 1				Scr:	Alpha:	Beta:	

Comments:

PH < 2.0. 9 15 08

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

KV3KF1AA-SAMP Constituent List:

Np-237	RDL:0.6	pCi/L	LCL:	UCL:	RPD:

KV5J91AA-BLK:

Np-237	RDL:0.6	pCi/L	LCL:	UCL:	RPD:

KV5J91AC-LCS:

KV3KF1AA-SAMP Calc Info:

9/15/2008 11:01:50 AM

Sample Preparation/Analysis

KO Np-237 PrpRC5086, SepRC5064(5003)
XW Neptunium-237 with tracer by alpha spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #:

AnalyDueDate: 09/29/2008

Sep1 DT/Tm Tech:

Batch: 8246316 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL

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

```
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
KV5J91AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
KV5J91AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 9/25/2007, 9/29/2008, Batch: '8246316'. User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8246316						
AC		Rev1C	LaneL	9/15/2008 10:48:04		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_RADCALC v4.8.34
SC			LaneL	InPrep	9/15/2008 10:48:04 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	9/15/2008 11:02:02 AM	RL-PRP-004 REVISION 0
SC			Barcotl	InPrep2	9/23/2008 12:05:36 PM	RL-PRP-010 REVISION 0
SC			Barcotl	Prep2C	9/23/2008 12:05:59 PM	RL-PRP-010 REVISION 0
SC			Barcotl	InSep1	9/23/2008 12:06:14 PM	RL-ALP-006 REVISION 0
SC			Barcotl	Sep1C	9/23/2008 12:06:29 PM	RL-ALP-006 REVISION 0
SC			Barcotl	InSep2	9/23/2008 12:06:44 PM	RL-ALP-016 REVISION 0
SC			Barcotl	Sep2C	9/23/2008 12:06:57 PM	RL-ALP-016 REVISION 0
SC			ClarkR	InCnt1	9/23/2008 12:11:41 PM	RL-CI-008 REVISION 0
SC			DAWKINSO	CalcC	9/23/2008 8:50:56 PM	RL-CI-008 REVISION 0
SC			antonsonl	Rev1C	9/24/2008 3:30:13 PM	RL-DR-001 REV 0
AC			LaneL	9/15/2008 11:02:02		
AC			Barcotl	9/23/2008 12:05:36		
AC			Barcotl	9/23/2008 12:05:59		
AC			Barcotl	9/23/2008 12:06:14		
AC			Barcotl	9/23/2008 12:06:29		
AC			Barcotl	9/23/2008 12:06:44		
AC			Barcotl	9/23/2008 12:06:57		
AC			ClarkR	9/23/2008 12:11:41		
AC			DAWKINSO	9/23/2008 8:50:56 PM		
AC			antonsonl	9/24/2008 3:30:13 PM		

AC: Accepting Entry; SC: Status Change

RAW WATER

9/15/2008 1:30:06 PM

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: 09/26/2008 WO5492

Sep1 DT/Tm Tech:

Batch: 8246315 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,LaneL Bell

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 KVW1G-1-AA J8H270305-2-SAMP 08/27/2008 13:50		2000.00g,in AmtRec: 20ML,4LP #Containers: 2			100mls	200	G15 Scr:	1247 Alpha: 5.14E-04 uCi/Sa	9/17/08 Beta: 4.15E-04 uCi/Sa	
2 KVW1G-1-AC-X J8H270305-2-DUP 08/27/2008 13:50		1909.30g,in AmtRec: 20ML,4LP #Containers: 2					G5 Scr:	1248 Alpha: 5.14E-04 uCi/Sa	Beta: 4.15E-04 uCi/Sa	
3 KV3KF-1-AD J8H290323-1-SAMP 08/29/2008 13:04		2000.00g,in AmtRec: 20ML,6XLP,3X4LP #Containers: 10					G11 Scr:	1249 Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa	
4 KV5J7-1-AA-B J8I020000-315-BLK 08/27/2008 13:50		2000.10g,in AmtRec: #Containers: 1					G14 Scr:	1249 Alpha:	Beta:	
5 KV5J7-1-AC-C J8I020000-315-LCS 08/27/2008 13:50		2000.00g,in AmtRec: #Containers: 1	QCAG1503 07/29/08,pd 06/08/05 r				G7 Scr:	1250 Alpha:	Beta:	

Comments:

PH < 2.0. Rpt 91508
REDUCED VOLD/T ISV.

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

KVW1G1AA-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:

TESTAMERICA

92

9/15/2008 1:30:07 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 09/26/2008

Sep1 DT/Tm Tech:

Batch: 8246315 pCi/L

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:

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:
KV5J71AA-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:
KV5J71AC-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						

KVW1G1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KV5J71AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

