Analytical Data Package Prepared For

CH2M Hill Plateau Remediation

Radiochemical Analysis By

TestAmerica TARL

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

Data Package Contains _____ Pages

Report Nbr: 45568

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06077	X11-005	B27WR3	J0L080557-1	MA2PK1AA	9MA2PK10	0363134
		B27WR3	J0L080557-1	MA2PK1AC	9MA2PK10	0363129
		B27WR3	J0L080557-1	MA2PK1AD	9MA2PK10	0363125
		B27WX8	J0L080557-10	MA23D1AA	9MA23D10	0363134
		B27WX8	J0L080557-10	MA23D1AC	9MA23D10	0363129
		B27WX8	J0L080557-10	MA23D1AD	9MA23D10	0363125
	X11-005	B27WT0	J0L080557-11	MA2301AA	9MA23010	0363134
		B27WT0	J0L080557-11	MA2301AC	9MA23010	0363129
		B27WT0	J0L080557-11	MA2301AD	9MA23010	0363125
		B27X76	J0L080557-12	MA24G1AA	9MA24G10	0363134
		B27X76	J0L080557-12	MA24G1AC	9MA24G10	0363129
		B27X76	J0L080557-12	MA24G1AD	9MA24G10	0363125
		B27WV0	J0L080557-13	MA24K1AA	9MA24K10	0363134
		B27WV0	J0L080557-13	MA24K1AC	9MA24K10	0363129
		B27WV0	J0L080557-13	MA24K1AD	9MA24K10	0363125

Comments:

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Report Nbr: 45568

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06077	X11-005	B27WP7	J0L080557-14	MA24N1AA	9MA24N10	0363134
		B27WP7	J0L080557-14	MA24N1AC	9MA24N10	0363129
		B27WP7	J0L080557-14	MA24N1AD	9MA24N10	0363125
		B27WN6	J0L080557-16	MA24W1AA	9MA24W10	0363134
		B27WN6	J0L080557-16	MA24W1AC	9MA24W10	0363129
		B27WN6	J0L080557-16	MA24W1AD	9MA24W10	0363125
		B27WP2	J0L080557-17	MA3D11AA	9MA3D110	0363134
		B27WP2	J0L080557-17	MA3D11AC	9MA3D110	0363129
		B27WW7	J0L080557-2	MA2T01AA	9MA2T010	0363134
		B27WW7	J0L080557-2	MA2T01AC	9MA2T010	0363129
		B27WW7	J0L080557-2	MA2T01AD	9MA2T010	0363125
		B27WW8	J0L080557-3	MA2XX1AA	9MA2XX10	0363134
		B27WW8	J0L080557-3	MA2XX1AC	9MA2XX10	0363129
		B27WW8	J0L080557-3	MA2XX1AD	9MA2XX10	0363125
		B27X88	J0L080557-4	MA22V1AA	9MA22V10	0363134
		B27X88	J0L080557-4	MA22V1AC	9MA22V10	0363129
		B27X88	J0L080557-4	MA22V1AD	9MA22V10	0363125
		B27WW1	J0L080557-5	MA22X1AA	9MA22X10	0363134
		B27WW1	J0L080557-5	MA22X1AC	9MA22X10	0363129
		B27WW1	J0L080557-5	MA22X1AD	9MA22X10	0363125
		B27X64	J0L080557-6	MA2221AA	9MA22210	0363134
		B27X64	J0L080557-6	MA2221AC	9MA22210	0363129
		B27X64	J0L080557-6	MA2221AD	9MA22210	0363125
		B27WR9	J0L080557-7	MA2241AA	9MA22410	0363134
		B27WR9	J0L080557-7	MA2241AC	9MA22410	0363129
		B27WR9	J0L080557-7	MA2241AD	9MA22410	0363125

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06077	X11-005	B27WV1	J0L080557-8	MA2261AA	9MA22610	0363134
		B27WV1	J0L080557-8	MA2261AC	9MA22610	0363129
		B27WV1	J0L080557-8	MA2261AD	9MA22610	0363125
		B27X58	J0L080557-9	MA2271AA	9MA22710	0363134
		B27X58	J0L080557-9	MA2271AC	9MA22710	0363129
		B27X58	J0L080557-9	MA2271AD	9MA22710	0363125
	X11-006	B286K5	J0L100641-1	MA7RT1AA	9MA7RT10	0363125
		B286D5	J0L100641-2	MA7R01AA	9MA7R010	0363125
		B286J5	J0L140536-1	MCCL81AA	9MCCL810	0363125
		B28D48	J0L140536-2	MCCMG1A	9MCCMG10	0363125

Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

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

January 18, 2011

Attention: Mike Neely

SAF Number	:	X11-005, X11-006
Date SDG Closed	:	December 9, 2010
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W06077
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

Between December 6, 2010 and December 9, 2010 twenty water samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the CH2M specific IDs:

CH2M ID#	TARL ID#	DATE OF RECEIPT	MATRIX
B27WR3	MA2PK	12/06/10	WATER
B27WW7	MA2T0	12/06/10	WATER
B27WW8	MA2XX	12/06/10	WATER
B27X88	MA22V	12/06/10	WATER
B27WW1	MA11X	12/06/10	WATER
B27X64	MA222	12/06/10	WATER
B27WR9	MA224	12/06/10	WATER
B27WV1	MA226	12/06/10	WATER
B27X58	MA227	12/06/10	WATER
B27WX8	MA23D	12/06/10	WATER
B27WT0	MA230	12/06/10	WATER
B27X76	MA24G	12/06/10	WATER
B27WV0	MA24K	12/06/10	WATER
B27WP7	MA24N	12/06/10	WATER

B27WN6	MA24W	12/06/10	WATER
B27WP2	MA3D1	12/06/10	WATER
B286K5	MA7RT	12/09/10	WATER
B286D5	MA7R0	12/09/10	WATER
B286J5	MCCL8	12/07/10	WATER
B28D48	MCCMG	12/07/10	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gamma Spectroscopy
Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017)*
Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025)*
Liquid Scintillation Counting
Carbon-14 by method RL-LSC-008 (RICH-RC-5022)*

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

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gamma Spectroscopy

Gamma Spec (LL) by method RL-GAM-001 (RICH-RC-5017):
There was insufficient volume for a duplicate. Sample B27WW7 was recounted on a different detector for the duplicate (B27WW7 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B27WW7) results are within contractual requirements.

Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025):
The LCS, batch blank, samples and sample duplicate (B286K5) results are within contractual requirements.

Liquid Scintillation Counting

Carbon-14 by method RL-LSC-008 (RICH-RC-5022):
The LCS, batch blank, samples and sample duplicate (B27WR3) 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	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

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

Uncertainty Estimation

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

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

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, ***u_c the combined uncertainty.*** The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC= (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Bff * 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 ModFeS5/PNL-ALO-435	SEPARATION OF IRON AND NICKEL BY EXTRACTION CHROMATOGRAPHY
Ni63	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
Ni63	RL-LSC-017	RICH-RC-5069	EXT Chromatography Mod RP300 / DOE0089T	SEPARATION OF Ni-63 BY EXTRACTION CHROMATOGRAPHY
Np	RL-ALP-013	RICH-RC-5009	NAS-NS-3060	DETERMINATION OF NEPTUNIUM-237 BY LIQUID-LIQUID EXTRACTION IN ALL MATRICES
Np	RL-ALP-006	RICH-RC-5064	EXT Chromatography	SEPARATION OF NEPTUNIUM BY EXTRACTION CHROMATOGRAPHY
P32	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
Pb	RL-ALP-011	RICH-RC-5076	EXT Chromatography	DETERMINATION OF LEAD-210 BY EXTRACTION CHROMATOGRAPHY
Po	RL-ALP-007	RICH-RB-5001	NAS-NS-3037 HASL 300	DETERMINATION OF POLONIUM-210 IN URINE
Po	RL-ALP-012	RICH-RC-5012	Po-01 / HASL 300 Mod U01 HASL 300	SEPARATION OF ISOTOPIC URANIUM AND POLONIUM-210 IN WATER, SOIL AND FILTERS
Prep - Bioassay	ARCHIVED	RICH-RB-0001		PREPARATION FOR RAPID BIOASSAY ANALYSES
Prep - Bioassay	RL-PRP-001	RICH-RB-5002	Mod Pu06 / HASL 300	PREPARATION OF URINE AND BLOOD SAMPLES
Prep - Bioassay	ARCHIVED	RICH-RB-5004	ASTM D1429-95	DETERMINATION OF SPECIFIC GRAVITY OF URINE
Prep - Bioassay	RL-RPL-002	RICH-RB-5036	Pub 6490,6601 / PNL	PREPARATION OF SYNTHETIC URINE AND FECES USING RECIPES FROM HPS N13.30 PREPORMANCE 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 Chromatogmphy Mod RP725 / DOE0089T	DETERMINATION OF ISOTOPIC URANIUM IN ALL MATRICES