KV5J71AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 9/18/2007, 9/22/2008, Batch: '8246315', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
8246315						
AC		Rev1C	LaneL	9/15/2008 1:14:32 PM		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_RADCALC v4.8.34
SC			LaneL	InPrep	9/15/2008 1:14:32 PM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	9/15/2008 1:30:14 PM	RL-PRP-004 REVISION 0
SC			BockJ	InPrep2	9/16/2008 7:47:43 AM	RL-GAM-001 REVISION 0
SC			BockJ	Prep2C	9/17/2008 9:22:33 AM	RL-GAM-001 REVISION 0
SC			ClarkR	InCnt1	9/17/2008 9:27:22 AM	RL-CI-007 REVISION 0
SC			ClarkR	CalcC	9/17/2008 1:20:42 PM	RL-CI-007 REVISION 0
SC			nortonj	Rev1C	9/17/2008 1:32:24 PM	RL-DR-001 REV 0
AC			LaneL	9/15/2008 1:30:14 PM		
AC			BockJ	9/16/2008 7:47:43		
AC			BockJ	9/17/2008 9:22:33		
AC			ClarkR	9/17/2008 9:27:22		
AC			ClarkR	9/17/2008 1:20:42 PM		
AC			nortonj	9/17/2008 1:32:24 PM		

AC: Accepting Entry; SC: Status Change

TESTAMERICA

9/17/2008 7:47:59 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:I4 A
Pipet #: _____

AnalyDueDate: 09/22/2008 W05492

Sep1 DT/Tm Tech:

Batch: 8246311 WATER pCi/L PM, Quote: SS , 57671

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:
1 KVQW1-1-AA J8H250199-1-SAMP 08/22/2008 13:04		3877.20g,in AmtRec: 20ML,2X4LP	ITA7564 08/21/08 #Containers: 3		34.5	100	L2	1354	9/25/08 RC	
								Scr:	Alpha: -2.90E-04 uCi/Sa	Beta: 7.43E-04 uCi/Sa
2 KVQW1-1-AC-X J8H250199-1-DUP 08/22/2008 13:04		3887.30g,in AmtRec: 20ML,2X4LP	ITA7565 08/21/08 #Containers: 3		39.3		L2	1516	9/25/08 RC	
								Scr:	Alpha: -2.90E-04 uCi/Sa	Beta: 7.43E-04 uCi/Sa
3 KVQW3-1-AA J8H250199-2-SAMP 08/22/2008 10:43		3895.70g,in AmtRec: 20ML,2X4LP	ITA7566 08/21/08 #Containers: 3		56.7		L2	1727	9/25/08 RC	
								Scr:	Alpha: -6.00E-04 uCi/Sa	Beta: 9.16E-04 uCi/Sa
4 KVQW4-1-AA J8H250199-3-SAMP 08/22/2008 07:45		3856.80g,in AmtRec: 20ML,2X4LP	ITA7567 08/21/08 #Containers: 3		34.7		L2	1910	9/25/08 RC	
								Scr:	Alpha: 1.12E-03 uCi/Sa	Beta: -8.17E-04 uCi/Sa
5 KVQW6-1-AA J8H250199-4-SAMP 08/22/2008 14:11		3882.70g,in AmtRec: 20ML,2X4LP	ITA7568 08/21/08 #Containers: 3		35.6		L2	2053	9/25/08 RC	
								Scr:	Alpha: 1.27E-03 uCi/Sa	Beta: -9.04E-04 uCi/Sa
6 KVQW7-1-AA J8H250199-5-SAMP 08/22/2008 11:32		3864.10g,in AmtRec: 20ML,2X4LP	ITA7569 08/21/08 #Containers: 3		35.8		L2	1018	9/25/08 RC	
								Scr:	Alpha: 2.44E-04 uCi/Sa	Beta: 3.96E-04 uCi/Sa
7 KVQW8-1-AA J8H250199-6-SAMP 08/22/2008 13:38		3858.10g,in AmtRec: 20ML,2X4LP	ITA7570 09/15/08 #Containers: 3		36.6		L4	1019		
								Scr:	Alpha: -1.79E-04 uCi/Sa	Beta: -3.84E-04 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

TESTAMERICA

9/17/2008 7:48:01 AM

Sample Preparation/Analysis

Balance Id:I4 A

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 09/22/2008

Sep1 DT/Tm Tech:

Batch: 8246311 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 KVQW9-1-AA J8H250199-7-SAMP 08/24/2008 13:06		3869.30g,in AmtRec: 20ML,2X4LP	ITA7571 09/15/08 #Containers: 3		34.1	100	L5 Scr:	1020 Alpha: -4.49E-04 uCi/Sa	9/26/08 KL Beta: 3.96E-04 uCi/Sa	
9 KVQXC-1-AA J8H250199-8-SAMP 08/24/2008 13:06		3876.70g,in AmtRec: 20ML,2X4LP	ITA7572 09/15/08 #Containers: 3		37.2		L2 Scr:	1207 Alpha: -1.15E-03 uCi/Sa	9/26/08 KL Beta: 1.18E-03 uCi/Sa	
10 KVWF0-1-AA J8H270231-1-SAMP 08/26/2008 12:42		3865.60g,in AmtRec: 20ML,2X4LP	ITA7573 09/15/08 #Containers: 3		36.6		L2 Scr:	1409 Alpha: 1.24E-03 uCi/Sa	9/26/08 KL Beta: -2.11E-04 uCi/Sa	
11 KV3KF-1-AE J8H290323-1-SAMP 08/29/2008 13:04		3884.30g,in AmtRec: 20ML,6XLP,3X4LP	ITA7574 09/15/08 #Containers: 10		36.0		L2 Scr:	1553 Alpha: 1.36E-03 uCi/Sa	9/26/08 KL Beta: 1.12E-04 uCi/Sa	