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.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:
9MA22210	B27X64		MW6-SBB-A1	X11-005	W06077					12/05/2010 13:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	-1.86E+00	pCi/L	3.3E+00	3.8E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 22:16	I
0363129	BE-7	13966-02-4	-3.89E+00	pCi/L	1.5E+01	1.5E+01	U	2.50E+01		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	CO-60	10198-40-0	-2.02E-01	pCi/L	1.4E+00	1.4E+00	U	2.48E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	CS-134	13967-70-9	-3.24E-01	pCi/L	1.3E+00	1.3E+00	U	2.24E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	CS-137	10045-97-3	-8.01E-01	pCi/L	1.3E+00	1.3E+00	U	2.21E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	EU-152	14683-23-9	5.89E-01	pCi/L	3.7E+00	3.7E+00	U	6.38E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	EU-154	15585-10-1	-1.55E+00	pCi/L	3.8E+00	3.8E+00	U	6.56E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	EU-155	14391-16-3	1.24E+00	pCi/L	2.8E+00	2.8E+00	U	4.87E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	K-40	13966-00-2	-3.61E+00	pCi/L	2.1E+01	2.1E+01	U	3.91E+01		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	RU-106	13967-48-1	-8.95E+00	pCi/L	1.2E+01	1.2E+01	U	2.01E+01		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363129	SB-125	14234-35-6	8.63E-01	pCi/L	3.2E+00	3.2E+00	U	5.78E+00		GAMMALL_GS	2.0046E+00	L	01/06/2011 16:29	I
0363125	I-129	15046-84-1	7.60E-02	pCi/L	8.5E-02	8.5E-02	U	1.67E-01	96.5	I129LL_SEP_LEPS	3.8898E+00	L	01/08/2011 05:38	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:
9MA22410	B27WR9		MW6-SBB-A1	X11-005	W06077					12/05/2010 12:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	1.30E+01	pCi/L	3.8E+00	4.4E+00		8.21E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 22:59	I
0363129	BE-7	13966-02-4	1.03E+01	pCi/L	2.5E+01	2.5E+01	U	4.39E+01		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	CO-60	10198-40-0	-4.57E-01	pCi/L	2.0E+00	2.0E+00	U	3.65E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	CS-134	13967-70-9	1.24E+00	pCi/L	2.4E+00	2.4E+00	U	4.39E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	CS-137	10045-97-3	4.72E-01	pCi/L	2.2E+00	2.2E+00	U	3.97E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	EU-152	14683-23-9	1.88E+00	pCi/L	5.3E+00	5.3E+00	U	9.42E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	EU-154	15585-10-1	1.05E+00	pCi/L	5.9E+00	5.9E+00	U	1.12E+01		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	EU-155	14391-16-3	-2.68E+00	pCi/L	3.6E+00	3.6E+00	U	5.88E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	K-40	13966-00-2	-3.45E+01	pCi/L	5.2E+01	5.2E+01	U	1.08E+02		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	RU-106	13967-48-1	3.56E+00	pCi/L	2.0E+01	2.0E+01	U	3.52E+01		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363129	SB-125	14234-35-6	1.65E+00	pCi/L	5.3E+00	5.3E+00	U	9.34E+00		GAMMALL_GS	2.001E+00	L	01/06/2011 17:54	I
0363125	I-129	15046-84-1	1.33E+00	pCi/L	3.0E-01	3.0E-01		1.97E-01	96.5	I129LL_SEP_LEPS	3.6853E+00	L	01/10/2011 04:40	I

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

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.

1

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

9MA22610 B27WV1 MW6-SBB-A1 X11-005 W06077 12/05/2010 08:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	1.00E+01	pCi/L	3.7E+00	4.3E+00		8.22E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 23:42	I
0363129	BE-7	13966-02-4	5.29E+00	pCi/L	1.1E+01	1.1E+01	U	1.96E+01		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	CO-60	10198-40-0	-5.01E-01	pCi/L	1.2E+00	1.2E+00	U	2.09E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	CS-134	13967-70-9	4.85E-01	pCi/L	1.2E+00	1.2E+00	U	2.29E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	CS-137	10045-97-3	7.94E-01	pCi/L	1.1E+00	1.1E+00	U	2.08E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	EU-152	14683-23-9	1.14E+00	pCi/L	2.6E+00	2.6E+00	U	4.61E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	EU-154	15585-10-1	-2.23E+00	pCi/L	3.3E+00	3.3E+00	U	5.46E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	EU-155	14391-16-3	-9.29E-01	pCi/L	1.9E+00	1.9E+00	U	3.29E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	K-40	13966-00-2	-3.79E+00	pCi/L	2.1E+01	2.1E+01	U	4.20E+01		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	RU-106	13967-48-1	-7.28E+00	pCi/L	9.6E+00	9.6E+00	U	1.56E+01		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363129	SB-125	14234-35-6	1.15E+00	pCi/L	2.3E+00	2.3E+00	U	4.25E+00		GAMMALL_GS	2.0006E+00	L	01/06/2011 17:55	I
0363125	I-129	15046-84-1	3.98E+00	pCi/L	5.8E-01	5.8E-01		2.07E-01	97.3	I129LL_SEP_LEPS	3.8084E+00	L	01/10/2011 08:03	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:
9MA22710	B27X58		MW6-SBB-A1	X11-005	W06077					12/05/2010 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	1.36E+00	pCi/L	3.4E+00	3.9E+00	U	8.22E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 00:25	I
0363129	BE-7	13966-02-4	-4.14E+00	pCi/L	2.1E+01	2.1E+01	U	3.66E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	CO-60	10198-40-0	6.51E-01	pCi/L	2.1E+00	2.1E+00	U	3.95E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	CS-134	13967-70-9	-3.44E-01	pCi/L	2.1E+00	2.1E+00	U	3.79E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	CS-137	10045-97-3	1.12E+00	pCi/L	2.0E+00	2.0E+00	U	3.61E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	EU-152	14683-23-9	2.93E+00	pCi/L	5.2E+00	5.2E+00	U	9.12E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	EU-154	15585-10-1	-1.75E+00	pCi/L	5.1E+00	5.1E+00	U	9.08E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	EU-155	14391-16-3	-4.46E-01	pCi/L	4.4E+00	4.4E+00	U	7.38E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	K-40	13966-00-2	-7.23E+01	pCi/L	5.3E+01	5.3E+01	U	1.09E+02		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	RU-106	13967-48-1	1.40E+00	pCi/L	1.7E+01	1.7E+01	U	3.00E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363129	SB-125	14234-35-6	1.10E+00	pCi/L	4.7E+00	4.7E+00	U	8.35E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011 17:56	I
0363125	I-129	15046-84-1	-2.64E-02	pCi/L	9.4E-02	9.4E-02	U	1.65E-01	96.8	I129LL_SEP_LEPS	3.8447E+00	L	01/10/2011 11:28	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:
9MA22V10	B27X88		MW6-SBB-A1	X11-005	W06077					12/05/2010 10:33

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

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	2.31E+00	pCi/L	3.5E+00	3.9E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 20:50	I
0363129	BE-7	13966-02-4	1.55E+00	pCi/L	2.0E+01	2.0E+01	U	3.44E+01		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	CO-60	10198-40-0	-2.82E-01	pCi/L	1.7E+00	1.7E+00	U	3.18E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	CS-134	13967-70-9	3.01E-01	pCi/L	1.8E+00	1.8E+00	U	3.29E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	CS-137	10045-97-3	-1.31E+00	pCi/L	1.6E+00	1.6E+00	U	2.63E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	EU-152	14683-23-9	2.11E-01	pCi/L	4.2E+00	4.2E+00	U	7.46E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	EU-154	15585-10-1	2.30E+00	pCi/L	5.7E+00	5.7E+00	U	1.08E+01		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	EU-155	14391-16-3	3.98E+00	pCi/L	3.3E+00	3.3E+00	U	6.10E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	K-40	13966-00-2	-4.13E+00	pCi/L	4.0E+01	4.0E+01	U	8.53E+01		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	RU-106	13967-48-1	-1.45E+00	pCi/L	1.4E+01	1.4E+01	U	2.56E+01		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363129	SB-125	14234-35-6	9.83E-02	pCi/L	4.1E+00	4.1E+00	U	7.19E+00		GAMMALL_GS	1.9998E+00	L	01/06/2011 14:23	I
0363125	I-129	15046-84-1	2.17E-01	pCi/L	1.5E-01	1.5E-01		1.67E-01	94.1	I129LL_SEP_LEPS	3.8284E+00	L	01/07/2011 21:05	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:
9MA22X10	B27WW1		MW6-SBB-A1	X11-005	W06077					12/05/2010 09:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	-2.29E+00	pCi/L	3.3E+00	3.8E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 21:33	I
0363129	BE-7	13966-02-4	-3.27E+00	pCi/L	1.1E+01	1.1E+01	U	1.83E+01		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	CO-60	10198-40-0	4.86E-01	pCi/L	1.1E+00	1.1E+00	U	2.11E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	CS-134	13967-70-9	7.07E-02	pCi/L	1.0E+00	1.0E+00	U	1.90E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	CS-137	10045-97-3	1.40E+00	pCi/L	1.1E+00	1.1E+00	U	2.18E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	EU-152	14683-23-9	8.86E-01	pCi/L	2.4E+00	2.4E+00	U	4.31E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	EU-154	15585-10-1	1.01E+00	pCi/L	2.9E+00	2.9E+00	U	5.70E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	EU-155	14391-16-3	-9.05E-01	pCi/L	1.9E+00	1.9E+00	U	3.23E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	K-40	13966-00-2	-1.10E+01	pCi/L	2.3E+01	2.3E+01	U	4.29E+01		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	RU-106	13967-48-1	6.49E+00	pCi/L	9.5E+00	9.5E+00	U	1.80E+01		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363129	SB-125	14234-35-6	-1.32E-01	pCi/L	2.3E+00	2.3E+00	U	4.13E+00		GAMMALL_GS	2.0019E+00	L	01/06/2011 14:23	I
0363125	I-129	15046-84-1	-2.13E-02	pCi/L	1.2E-01	1.2E-01	U	2.03E-01	96.5	I129LL_SEP_LEPS	3.7637E+00	L	01/08/2011 05:37	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:
9MA23010	B27WT0		MW6-SBB-A1	X11-005	W06077					12/05/2010 07:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	2.39E+00	pCi/L	3.5E+00	3.9E+00	U	8.22E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 02:34	I

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

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45568 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