12 KV3KG-1-AA J8H290323-2-SAMP 08/27/2008 12:15		3849.30g,in AmtRec: 20ML,2X4LP	ITA7575 09/15/08 #Containers: 3		DB 9-25-08 ~~41.0~~ 36.9		L2 Scr:	1743 Alpha: -1.75E-04 uCi/Sa	9/26/08 KL Beta: 4.95E-05 uCi/Sa	
13 KV3LR-1-AA J8H290331-1-SAMP 08/27/2008 10:44		3907.30g,in AmtRec: 20ML,2X4LP	ITA7576 09/15/08 #Containers: 3		~~39.3~~ 41.0		L2 Scr:	1929 Alpha: -2.84E-04 uCi/Sa	9/26/08 KL Beta: -4.71E-04 uCi/Sa	
14 KV5J4-1-AA-B J8I020000-311-BLK 08/22/2008 13:04		4000.00g,in AmtRec:	ITA7577 09/15/08 #Containers: 1		~~39.8~~ 39.3		L2 Scr:	2113 Alpha:	9/26/08 KL Beta:	

TESTAMERICA

9/17/2008 7:48:01 AM

Sample Preparation/Analysis

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

Balance Id:I4 A
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,LaneL

AnalyDueDate: 09/22/2008

Batch: 8246311 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:
15 KV5J4-1-AC-C J8I020000-311-LCS		4000.00g,in	ISD0874 07/29/08		39.8	100	L2	2302	9/26/08	
08/22/2008 13:04		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments:

REDUCED VOL D/T ISV. RJR 91708
Sample KVQW31AA was very cloudy throughout entire procedure.
Samples KV3LR1AA, KV5J41AA-BLK, and KV5J41AC-LCS had only 70mL of carbon Tet added instead of 125 mL due to Analyst over sight. DB 9-25-08

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

KVQW11AA-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
KV5J41AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
KV5J41AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

KVQW11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5J41AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5J41AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

9/29/2008 11:18:58 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/30/2007, 10/4/2008, Batch: '8246311', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8246311						
AC		Rev1C	LaneL	9/17/2008 7:01:38		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_ RADCALC v4.8.34
SC			LaneL	InPrep	9/17/2008 7:01:38 AM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	9/17/2008 7:48:08 AM	RL-PRP-004 REVISION 0
SC			BostedD	InPrep2	9/22/2008 1:35:40 PM	RL-GAM-002 REVISION 0
SC			BostedD	Prep2C	9/25/2008 11:59:12 AM	RL-GAM-002 REVISION 0
SC			ClarkR	InCnt1	9/25/2008 12:15:09 PM	RL-CI-007 REVISION 0
SC			ClarkR	CalcC	9/28/2008 7:53:34 AM	RL-CI-007 REVISION 0
SC			nortonj	Rev1C	9/29/2008 11:18:48 AM	RL-DR-001 REV 0
AC			LaneL	9/17/2008 7:48:08		
AC			BostedD	9/22/2008 1:35:40 PM		
AC			BostedD	9/25/2008 11:59:12		
AC			ClarkR	9/25/2008 12:15:09		
AC			ClarkR	9/28/2008 7:53:34		
AC			nortonj	9/29/2008 11:18:48		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.34

TESTAMERICA

9/15/2008 12:58:06 PM

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: 09/26/2008 W05492

Sep1 DT/Tm Tech:

Batch: 8246318 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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KVW08-1-AA J8H270304-1-SAMP 08/27/2008 12:01		125.00g,in AmtRec: 20ML,3XLP	#Containers: 4	60		Scr:	Alpha: -1.42E-04 uCi/Sa	Beta: 2.79E-04 uCi/Sa
2 KVW08-1-AC-X J8H270304-1-DUP 08/27/2008 12:01		125.00g,in AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha: -1.42E-04 uCi/Sa	Beta: 2.79E-04 uCi/Sa
3 KVW09-1-AA J8H270304-2-SAMP 08/27/2008 09:30		125.00g,in AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha: -4.13E-04 uCi/Sa	Beta: 3.76E-04 uCi/Sa
4 KVW09-1-AC-S J8H270304-2-MS 08/27/2008 09:30		125.00g,in AmtRec: 20ML,3XLP	TCSG2202 08/27/08,pd 09/01/05,r #Containers: 4			Scr:	Alpha: -4.13E-04 uCi/Sa	Beta: 3.76E-04 uCi/Sa
5 KVW1F-1-AA J8H270305-1-SAMP 08/27/2008 13:00		125.00g,in AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha: 3.18E-04 uCi/Sa	Beta: -1.39E-05 uCi/Sa
6 KV5KE-1-AA-B J8I020000-318-BLK 08/27/2008 12:01		125.00g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 KV5KE-1-AC-C J8I020000-318-LCS 08/27/2008 12:01		125.00g,in AmtRec:	TCSE2251 08/27/08,pd 07/01/05,r #Containers: 1			Scr:	Alpha:	Beta:

99

TESTAMERICA

9/15/2008 12:58:07 PM

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: 09/26/2008

Batch: 8246318 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:
8 KV5KE-1-AD-BN								
J8I020000-318-IBLK								
08/27/2008 12:01		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

PH < 2.0. [illegible] 91508

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

KVW081AA-SAMP Constituent List:
Tc-99 RDL:1.50E+01 pCi/L LCL:70 UCL:130 RPD:20
KVW091AC-MS:

KV5KE1AA-BLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:
KV5KE1AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
KV5KE1AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

KVW081AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KVW091AC-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KE1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KE1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KE1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

100

ICOC Fraction Transfer/Status Report

ByDate: 9/30/2007, 10/4/2008, Batch: '8246318', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8246318						
AC		Rev1C	LaneL	9/15/2008 12:39:13		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_RADCALC v4.8.34
SC			LaneL	InPrep	9/15/2008 12:39:13 PM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	9/15/2008 12:56:33 PM	RL-PRP-004 REVISION 0
SC			Barcotl	InSep1	9/25/2008 12:57:42 PM	RL-LSC-013 REVISION 0
SC			Barcotl	Sep1C	9/25/2008 12:57:57 PM	RL-LSC-013 REVISION 0
SC			ClarkR	InCnt1	9/25/2008 1:02:25 PM	RL-CI-005 REVISION 0
SC			DAWKINSO	CalcC	9/26/2008 8:30:11 PM	RL-CI-005 REVISION 0
SC			nortonj	Rev1C	9/29/2008 10:24:14 AM	RL-DR-001 REV 0
AC			LaneL	9/15/2008 12:56:33		
AC			Barcotl	9/25/2008 12:57:42		
AC			Barcotl	9/25/2008 12:57:57		
AC			ClarkR	9/25/2008 1:02:25 PM		
AC			DAWKINSO	9/26/2008 8:30:11 PM		
AC			nortonj	9/29/2008 10:24:14		

AC: Accepting Entry; SC: Status Change

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

RE-ANALYSIS REQUEST

DUE DATE 9/29/08

CUSTOMER PGW

ANALAYSIS Se79

MATRIX water

LOT NUMBER J8H290328

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 82116520

NEW BATCH NUMBER 82175303

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) KV3KF1AK		Dup failed.
2) KV3KF1AF		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		
LAB QC ID		Assigned with new batch.

RC-048, 12/07, Rev 8

TESTAMERICA

10/1/2008 12:45:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

CY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 09/29/2008

Sep1 DT/Tm Tech:

Batch: 8275303 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	Tracer Yield	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KV3KF-2-AF J8H290323-1-SAMP 08/29/2008 13:04		200.00g,in AmtRec: 20ML,6XLP,3X4LP	SETA0342 09/24/08 #Containers: 10		200		Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa
2 KV3KF-3-AK-X J8H290323-1-DUP 08/29/2008 13:04		200.00g,in AmtRec: 20ML,6XLP,3X4LP	SETA0343 09/24/08 #Containers: 10				Scr:	Alpha: 1.36E-03 uCi/Sa	Beta: 1.12E-04 uCi/Sa
3 KV5KT-2-AA-B J8I020000-320-BLK 08/29/2008 13:04		200.00g,in AmtRec:	SETA0344 09/24/08 #Containers: 1				Scr:	Alpha:	Beta:
4 KV5KT-2-AC-BN J8I020000-320-IBLK 08/29/2008 13:04		AmtRec:	SETA 0345 #Containers: 1				Scr:	Alpha:	Beta:

Comments: pH < 2.0. [illegible] 10108

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

KV3KF2AF-SAMP Constituent List:

KV5KT2AA-BLK:

KV5KT2AC-IBLK:

KV3KF2AF-SAMP Calc Info:

10/1/2008 12:45:23 PM

Sample Preparation/Analysis

CY Se-79 PrpRC5016, SepRC5043
TM Selenium-79 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 09/29/2008

Batch: 8275303 pCi/L
SEQ Batch, Test: None

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