0363129	BE-7	13966-02-4	8.44E+00	pCi/L	2.3E+01	2.3E+01	U	4.04E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	CO-60	10198-40-0	5.91E-01	pCi/L	2.4E+00	2.4E+00	U	4.57E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	CS-134	13967-70-9	5.00E-01	pCi/L	2.4E+00	2.4E+00	U	4.38E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	CS-137	10045-97-3	1.27E+00	pCi/L	2.1E+00	2.1E+00	U	3.85E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-152	14683-23-9	2.20E+00	pCi/L	5.5E+00	5.5E+00	U	9.81E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-154	15585-10-1	4.10E+00	pCi/L	6.4E+00	6.4E+00	U	1.25E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-155	14391-16-3	-3.63E+00	pCi/L	3.8E+00	3.8E+00	U	6.11E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	K-40	13966-00-2	1.98E+00	pCi/L	5.7E+01	5.7E+01	U	3.31E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	RU-106	13967-48-1	1.03E+01	pCi/L	1.9E+01	1.9E+01	U	3.47E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	SB-125	14234-35-6	-5.62E-01	pCi/L	5.2E+00	5.2E+00	U	8.91E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363125	I-129	15046-84-1	-2.87E-02	pCi/L	8.7E-02	8.7E-02	U	1.52E-01	96.5	I129LL_SEP_LEPS	3.8331E+00	L	01/10/2011	19:00	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA23D10	B27WX8		MW6-SBB-A1		W06077					12/05/2010 10:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
0363134	C-14	14762-75-5	1.31E+01	pCi/L	3.8E+00	4.4E+00		8.22E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011	01:08	I
0363129	BE-7	13966-02-4	8.60E+00	pCi/L	1.4E+01	1.4E+01	U	2.59E+01		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	CO-60	10198-40-0	5.23E-01	pCi/L	1.2E+00	1.2E+00	U	2.35E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	CS-134	13967-70-9	4.46E-01	pCi/L	1.4E+00	1.4E+00	U	2.63E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	CS-137	10045-97-3	-3.26E-02	pCi/L	1.2E+00	1.2E+00	U	2.20E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	EU-152	14683-23-9	-7.73E-01	pCi/L	3.3E+00	3.3E+00	U	5.67E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	EU-154	15585-10-1	1.34E+00	pCi/L	4.3E+00	4.3E+00	U	8.10E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	EU-155	14391-16-3	-2.98E+00	pCi/L	3.1E+00	3.1E+00	U	4.88E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	K-40	13966-00-2	-1.76E+01	pCi/L	2.0E+01	2.0E+01	U	3.59E+01		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	RU-106	13967-48-1	-1.42E+00	pCi/L	1.2E+01	1.2E+01	U	2.11E+01		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363129	SB-125	14234-35-6	-9.66E-01	pCi/L	3.2E+00	3.2E+00	U	5.48E+00		GAMMALL_GS	2.0023E+00	L	01/06/2011	19:58	I
0363125	I-129	15046-84-1	1.52E+00	pCi/L	3.0E-01	3.0E-01		2.01E-01	96.5	I129LL_SEP_LEPS	3.7261E+00	L	01/10/2011	15:34	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA24G10	B27X76		MW6-SBB-A1	X11-005	W06077					12/05/2010 13:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
0363134	C-14	14762-75-5	-1.92E+00	pCi/L	3.3E+00	3.8E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011	03:17	I
0363129	BE-7	13966-02-4	-7.43E+00	pCi/L	1.1E+01	1.1E+01	U	1.75E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	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.

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

0363129	CO-60	10198-40-0	-2.19E-01	pCi/L	9.2E-01	9.2E-01	U	1.68E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	CS-134	13967-70-9	2.07E-01	pCi/L	9.7E-01	9.7E-01	U	1.84E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	CS-137	10045-97-3	1.55E+00	pCi/L	1.1E+00	1.1E+00	U	2.23E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-152	14683-23-9	3.15E-01	pCi/L	2.3E+00	2.3E+00	U	4.14E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-154	15585-10-1	-9.38E-01	pCi/L	3.2E+00	3.2E+00	U	5.61E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	EU-155	14391-16-3	1.60E-01	pCi/L	1.9E+00	1.9E+00	U	3.34E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	K-40	13966-00-2	4.15E+00	pCi/L	2.6E+01	2.6E+01	U	2.26E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	RU-106	13967-48-1	1.76E-01	pCi/L	9.7E+00	9.7E+00	U	1.72E+01		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363129	SB-125	14234-35-6	-3.71E-01	pCi/L	2.2E+00	2.2E+00	U	3.89E+00		GAMMALL_GS	2.0004E+00	L	01/06/2011	21:27	I
0363125	I-129	15046-84-1	-1.20E-02	pCi/L	8.9E-02	8.9E-02	U	1.59E-01	90.5	I129LL_SEP_LEPS	3.8378E+00	L	01/10/2011	22:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA24K10	B27WV0		MW6-SBB-A1	X11-005	W06077					12/05/2010 08:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	1.30E+01	pCi/L	3.8E+00	4.4E+00		8.21E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 04:00	I
0363129	BE-7	13966-02-4	-9.91E+00	pCi/L	2.0E+01	2.0E+01	U	3.34E+01		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	CO-60	10198-40-0	-6.87E-01	pCi/L	1.8E+00	1.8E+00	U	3.26E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	CS-134	13967-70-9	4.62E-01	pCi/L	1.8E+00	1.8E+00	U	3.40E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	CS-137	10045-97-3	1.45E-01	pCi/L	1.6E+00	1.6E+00	U	2.92E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	EU-152	14683-23-9	-4.72E-01	pCi/L	3.5E+00	3.5E+00	U	6.29E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	EU-154	15585-10-1	2.66E+00	pCi/L	5.4E+00	5.4E+00	U	1.05E+01		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	EU-155	14391-16-3	1.45E+00	pCi/L	2.8E+00	2.8E+00	U	5.18E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	K-40	13966-00-2	-5.92E+01	pCi/L	3.7E+01	3.7E+01	U	7.46E+01		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	RU-106	13967-48-1	8.86E-01	pCi/L	1.4E+01	1.4E+01	U	2.48E+01		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363129	SB-125	14234-35-6	4.79E-01	pCi/L	4.0E+00	4.0E+00	U	7.21E+00		GAMMALL_GS	1.9961E+00	L	01/06/2011 21:28	I
0363125	I-129	15046-84-1	5.84E+00	pCi/L	7.9E-01	7.9E-01		3.31E-01	94.6	I129LL_SEP_LEPS	3.7949E+00	L	01/11/2011 03:39	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:
9MA24N10	B27WP7		MW6-SBB-A1	X11-005	W06077					12/05/2010 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	7.29E+00	pCi/L	3.6E+00	4.1E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 04:43	I
0363129	BE-7	13966-02-4	-3.42E+00	pCi/L	1.3E+01	1.3E+01	U	2.33E+01		GAMMALL_GS	2.0041E+00	L	01/06/2011 23:24	I
0363129	CO-60	10198-40-0	3.30E-01	pCi/L	1.2E+00	1.2E+00	U	2.35E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011 23:24	I

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

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

0363129	CS-134	13967-70-9	-4.60E-01	pCi/L	1.4E+00	1.4E+00	U	2.37E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	CS-137	10045-97-3	-6.97E-02	pCi/L	1.3E+00	1.3E+00	U	2.35E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	EU-152	14683-23-9	-2.09E+00	pCi/L	3.6E+00	3.6E+00	U	5.86E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	EU-154	15585-10-1	-1.58E+00	pCi/L	3.6E+00	3.6E+00	U	6.30E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	EU-155	14391-16-3	-3.74E-01	pCi/L	3.1E+00	3.1E+00	U	5.22E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	K-40	13966-00-2	1.85E+01	pCi/L	2.4E+01	2.4E+01	U	1.98E+01		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	RU-106	13967-48-1	-2.60E+00	pCi/L	1.2E+01	1.2E+01	U	2.15E+01		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363129	SB-125	14234-35-6	-9.64E-01	pCi/L	3.3E+00	3.3E+00	U	5.60E+00		GAMMALL_GS	2.0041E+00	L	01/06/2011	23:24	I
0363125	I-129	15046-84-1	3.55E+00	pCi/L	5.1E-01	5.1E-01		2.04E-01	96.5	I129LL_SEP_LEPS	3.8616E+00	L	01/11/2011	03:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA24W10	B27WN6		MW6-SBB-A1	X11-005	W06077					12/05/2010 14:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	9.73E+00	pCi/L	3.7E+00	4.2E+00		8.22E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 05:26	I
0363129	BE-7	13966-02-4	5.77E+00	pCi/L	1.6E+01	1.6E+01	U	2.87E+01		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	CO-60	10198-40-0	-9.43E-01	pCi/L	1.4E+00	1.4E+00	U	2.31E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	CS-134	13967-70-9	2.90E-01	pCi/L	1.4E+00	1.4E+00	U	2.60E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	CS-137	10045-97-3	3.65E-01	pCi/L	1.3E+00	1.3E+00	U	2.34E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	EU-152	14683-23-9	-3.37E+00	pCi/L	3.6E+00	3.6E+00	U	5.84E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	EU-154	15585-10-1	-1.76E+00	pCi/L	3.7E+00	3.7E+00	U	6.33E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	EU-155	14391-16-3	-2.46E+00	pCi/L	3.1E+00	3.1E+00	U	5.00E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	K-40	13966-00-2	-4.15E+00	pCi/L	2.1E+01	2.1E+01	U	3.97E+01		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	RU-106	13967-48-1	-4.11E+00	pCi/L	1.2E+01	1.2E+01	U	2.02E+01		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363129	SB-125	14234-35-6	1.23E+00	pCi/L	3.1E+00	3.1E+00	U	5.62E+00		GAMMALL_GS	1.9992E+00	L	01/07/2011 04:19	I
0363125	I-129	15046-84-1	1.46E+00	pCi/L	3.5E-01	3.5E-01		2.00E-01	97.3	I129LL_SEP_LEPS	3.8114E+00	L	01/11/2011 07:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA2PK10	B27WR3		MW6-SBB-A1	X11-005	W06077					12/05/2010 12:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	5.49E+00	pCi/L	3.6E+00	4.1E+00	U	8.22E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 17:59	I
0363129	BE-7	13966-02-4	-1.15E+00	pCi/L	1.3E+01	1.3E+01	U	2.30E+01		GAMMALL_GS	2.0035E+00	L	01/06/2011 12:19	I
0363129	CO-60	10198-40-0	-2.96E-03	pCi/L	1.3E+00	1.3E+00	U	2.41E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011 12:19	I
0363129	CS-134	13967-70-9	1.07E+00	pCi/L	1.3E+00	1.3E+00	U	2.56E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011 12:19	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.