```
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
KV5KT2AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
KV5KT2AC-IBLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 10/9/2007, 10/13/2008, Batch: '8275303', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8275303						
AC		Rev1C	LaneL	10/1/2008 12:40:34		
SC			antonsonl	IsBatched	10/1/2008 11:03:01 AM	ICOC_RADCALC v4.8.34
SC			LaneL	InPrep	10/1/2008 12:40:34 PM	RL-PRP-004 REVISION 0
SC			LaneL	Prep1C	10/1/2008 12:46:16 PM	RL-PRP-004 REVISION 0
SC			Barcotl	InSep1	10/6/2008 12:52:11 PM	RL-LSC-012 REVISION 0
SC			Barcotl	Sep1C	10/6/2008 12:52:33 PM	RL-LSC-012 REVISION 0
SC			BlackCL	InCnt1	10/6/2008 1:00:31 PM	RL-CI-005 REVISION 0
SC			ClarkR	CalcC	10/7/2008 1:04:51 PM	RL-CI-005 REVISION 0
SC			nortonj	Rev1C	10/8/2008 7:53:31 AM	RL-DR-001 REV 0
AC			LaneL	10/1/2008 12:46:16		
AC			Barcotl	10/6/2008 12:52:11		
AC			Barcotl	10/6/2008 12:52:33		
AC			BlackCL	10/6/2008 1:00:31 PM		
AC			ClarkR	10/7/2008 1:04:51 PM		
AC			nortonj	10/8/2008 7:53:31		