0363129	CS-137	10045-97-3	-4.48E-01	pCi/L	1.3E+00	1.3E+00	U	2.24E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	EU-152	14683-23-9	-5.83E-01	pCi/L	3.2E+00	3.2E+00	U	5.45E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	EU-154	15585-10-1	6.67E-01	pCi/L	3.4E+00	3.4E+00	U	6.43E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	EU-155	14391-16-3	-2.07E+00	pCi/L	2.9E+00	2.9E+00	U	4.69E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	K-40	13966-00-2	-6.92E+00	pCi/L	2.0E+01	2.0E+01	U	3.77E+01		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	RU-106	13967-48-1	2.98E+00	pCi/L	1.2E+01	1.2E+01	U	2.14E+01		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363129	SB-125	14234-35-6	-6.93E-01	pCi/L	3.3E+00	3.3E+00	U	5.66E+00		GAMMALL_GS	2.0035E+00	L	01/06/2011	12:19	I
0363125	I-129	15046-84-1	7.66E-01	pCi/L	2.6E-01	2.6E-01		1.77E-01	96.8	I129LL_SEP_LEPS	3.8077E+00	L	01/07/2011	17:39	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:
9MA2T010	B27WW7		MW6-SBB-A1	X11-005	W06077					12/05/2010 10:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	4.46E+00	pCi/L	3.5E+00	4.0E+00	U	8.22E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 19:25	I
0363129	BE-7	13966-02-4	9.11E+00	pCi/L	2.0E+01	2.0E+01	U	3.68E+01		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	CO-60	10198-40-0	1.43E-01	pCi/L	1.8E+00	1.8E+00	U	3.44E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	CS-134	13967-70-9	-2.46E-01	pCi/L	2.1E+00	2.1E+00	U	3.67E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	CS-137	10045-97-3	-1.52E+00	pCi/L	2.0E+00	2.0E+00	U	3.29E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	EU-152	14683-23-9	-3.97E+00	pCi/L	5.3E+00	5.3E+00	U	8.39E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	EU-154	15585-10-1	-1.09E+00	pCi/L	5.1E+00	5.1E+00	U	9.21E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	EU-155	14391-16-3	-7.51E-01	pCi/L	4.2E+00	4.2E+00	U	7.05E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	K-40	13966-00-2	-8.87E+01	pCi/L	5.4E+01	5.4E+01	U	1.09E+02		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	RU-106	13967-48-1	1.08E+01	pCi/L	1.8E+01	1.8E+01	U	3.35E+01		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363129	SB-125	14234-35-6	-2.06E+00	pCi/L	4.5E+00	4.5E+00	U	7.75E+00		GAMMALL_GS	2.0031E+00	L	01/06/2011 14:22	I
0363125	I-129	15046-84-1	6.07E-01	pCi/L	2.1E-01	2.1E-01		1.73E-01	95.4	I129LL_SEP_LEPS	3.8336E+00	L	01/07/2011 17:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA2XX10	B27WW8		MW6-SBB-A1	X11-005	W06077					12/05/2010 07:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	1.44E+00	pCi/L	3.4E+00	3.9E+00	U	8.22E+00	100.0	C14_LSC	2.00E-01	L	01/04/2011 20:07	I
0363129	BE-7	13966-02-4	-8.08E+00	pCi/L	2.3E+01	2.3E+01	U	3.95E+01		GAMMALL_GS	2.0014E+00	L	01/06/2011 14:22	I
0363129	CO-60	10198-40-0	2.98E-01	pCi/L	2.1E+00	2.1E+00	U	4.01E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011 14:22	I
0363129	CS-134	13967-70-9	-3.35E-01	pCi/L	2.2E+00	2.2E+00	U	3.91E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011 14:22	I
0363129	CS-137	10045-97-3	-4.97E-01	pCi/L	2.2E+00	2.2E+00	U	3.74E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011 14:22	I

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

1/18/2011 12:34:08 PM **TestAmerica Report** **Lab Code:** TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45568 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

0363129	EU-152	14683-23-9	-1.41E+00	pCi/L	5.4E+00	5.4E+00	U	9.18E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363129	EU-154	15585-10-1	1.19E+00	pCi/L	5.5E+00	5.5E+00	U	1.05E+01		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363129	EU-155	14391-16-3	-6.68E-01	pCi/L	3.8E+00	3.8E+00	U	6.38E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363129	K-40	13966-00-2	-6.78E+01	pCi/L	5.2E+01	5.2E+01	U	1.05E+02		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363129	RU-106	13967-48-1	-2.91E+00	pCi/L	1.8E+01	1.8E+01	U	3.09E+01		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363129	SB-125	14234-35-6	-8.94E-01	pCi/L	5.1E+00	5.1E+00	U	8.78E+00		GAMMALL_GS	2.0014E+00	L	01/06/2011	14:22	I
0363125	I-129	15046-84-1	-6.68E-02	pCi/L	1.2E-01	1.2E-01	U	2.09E-01	97.0	I129LL_SEP_LEPS	3.5852E+00	L	01/07/2011	21:03	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:
9MA3D110	B27WP2		MW6-SBB-A1	X11-005	W06077					12/05/2010 11:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363134	C-14	14762-75-5	4.82E+00	pCi/L	3.6E+00	4.0E+00	U	8.21E+00	100.0	C14_LSC	2.00E-01	L	01/05/2011 06:08	I
0363129	BE-7	13966-02-4	2.97E-01	pCi/L	1.1E+01	1.1E+01	U	1.88E+01		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	CO-60	10198-40-0	1.20E-01	pCi/L	1.1E+00	1.1E+00	U	2.13E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	CS-134	13967-70-9	3.92E-02	pCi/L	1.0E+00	1.0E+00	U	1.84E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	CS-137	10045-97-3	1.24E+00	pCi/L	1.1E+00	1.1E+00	U	2.18E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	EU-152	14683-23-9	-9.33E-01	pCi/L	2.4E+00	2.4E+00	U	3.96E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	EU-154	15585-10-1	-2.91E+00	pCi/L	3.1E+00	3.1E+00	U	4.77E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	EU-155	14391-16-3	6.67E-01	pCi/L	2.2E+00	2.2E+00	U	3.95E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	K-40	13966-00-2	7.73E+00	pCi/L	2.4E+01	2.4E+01	U	1.90E+01		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	RU-106	13967-48-1	2.01E+00	pCi/L	9.5E+00	9.5E+00	U	1.72E+01		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I
0363129	SB-125	14234-35-6	-9.84E-01	pCi/L	2.4E+00	2.4E+00	U	4.15E+00		GAMMALL_GS	1.9998E+00	L	01/07/2011 04:19	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA7R010	B286D5		MW6-SBB-A1	X11-006	W06077					12/09/2010 09:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363125	I-129	15046-84-1	6.63E-02	pCi/L	1.3E-01	1.3E-01	U	1.51E-01	97.3	I129LL_SEP_LEPS	3.8441E+00	L	01/11/2011 13:36	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9MA7RT10	B286K5		MW6-SBB-A1	X11-006	W06077					12/09/2010 10:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363125	I-129	15046-84-1	8.23E-02	pCi/L	8.7E-02	8.7E-02	U	1.47E-01	95.9	I129LL_SEP_LEPS	3.8122E+00	L	01/11/2011 07:42	I

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

1/18/2011 12:34:08 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 45568 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.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:
9MCCL810	B286J5		MW6-SBB-A1	X11-006	W06077					12/07/2010 13:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363125	I-129	15046-84-1	-2.98E-02	pCi/L	1.1E-01	1.1E-01	U	1.91E-01	97.3	I129LL_SEP_LEPS	3.8082E+00	L	01/11/2011 17:02	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:
9MCCMG10	B28D48		MW6-SBB-A1	X11-006	W06077					12/07/2010 07:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0363125	I-129	15046-84-1	-6.45E-03	pCi/L	8.6E-02	8.6E-02	U	1.55E-01	94.1	I129LL_SEP_LEPS	3.8294E+00	L	01/11/2011 17:03	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.

Tuesday, January 18, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id: MCVTC1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W06077 45568
Matrix: WATER WATER
QC Type: BLK

Collection Date: 12/09/2010 10:42
Sample On Date:
Received Date: 12/09/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363125	I-129	-1.22E-01	pCi/L	1.2E-01	U	1.82E-01	96.8		I129LL_SEP_L	3.8913E+00	01/11/2011				D
BLK	15046-84-1			1.2E-01						L	20:48				

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.

Tuesday, January 18, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id:	MCVTF1AB	**Sdg/Rept Nbr:**	W06077	45568	**Collection Date:** 12/05/2010 10:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/06/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363129	BE-7	5.95E+00	pCi/L	1.7E+01	U	2.99E+01			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	13966-02-4			1.7E+01						L	04:20				
0363129	CO-60	1.35E-01	pCi/L	1.9E+00	U	3.60E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	10198-40-0			1.9E+00						L	04:20				
0363129	CS-134	1.33E+00	pCi/L	2.3E+00	U	4.28E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	13967-70-9			2.3E+00						L	04:20				
0363129	CS-137	1.69E-01	pCi/L	2.0E+00	U	3.62E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	10045-97-3			2.0E+00						L	04:20				
0363129	EU-152	2.78E+00	pCi/L	5.4E+00	U	9.59E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	14683-23-9			5.4E+00						L	04:20				
0363129	EU-154	1.42E+00	pCi/L	6.6E+00	U	1.21E+01			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	15585-10-1			6.6E+00						L	04:20				
0363129	EU-155	-6.52E-01	pCi/L	3.5E+00	U	5.91E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	14391-16-3			3.5E+00						L	04:20				
0363129	K-40	-6.28E+01	pCi/L	5.2E+01	U	1.05E+02			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	13966-00-2			5.2E+01						L	04:20				
0363129	RU-106	-1.27E+01	pCi/L	1.9E+01	U	3.09E+01			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	13967-48-1			1.9E+01						L	04:20				
0363129	SB-125	-9.83E-02	pCi/L	4.9E+00	U	8.57E+00			GAMMALL_GS	2.0059E+00	01/07/2011				D
BLK	14234-35-6			4.9E+00						L	04:20				

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

Tuesday, January 18, 2011

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id:	MCVTL1AB	**Sdg/Rept Nbr:**	W06077	45568	**Collection Date:** 12/05/2010 12:50
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 12/06/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363134	C-14	-1.30E+00	pCi/L	3.8E+00	U	8.22E+00	100.0		C14_LSC	2.00E-01	01/05/2011				D
BLK	14762-75-5			3.3E+00						L	06:51				

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.

Tuesday, January 18, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id:	MCVTC1CS	**Sdg/Rept Nbr:**	W06077	45568	**Collection Date:** 12/09/2010 10:42
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 12/09/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363125	I-129	1.08E+01	pCi/L	1.2E+00		2.44E-01	95.3	9.93E+00	I129LL_SEP_L	3.8924E+00	01/11/2011			70	D
BS	15046-84-1			1.2E+00				109.0		L	20:49			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.

Tuesday, January 18, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id: MCVTF1CS **Sdg/Rept Nbr:** W06077 45568 **Collection Date:** 12/05/2010 10:21

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/06/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363129	CO-60	3.64E+01	pCi/L	7.0E+00		3.58E+00		3.73E+01	GAMMALL_GS	2.001E+00	01/07/2011			70	D
BS	10198-40-0			7.0E+00				97.4		L	04:20			130	
0363129	CS-137	4.70E+01	pCi/L	8.9E+00		3.69E+00		4.96E+01	GAMMALL_GS	2.001E+00	01/07/2011			70	D
BS	10045-97-3			8.9E+00				94.8		L	04:20			130	
0363129	EU-152	7.86E+01	pCi/L	1.5E+01		8.27E+00		7.59E+01	GAMMALL_GS	2.001E+00	01/07/2011			70	D
BS	14683-23-9			1.5E+01				103.5		L	04:20			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.

Tuesday, January 18, 2011

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id: MCVTL1CS **Sdg/Rept Nbr:** W06077 45568 **Collection Date:** 12/05/2010 12:50

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/06/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0363134	C-14	7.25E+03	pCi/L	4.3E+02		3.29E+02	100.0	7.54E+03	C14_LSC	5.00E-03	01/05/2011			70	D
BS	14762-75-5			3.0E+02				96.2		L	07:34			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.

Tuesday, January 18, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id:	MA2PK1ER	**Sdg/Rept Nbr:**	W06077	45568	**Collection Date:** 12/05/2010 12:50
Client Id:	B27WR3	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 12/06/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-005	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
0363134	C-14	7.31E+00	pCi/L	4.1E+00	U	8.21E+00	100.0		C14_LSC	2.00E-01	01/04/2011	28.4	0.6		D
DUP	14762-75-5	5.49E+00		3.6E+00						L	18:42	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.

Tuesday, January 18, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id: MA2T01ER **Sdg/Rept Nbr:** W06077 45568 **Collection Date:** 12/05/2010 10:21

Client Id: B27WW7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/06/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-005	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
0363129	BE-7	-4.28E+00	pCi/L	1.9E+01	U	3.32E+01			GAMMALL_GS	2.0031E+00	01/06/2011	554.7	1.		D
DUP	13966-02-4	9.11E+00		1.9E+01						L	17:53	20.0	3		
0363129	CO-60	2.46E-01	pCi/L	1.8E+00	U	3.38E+00			GAMMALL_GS	2.0031E+00	01/06/2011	53.0	0.1		D
DUP	10198-40-0	1.43E-01		1.8E+00						L	17:53	20.0	3		
0363129	CS-134	1.90E+00	pCi/L	1.8E+00	U	3.61E+00			GAMMALL_GS	2.0031E+00	01/06/2011	259.5	1.7		D
DUP	13967-70-9	-2.46E-01		1.8E+00						L	17:53	20.0	3		
0363129	CS-137	-4.98E-01	pCi/L	1.8E+00	U	3.11E+00			GAMMALL_GS	2.0031E+00	01/06/2011	0.0	0.8		D
DUP	10045-97-3	-1.52E+00		1.8E+00						L	17:53	20.0	3		
0363129	EU-152	-1.46E+00	pCi/L	4.3E+00	U	7.51E+00			GAMMALL_GS	2.0031E+00	01/06/2011	0.0	0.8		D
DUP	14683-23-9	-3.97E+00		4.3E+00						L	17:53	20.0	3		
0363129	EU-154	-2.27E+00	pCi/L	5.4E+00	U	9.25E+00			GAMMALL_GS	2.0031E+00	01/06/2011	0.0	0.3		D
DUP	15585-10-1	-1.09E+00		5.4E+00						L	17:53	20.0	3		
0363129	EU-155	1.06E+00	pCi/L	3.6E+00	U	6.32E+00			GAMMALL_GS	2.0031E+00	01/06/2011	1171.9	0.7		D
DUP	14391-16-3	-7.51E-01		3.6E+00						L	17:53	20.0	3		
0363129	K-40	1.96E+01	pCi/L	4.3E+01	U	9.07E+01			GAMMALL_GS	2.0031E+00	01/06/2011	0.0	3.6		D
DUP	13966-00-2	-8.87E+01		4.3E+01						L	17:53	20.0	3		
0363129	RU-106	7.93E+00	pCi/L	1.6E+01	U	2.93E+01			GAMMALL_GS	2.0031E+00	01/06/2011	30.5	0.3		D
DUP	13967-48-1	1.08E+01		1.6E+01						L	17:53	20.0	3		
0363129	SB-125	1.66E+00	pCi/L	4.1E+00	U	7.53E+00			GAMMALL_GS	2.0031E+00	01/06/2011	0.0	1.3		D
DUP	14234-35-6	-2.06E+00		4.1E+00						L	17:53	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.

Tuesday, January 18, 2011

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06077.Edd, h:\Reportdb\edd\FeadIV\Rad\45568.Edd

Lab Sample Id: MA7RT1CR **Sdg/Rept Nbr:** W06077 45568 **Collection Date:** 12/09/2010 10:42

Client Id: B286K5 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/09/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X11-006	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
0363125	I-129	-2.63E-02	pCi/L	1.2E-01	U	2.07E-01	97.0		I129LL_SEP_L	3.7877E+00	01/11/2011	388.3	1.3		D
DUP	15046-84-1	8.23E-02		1.2E-01						L	13:35	20.0	3		

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

1/10/2011 3:43:50 PM

Lot No., Due Date: J0L080557; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0363129; RGAMMA Gamma by GER
SDG, Matrix: W06077; WATER

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

6.0 Comments on any No response:

First Level [signature] **Date** 1/10/11

TestAmerica Richland
QAS_RADCALCv4.8.44

Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0363129

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

Comments on any "No" response: _____

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

1/18/2011 11:21:49 AM

Lot No., Due Date: J0L080557,J0L100641,J0L140536; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0363125; RGAMLEPS Gamma by LEPS
SDG, Matrix: W06077; 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 Lee Anderson **Date** 1/18/11

TestAmerica Richland
QAS_RADCALCv4.8.44

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0363125

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: [signature] Date: 1/18/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

1/7/2011 11:12:51 AM

Lot No., Due Date: J0L080557; 01/10/2011
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0363134; RC14 C-14 by LSC
SDG, Matrix: W06077; WATER

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

First Level [signature] **Date** 1/7/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0363134

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: [signature] Date: 1/14/11

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

CHPRC JOL080557

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-005-32

Page 1 of 1

Collector: CA Snyder CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 33179	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WR3	N	W	12-5-10	1250	1x20-mL P	Activity Scan MA2PK	6 Months	None
B27WR3	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WR3	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WR3	N	W	12-5-10	1250	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Quote #57671
SDG #W06077
LOT #JOL080557
Report: 1/20/11
PGW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 05 2010 1430	SSU-1			DEC 05 2010 1430
SSU-1			DEC 06 2010 0800	B.E. Briggs CHPRC		BBriggs	DEC 06 2010 0800
B.E. Briggs CHPRC		BBriggs	DEC 06 2010 1340	Luis Velazquez TAIR			DEC 06 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-69
		Page 1 of 1

Collector S.J. Southerland CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-005	Sampling Origin Hanford Site	Purchase Order/Charge Code 300118ES20
Project Title IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 25189	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated_Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 30 Days PRIORITY	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WW7	N	W	12/5/10	1021	1x20-mL P	Activity Scan MA2TO	6 Months	None
B27WW7	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WW7	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WW7	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG# W06077
LOT# J0L080557