AC: Accepting Entry; SC: Status Change

TESTAMERICA

9/2/2008 2:32:33 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 09/26/2008 W05192

Batch: 8246322 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: SS , 57671

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 9-5-08 am
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KVWF9-1-AA								
J8H270234-1-SAMP								
08/20/2008 11:06		AmtRec: 20ML,2XLP	#Containers: 3			Scr:	Alpha:	Beta:
2 KVWF9-1-AC-X								
J8H270234-1-DUP								
08/20/2008 11:06		AmtRec: 20ML,2XLP	#Containers: 3			Scr:	Alpha:	Beta:
3 KVWGL-1-AA								
J8H270234-2-SAMP								
08/20/2008 09:36		AmtRec: 20ML,2XLP	#Containers: 3			Scr:	Alpha:	Beta:
4 KV3KF-1-AC								
J8H290323-1-SAMP								
08/29/2008 13:04		AmtRec: 20ML,6XLP,3X4LP	#Containers: 10			Scr:	Alpha:	Beta:
5 KV5KX-1-AA-B								
J8I020000-322-BLK								
08/20/2008 11:06		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 KV5KX-1-AC-C								
J8I020000-322-LCS								
08/20/2008 11:06		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 KV5KX-1-AD-BN								
J8I020000-322-IBLK								
08/20/2008 11:06		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TESTAMERICA

9/2/2008 2:32:33 PM

Sample Preparation/Analysis

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 9-5-08 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 09/26/2008

Batch: 8246322 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:

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

KVWF91AA-SAMP Constituent List:
C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20
KV5KX1AA-BLK:

KV5KX1AC-LCS:

KV5KX1AD-IBLK:

KVWF91AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KX1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KX1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5KX1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

107

9/10/2008 7:28:12 AM

ICOC Fraction Transfer/Status Report

ByDate: 9/11/2007, 9/15/2008, Batch: '8246322', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
8246322						
AC		Rev1C	McDowellD	9/3/2008 2:46:03 PM		
SC			wagarr	IsBatched	9/2/2008 2:34:03 PM	ICOC_RADCALC v4.8.34
SC			McDowellD	InSep1	9/3/2008 2:46:03 PM	RL-LSC-008 REVISION 0
SC			McDowellD	Sep1C	9/8/2008 11:37:00 AM	RL-LSC-008 REVISION 0
SC			ClarkR	InCnt1	9/8/2008 11:46:48 AM	RL-CI-005 REVISION 0
SC			BlackCL	CalcC	9/9/2008 6:29:30 AM	RL-CI-005 REVISION 0
SC			antonsonl	Rev1C	9/10/2008 7:28:03 AM	RL-DR-001 REV 0
AC			McDowellD	9/8/2008 11:37:00		
AC			McDowellD	9/8/2008 11:40:22		
AC			ClarkR	9/8/2008 11:46:48		
AC			BlackCL	9/9/2008 6:29:30 AM		
AC			antonsonl	9/10/2008 7:28:03		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 6

ICOCFractions v4.8.34

TESTAMERICA

9/2/2008 2:32:33 PM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 09/29/2008 W05492

Batch: 8246325 WATER Due 9/29/08
SEQ Batch, Test: None

Sample Preparation/Analysis

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

PM, Quote: SS , 57671

Balance Id: ENTERED SKS 9/8/08
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 KV2VJ-1-AA J8H290231-1-SAMP 08/29/2008 08:10		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 KV2VJ-1-AC-X J8H290231-1-DUP 08/29/2008 08:10		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 KV2VN-1-AA J8H290231-2-SAMP 08/29/2008 11:05		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 KV5K1-1-AA-B J8I020000-325-BLK 08/29/2008 08:10		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 KV5K1-1-AC-C J8I020000-325-LCS 08/29/2008 08:10		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

KV2VJ1AA-SAMP Constituent List:

109

TESTAMERICA

9/2/2008 2:32:34 PM

Sample Preparation/Analysis

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

AnalyDueDate: 09/29/2008

Batch: 8246325
SEQ Batch, Test: None

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

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

KV5K11AA-BLK:

KV5K11AC-LCS:

KV2VJ1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5K11AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
KV5K11AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

110