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-70
		Page 1 of 1

Collector: S.J. Southerland	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No.: HNF-N-506 25 / 89	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WW8	N	W	12/5/10	0730	1x20-mL P	Activity Scan MA7XX	6 Months	None
B27WW8	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WW8	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WW8	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
S.J. Southerland CHPRC	1430 DEC 05 2010	SSU-1	1430 DEC 05 2010
SSU-1	0700 DEC 06 2010	B.E. Briggs CHPRC	0700 DEC 06 2010
B.E. Briggs CHPRC	1340 DEC 06 2010	TALR	1340 DEC 06 2010

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-229
		Page 1 of 1

Collector: DJ Woehle, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 31/95	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time**
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X88	N	W	12-5-10	1033	1x20-mL P	Activity Scan MA22V	6 Months	None
B27X88	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X88	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X88	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06074
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
DJ Woehle, CHPRC	DEC 05 2010 1500	SSU #1	DEC 05 2010 1500
SSU-1	DEC 06 2010 0800	B.E. Briggs, CHPRC	DEC 06 2010 0800
B.E. Briggs, CHPRC	DEC 06 2010 1340	Lucas Rodriguez TALR	DEC 06 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-59
		Page 1 of 1

Collector: DJ Sparks CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No.: HNF-N-506 321/77	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WW1	N	W	12/5/10	0922	1x20-mL P	Activity Scan MA22X	6 Months	None
B27WW1	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WW1	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WW1	N	W	12/5/10	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: J0L080557

Relinquished By	Received By
Print: DJ Sparks CHPRC; Sign: [signature]; Date/Time: DEC 0 5 2010 1500	Print: SSU #1; Sign: [signature]; Date/Time: DEC 0 5 2010 1500
Relinquished By: SSU #1; Date/Time: DEC 0 6 2010 0800	Received By: B.E. Briggs CHPRC; Date/Time: DEC 0 6 2010 0800
Relinquished By: B.E. Briggs CHPRC; Date/Time: DEC 0 6 2010 1340	Received By: Lucas Velazquez DALR; Date/Time: DEC 0 6 2010 1340
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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-189 Page 1 of 1

Collector: F. M. Hall	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 34 / 87	Ice Chest No.: N/A
Shipped To/Lab: TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X64	N	W	DEC 05 2010	1346	1x20-mL P	Activity Scan MA222	6 Months	None
B27X64	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X64	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X64	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
F. M. Hall	DEC 05 2010 1445	SS4#1	DEC 05 2010 1445
SSU-1	DEC 06 2010 0800	B.E. Briggs CHPRC	DEC 06 2010 0800
B.E. Briggs CHPRC	DEC 06 2010 1340	Lucas Elizondez TALR	DEC 06 2010 1340

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-39
		Page 1 of 1

Collector: DJ Sparks CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 32177	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated_Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WR9	N	W	12/5/10	1238	1x20-mL P	Activity Scan MA224	6 Months	None
B27WR9	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WR9	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WR9	N	W	12/5/10	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Sparks CHPRC			DEC 0 5 2010 1500	SSU #1			DEC 0 5 2010 1500
SSU #1			DEC 0 6 2010 0800	B.E. Briggs CHPRC			DEC 0 6 2010 0800
B.E. Briggs CHPRC			DEC 0 6 2010 1340	TALR			DEC 0 6 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-50
		Page 1 of 1

Collector CA Snyder CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-005	Sampling Origin Hanford Site	Purchase Order/Charge Code 300118ES20
Project Title IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 33 / 79	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 30 Days PRIORITY	Offsite Property No. N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WV1	N	W	12-5-10	0845	1x20-mL P	Activity Scan MA276	6 Months	None
B27WV1	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WV1	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WV1	N	W	12-5-10	0845	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 05 2010 1005	SSU- 1			DEC 05 2010 1005
SSU- 1			DEC 06 2010 0800	B.E. Briggs CHPRC			DEC 06 2010 0800
B.E. Briggs CHPRC			DEC 06 2010 1340	Lucas Velazquez TALR			DEC 06 2010 1340

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-179
		Page 1 of 1

Collector: F. M. Hall	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No.: HNF-N-506 34 / 87	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X58	N	W	DEC 05 2010	1140	1x20-mL P	Activity Scan MA227	6 Months	None
B27X58	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X58	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X58	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W0607 7
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
F. M. Hall	DEC 05 2010 1445	SSU #1	DEC 05 2010 1445
SSU-1	DEC 06 2010 0800	B.E. Briggs CHPRC	DEC 06 2010 0800
B.E. Briggs CHPRC	DEC 06 2010 1340	Lucas Venegas TALK	DEC 06 2010 1340
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-79
		Page 1 of 1

Collector: DJ Sparks CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 32177	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WX8	N	W	12/5/10	1057	1x20-mL P	Activity Scan MA23D	6 Months	None
B27WX8	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WX8	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WX8	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG#W06077
LOT#J0L080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
DJ Sparks CHPRC	DEC 0 5 2010 1500	SSU#1	DEC 0 5 2010 1500
SSU#1	DEC 0 6 2010 0800	B.E. Briggs CHPRC	DEC 0 6 2010 0800
B.E. Briggs CHPRC	DEC 0 6 2010 1340	Lucas Velazquez TAL	DEC 0 6 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-40
		Page 1 of 1

Collector: DJ Sparks CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2, IU6DURA, OCTOBER 2010	Logbook No: HNF-N-506 32 / 77	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.
Please report all TICs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WT0	N	W	12/5/10	0700	1x20-mL P	Activity Scan MA230	6 Months	None
B27WT0	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WT0	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WT0	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG#W06077
LOT#JOL080557

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Sparks CHPRC			DEC 0 5 2010 1500	SSU#1			DEC 0 5 2010 1500
SSU#1			DEC 0 6 2010 0800	B.E. Briggs CHPRC			DEC 0 6 2010 0800
B.E. Briggs CHPRC			DEC 0 6 2010 1340	Lucas Velazquez TALB			DEC 0 6 2010 1340
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

A-6004-842 (05/10)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-209
		Page 1 of 1

Collector: ~~DJ Woehle~~ CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 31 / 95	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27X76	N	W	12-5-10	1344	1x20-mL P	Activity Scan MA240	6 Months	None
B27X76	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27X76	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27X76	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: J0L080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
~~DJ Woehle~~ CHPRC	DEC 0 5 2010 1500	SSU #1	DEC 0 5 2010 1500
SSU-..1	DEC 0 6 2010 0800	B.E. Briggs CHPRC	DEC 0 6 2010 0800
B.E. Briggs CHPRC	DEC 0 6 2010 1340	Lucas Velazquez TAIR	DEC 0 6 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-49
		Page 1 of 1

Collector: CA Snyder, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_OCTOBER 2010	Logbook No: HNF-N-506 331 79	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated_Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WV0	N	W	12-5-10	0845	1x20-mL P	Activity Scan MA24K	6 Months	None
B27WV0	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WV0	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WV0	N	W	12-5-10	0845	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
CA Snyder CHPRC	DEC 05 2010 1005	SSU-1	DEC 05 2010 1005
SSU-1	DEC 06 2010 0800	B.E. Briggs CHPRC	DEC 06 2010 0800
B.E. Briggs CHPRC	DEC 06 2010 1340	Lucas Velazquez TALE	DEC 06 2010 1340
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-27
		Page 1 of 1

Collector: CA Snyder, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA, OCTOBER 2010	Logbook No.: HNF-N-506 33, 79	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated_Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WP7	N	W	12-5-10	1140	1x20-mL P	Activity Scan MA24N	6 Months	None
B27WP7	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WP7	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WP7	N	W	12-5-10	1140	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
CA Snyder, CHPRC	DEC 05 2010 1430	SSU-1	DEC 05 2010 1430
SSU-1	DEC 06 2010 0800	B.E. Briggs, CHPRC	DEC 06 2010 0800
B.E. Briggs, CHPRC	DEC 06 2010 1340	Lucas Velazquez TAL	DEC 06 2010 1340

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-18
		Page 1 of 1

Collector: DJ Sparks ~~CHPRC~~	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2 IU6DURA OCTOBER 2010	Logbook No: HNF-N-506 32/77	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WN6	N	W	12/5/10	1401	1x20-mL P	Activity Scan MA24W	6 Months	None
B27WN6	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WN6	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27WN6	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: J0L080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
DJ Sparks ~~CHPRC~~ DJ Sparks	DEC 05 2010 1500	SSU #1	DEC 05 2010 1500
SSU #1	DEC 06 2010 0800	B.E. Briggs CHPRC BeBriggs	DEC 06 2010 0800
B.E. Briggs CHPRC BeBriggs	DEC 06 2010 1340	Lucas Velazquez Lucas Velazquez TALP	DEC 06 2010 1340
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

A-6004-842 (REV 2)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-005-23
		Page 1 of 1

Collector: S.J. Southerland	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X11-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_OCTOBER 2010	Logbook No.: HNF-N-506 25 / 89	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated_Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days **PRIORITY**	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site Wide Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401922.
Please report all TICs.
LV 12/8/10

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27WP2	N	W	12/5/10	1153	1x20-mL P	Activity Scan ~~MA2HG~~ MA3D1	6 Months	None
B27WP2	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27WP2	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2

SDG: W06077
LOT: JOL080557

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
S.J. Southerland CHPRC	DEC 05 2010 1430	SSU- 1	1430 DEC 05 2010
SSU- 1	0600 DEC 06 2010	B.E. Briggs CHPRC	0800 DEC 06 2010
B.E. Briggs CHPRC	DEC 06 2010 1340	Lucia Velazquez TALR	DEC 06 2010 1340
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

A-6004-842 (REV 2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 12/6/10 @ 1340 GM Screen Result (out) .4 (in) .5 Initials [LV]

Client: PGW SDG #: WO 6077 NA [ ] SAF #: X11-005 NA [ ]

Work Order Number: JOL080557 Chain of Custody # X11-005-32, 69, 70, 229, 59, 189, 34,

Shipping Container ID: Hand Delivery NA [✓] Air Bill # 50, 179, 79, 40, 209, 49, 27, 23, 18 [✓]

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

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

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 16 @ 1-VOA 3-4LP 2-1LP per sample

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

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

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

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

    RPL ID # of preservative used : _____

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

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

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

See other side for additional comments

Sample Custodian: [signature] Date: 12/6/10

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

[ ] No action necessary; process as is

Project Manager [signature] Date 12/9/10

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CHPRC JOL100641

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-006-108

Page 1 of 1

Collector: CA Snyder ~~CHPRC~~	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300206ES20
Project Title: 300DURA OCTOBER 2010	Logbook No: HNF-N-506 33 / 82	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B286K5	N	W	12/09/10	1042	1x20-mL P	Activity Scan MARRT	6 Months	None
B286K5	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Quote #57671
SDG #W06077
LOT #JOL100641
Report: 1/24/10
PGW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 0 9 2010 1320	AR McIntyre			DEC 0 9 2010 1320
AR McIntyre			12-9-10 1400	Lucas Velazquez		TALP	12-9-10 1400

Matrix *

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

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

A-6004-842 (05/10)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-006-80
		Page 1 of 1

Collector: CA Snyder CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300206ES20
Project Title: 300DURA OCTOBER 2010	Logbook No: HNF-N-506 33 / 82	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B286D5	N	W	12/09/10	0930	1x20-mL P	Activity Scan MA7RD	6 Months	None
B286D5	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
REC: 12/9/10

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

Matrix *

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

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

A-6004-842 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 12/9/10 @ 1420 GM Screen Result (out) .2 (in) .3 Initials [LW]

Client: PGW SDG #: WD6077 NA [ ] SAF #: X11-006 NA [ ]

Work Order Number: JDL100641 Chain of Custody # X11-006-108,80

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

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

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

See other side for additional comments

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

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

[✓] No action necessary; process as is

Project Manager [signature] Date 12/13/10

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CHPRC JOL140536

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X11-006-100

Page 1 of 1

Collector: CA Snyder ~~CHPRC~~	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X11-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300206ES20
Project Title: 300DURA OCTOBER 2010	Logbook No.: HNF-N-506 25 / 90	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days PRIORITY	Offsite Property No.: N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B286J5	N	W	12/07/10	1301	1x20-mL P	Activity Scan MCCLS	6 Months	None
B286J5	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

Quote #57671
SDG #W06077
LOT # JOL140536
Report: 1/21/11
PGW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 0 7 2010 1400	AMCSI	Gerald Anzo		DEC 0 7 2010 1400

Matrix *

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

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

A-6004-842 (05/10)

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X11-006-147
		Page 1 of 1

Collector CA Snyder CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X11-006	Sampling Origin Hanford Site	Purchase Order/Charge Code 300206ES20
Project Title 300DURA OCTOBER 2010	Logbook No: HNF-N-506 25 / 90	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 30 Days PRIORITY	Offsite Property No. N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B28D48	N	W	12/07/10	0715	1x20-mL P	Activity Scan MCCMG	6 Months	None
B28D48	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

SDG: W06077
LOT: J0L140536

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CA Snyder CHPRC			DEC 0 7 2010 1400				DEC 0 7 2010 1400
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

A-6004-842 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date-Time Received: 12/07/10 @ 1400 GM Screen Result (out) .3 (in) .5 Initials [LV]

Client: PGW SDG #: W06077 NA [ ] SAF #: X11-006 NA [ ]

Work Order Number: JOL140536 Chain of Custody # X11-006-100; 147

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

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

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

See other side for additional comments

Sample Custodian: [signature] Date: 12/7/10

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

[✓] No action necessary; process as is

Project Manager [signature] Date 12/16/10

LS-023, Rev. 12, 10/10

12/30/2010 12:27:32 PM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011 W06077

Sep1 DT/Tm Tech:

Batch: 0363129 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WagarC Back 9

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MA2PK-1-AC J0L080557-1-SAMP 12/05/2010 12:50			2003.50g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2003.50g #Containers: 6		100mL	200	610	1539	1/6/11	
								Scr:	Alpha: 1.74E-03 uCi/Sa	Beta: -3.00E-04 uCi/Sa	
2 MA2T0-1-AC J0L080557-2-SAMP 12/05/2010 10:21			2003.10g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2003.10g #Containers: 6				65	1742		
								Scr:	Alpha: -1.69E-03 uCi/Sa	Beta: 2.85E-03 uCi/Sa	
3 MA2T0-1-AE-X J0L080557-2-DUP 12/05/2010 10:21			ISV AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				1/6/6 GH 67	2113	1/6/11 0XR	
								Scr:	Alpha: -1.69E-03 uCi/Sa	Beta: 2.85E-03 uCi/Sa	
4 MA2XX-1-AC J0L080557-3-SAMP 12/05/2010 07:30			2001.40g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2001.40g #Containers: 6				614	1742	1/6/11	
								Scr:	Alpha: -1.76E-04 uCi/Sa	Beta: -8.99E-04 uCi/Sa	
5 MA22V-1-AC J0L080557-4-SAMP 12/05/2010 10:33			1999.80g,in AmtRec: 1XVIAL;2X1LP;3X4LP	1999.80g #Containers: 6				67	1743		
								Scr:	Alpha: 9.17E-05 uCi/Sa	Beta: -3.00E-04 uCi/Sa	
6 MA22X-1-AC J0L080557-5-SAMP 12/05/2010 09:22			2001.90g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2001.90g #Containers: 6				611	1743		
								Scr:	Alpha: 4.18E-04 uCi/Sa	Beta: 6.00E-04 uCi/Sa	
7 MA222-1-AC J0L080557-6-SAMP 12/05/2010 13:46			2004.60g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2004.60g #Containers: 6				G10	1949	1/6/11 0XR	
								Scr:	Alpha: -1.08E-03 uCi/Sa	Beta: 2.10E-03 uCi/Sa	

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

12/30/2010 12:27:33 PM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363129 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WagarC

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
~~8 MA224-1-AC~~ J0L080557-7-SAMP 12/05/2010 12:38			2001.00g,in	2001.00g		100mL	200	G14	2114	1/6/11 MP	
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: -1.26E-03 uCi/Sa	Beta: 1.20E-03 uCi/Sa	
9 MA226-1-AC J0L080557-8-SAMP 12/05/2010 08:45			2000.60g,in	2000.60g				G11	2115		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: -2.69E-05 uCi/Sa	Beta: -8.98E-04 uCi/Sa	
~~10 MA227-1-AC~~ J0L080557-9-SAMP 12/05/2010 11:40			2000.40g,in	2000.40g				G5	2116		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: -1.71E-03 uCi/Sa	Beta: 4.49E-04 uCi/Sa	
11 MA23D-1-AC J0L080557-10-SAMP 12/05/2010 10:57			2002.30g,in	2002.30g				G10	2318		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: -1.14E-03 uCi/Sa	Beta: 1.80E-03 uCi/Sa	
12 MA230-1-AC J0L080557-11-SAMP 12/05/2010 07:00			2000.40g,in	2000.40g				G14	0047		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: -5.71E-04 uCi/Sa	Beta: 1.50E-04 uCi/Sa	
13 MA24G-1-AC J0L080557-12-SAMP 12/05/2010 13:44			2000.40g,in	2000.40g				G11	0047		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: 6.24E-04 uCi/Sa	Beta: 1.65E-03 uCi/Sa	
14 MA24K-1-AC J0L080557-13-SAMP 12/05/2010 08:45			1996.10g,in	1996.10g				G7	0048		
			AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6				Scr:	Alpha: 1.41E-03 uCi/Sa	Beta: -4.50E-04 uCi/Sa	

1/6/2011 11:40:53 AM

Sample Preparation/Analysis

Balance Id:1117411003

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363129 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WagarC

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MA24N-1-AC J0L080557-14-SAMP 12/05/2010 11:40			2004.10g,in AmtRec: 1XVIAL;2X1LP;3X4LP	2004.10g #Containers: 6		100 mL	200	G10 Scr: Alpha: -2.39E-06 uCi/Sa	0244 Beta: 7.49E-04 uCi/Sa	1/6/11	
16 MA24W-1-AC J0L080557-16-SAMP 12/05/2010 14:01			1999.20g,in AmtRec: 1XVIAL;2X1LP;3X4LP	1999.20g #Containers: 6				G10 Scr: Alpha: -6.96E-04 uCi/Sa	0739 Beta: 1.80E-03 uCi/Sa	1/7/11	
17 MA3D1-1-AC J0L080557-17-SAMP 12/05/2010 11:53			1999.80g,in AmtRec: 1XVIAL;2X1LP;1X4LP	1999.80g #Containers: 4				G11 Scr: Alpha: -8.80E-04 uCi/Sa	0739 Beta: 1.42E-03 uCi/Sa		
18 MCVTF-1-AA-B J0L290000-129-BLK 12/29/2010 09:10 pd			2005.90g,in AmtRec:	2005.90g #Containers: 1				G14 Scr: Alpha:	0740 Beta:		
19 MCVTF-1-AC-C J0L290000-129-LCS 12/29/2010 09:10 pd			2001.00g,in AmtRec:	2001.00g #Containers: 1	QCAG1690 09/16/10,pd 11/07/03,r			G7 Scr: Alpha:	0740 Beta:		

Comments: PH <2.0. No Dup. due to I.S.V. Please recount on diff. detector. JB 1-6-11

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

MA2PK1AC-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:

12/30/2010 12:27:34 PM

Sample Preparation/Analysis

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

Balance Id:1117411003

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363129 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WagarC

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Cs-137	RDL:6.00E+00	pCi/L	LCL: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:
MCVTF1AA-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:
MCVTF1AC-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						

MA2PK1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MCVTF1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MCVTF1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

1/11/2011 11:12:33 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/11/2010, 1/16/2011, Batch: '0363129', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0363129						
AC		Rev1C	WagarC	12/30/2010 11:51:26		
SC			wagarr	IsBatched	12/29/2010 9:11:38 AM	ICOC_RADCALC v4.8.49
SC			WagarC	InPrep	12/30/2010 11:51:26 AM	RL-PRP-004 REVISION 1
SC			WagarC	InPrep2	1/3/2011 7:04:32 AM	RL-GAM-001 REVISION 1
SC			BockJ	InPrep2	1/3/2011 12:37:14 PM	RL-GAM-001 REVISION 1
SC			BockJ	Prep2C	1/6/2011 11:42:31 AM	RL-GAM-001 REVISION 1
SC			BlackCL	InCnt1	1/6/2011 12:18:19 PM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	1/7/2011 9:10:53 AM	RL-CI-007 REVISION 1
SC			whelands	Rev1C	1/10/2011 3:43:00 PM	RL-DR-001 Rev 2
SC			antonsonl	Rev1C	1/11/2011 11:11:58 AM	RL-DR-001 Rev 2
AC			WagarC	1/3/2011 7:04:32 AM		
AC			BockJ	1/3/2011 12:37:14 PM		
AC			BockJ	1/6/2011 11:42:31		
AC			BlackCL	1/6/2011 12:18:19 PM		
AC			BlackCL	1/7/2011 9:10:53 AM		
AC			whelands	1/10/2011 3:43:00 PM		
AC			antonsonl	1/11/2011 11:11:58		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 8

ICOCFractions v4.8.44

12/30/2010 5:29:56 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011 WO 6077

Sep1 DT/Tm Tech:

Batch: 0363125 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 0363125 BNTB, 0363129 AWTA, 0363134 5SS3,

Prep Tech: ,ONeilID

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MA2PK-1-AD J0L080557-1-SAMP 12/05/2010 12:50		3807.70g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10293 12/08/10 #Containers: 6		0.1198 g - 0.0840 g = 35.8 mg	200	LH Scr:	2059 Alpha: 1.74E-03 uCi/Sa	1/7/11 OAL Beta: -3.00E-04 uCi/Sa	
2 MA2T0-1-AD J0L080557-2-SAMP 12/05/2010 10:21		3833.60g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10294 12/08/10 #Containers: 6		0.1218 g - 0.0865 g = 35.3 mg		L5 Scr:	2100 Alpha: -1.69E-03 uCi/Sa	Beta: 2.85E-03 uCi/Sa	
3 MA2XX-1-AD J0L080557-3-SAMP 12/05/2010 07:30		3585.20g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10295 12/08/10 #Containers: 6		0.1245 g - 0.0886 g = 35.9 mg		L4 Scr:	0023 Alpha: -1.76E-04 uCi/Sa	Beta: -8.99E-04 uCi/Sa	
4 MA22V-1-AD J0L080557-4-SAMP 12/05/2010 10:33		3828.40g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10296 12/08/10 #Containers: 6		0.1224 g - 0.0876 g = 34.8 mg		L5 Scr:	0025 Alpha: 9.17E-05 uCi/Sa	Beta: -3.00E-04 uCi/Sa	
5 MA22X-1-AD J0L080557-5-SAMP 12/05/2010 09:22		3763.70g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10297 12/08/10 #Containers: 6		0.1207 g - 0.0850 g = 35.7 mg		L4 Scr:	0057 Alpha: 4.18E-04 uCi/Sa	1/8/16 Beta: 6.00E-04 uCi/Sa	
6 MA222-1-AD J0L080557-6-SAMP 12/05/2010 13:46		3889.80g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10298 12/08/10 #Containers: 6		0.1191 g - 0.0834 g = 35.7 mg		L5 Scr:	0058 Alpha: -1.08E-03 uCi/Sa	Beta: 2.10E-03 uCi/Sa	
7 MA224-1-AD J0L080557-7-SAMP 12/05/2010 12:38		3685.30g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10299 12/08/10 #Containers: 6		0.1188 g - 0.0831 g = 35.7 mg		L5 Scr:	0005 Alpha: -1.26E-03 uCi/Sa	1/10/11 Beta: 1.20E-03 uCi/Sa	

12/30/2010 5:29:59 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363125 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,ONeilID

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MA226-1-AD J0L080557-8-SAMP 12/05/2010 08:45		3808.40g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10300 12/08/10 #Containers: 6	0.1185g -0.0825g = 36.0mg		200	L5	1123	1/10/11 s	
							Scr:	Alpha: -2.69E-05 uCi/Sa	Beta: -8.98E-04 uCi/Sa	
9 MA227-1-AD J0L080557-9-SAMP 12/05/2010 11:40		3844.70g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10301 12/08/10 #Containers: 6	0.1223g -0.0865g = 35.8mg			L5	1448	1/10/11 [illegible]	
							Scr:	Alpha: -1.71E-03 uCi/Sa	Beta: 4.49E-04 uCi/Sa	
10 MA23D-1-AD J0L080557-10-SAMP 12/05/2010 10:57		3726.10g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10302 12/08/10 #Containers: 6	0.1239g -0.0882g = 35.7mg			L5	1854	1/10/11 OD	
							Scr:	Alpha: -1.14E-03 uCi/Sa	Beta: 1.80E-03 uCi/Sa	
11 MA230-1-AD J0L080557-11-SAMP 12/05/2010 07:00		3833.10g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10303 12/08/10 #Containers: 6	0.1229g -0.0872g = 35.7mg			L5	2220	1/10/11 OD	
							Scr:	Alpha: -5.71E-04 uCi/Sa	Beta: 1.50E-04 uCi/Sa	
12 MA24G-1-AD J0L080557-12-SAMP 12/05/2010 13:44		3837.80g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10304 12/08/10 #Containers: 6	0.1183g 0.0848g = 33.5mg			L5	0210	↓	
							Scr:	Alpha: 6.24E-04 uCi/Sa	Beta: 1.65E-03 uCi/Sa	
13 MA24K-1-AD J0L080557-13-SAMP 12/05/2010 08:45		3794.90g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10305 12/08/10 #Containers: 6	0.1236g 0.0886g = 35.0mg			L4	0700	1/11/11 s	
							Scr:	Alpha: 1.41E-03 uCi/Sa	Beta: -4.50E-04 uCi/Sa	
14 MA24N-1-AD J0L080557-14-SAMP 12/05/2010 11:40		3861.60g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10306 12/08/10 #Containers: 6	0.1178g 0.0821g = 35.7mg			L5	0700		
							Scr:	Alpha: -2.39E-06 uCi/Sa	Beta: 7.49E-04 uCi/Sa	

TestAmerica Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2 ISV - Insufficient Volume for Analysis WO Cnt: 14
Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.49

12/30/2010 5:30:00 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363125 WATER pCi/L PM, Quote: SS , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,ONeillD

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 MA24W-1-AD J0L080557-16-SAMP 12/06/2010 14:01		3811.40g,in AmtRec: 1XVIAL;2X1LP;3X4LP	ITA10307 12/08/10 #Containers: 6	0.1183 g - 0.0823 g = 36.0 mg		200	L4	1102	1/11/11	Scr: Alpha: -6.96E-04 uCi/Sa Beta: 1.80E-03 uCi/Sa
16 MA7RT-1-AA J0L100641-1-SAMP 12/09/2010 10:42		3812.20g,in AmtRec: 1XVIAL;2X4LP	ITA10308 12/08/10 #Containers: 3	0.1184 g - 0.0829 g = 35.5 mg			L5	1102		Scr: Alpha: 1.81E-03 uCi/Sa Beta: -3.99E-04 uCi/Sa
17 MA7RT-1-AC-X J0L100641-1-DUP 12/09/2010 10:42		3787.70g,in AmtRec: 1XVIAL;2X4LP	ITA10309 12/08/10 #Containers: 3	0.1196 g - 0.0837 g = 35.9 mg			L4	1655	1/11/11	Scr: Alpha: 1.81E-03 uCi/Sa Beta: -3.99E-04 uCi/Sa
18 MA7R0-1-AA J0L100641-2-SAMP 12/09/2010 09:30		3844.10g,in AmtRec: 1XVIAL;2X4LP	ITA10310 12/08/10 #Containers: 3	0.1221 g - 0.0861 g = 36.0 mg			L5	1656		Scr: Alpha: -1.18E-04 uCi/Sa Beta: 1.40E-03 uCi/Sa
19 MCCL8-1-AA J0L140536-1-SAMP 12/07/2010 13:01		3808.20g,in AmtRec: 1XVIAL;2X4LP	ITA10311 12/08/10 #Containers: 3	0.1191 g - 0.0831 g = 36.0 mg			L4	2022		Scr: Alpha: Beta:
20 MCCMG-1-AA J0L140536-2-SAMP 12/07/2010 07:15		3829.40g,in AmtRec: 1XVIAL;2X4LP	ITA10312 12/08/10 #Containers: 3	0.1225 g - 0.0877 g = 34.8 mg			L5	2023		Scr: Alpha: Beta:
21 MCVTC-1-AA-B J0L290000-125-BLK 12/29/2010 09:10 pd		3891.30g,in AmtRec:	ITA10313 12/08/10 #Containers: 1	0.1180 g - 0.0822 g = 35.8 mg			L4	0008		Scr: Alpha: Beta:

12/30/2010 5:30:01 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 01/10/2011

Sep1 DT/Tm Tech:

Batch: 0363125 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,ONeillD

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:
22 MCVTC-1-AC-C		3892.40g,in	ISD1175	0.1191 g			L5	0009	1/11/10	
J0L290000-125-LCS			10/16/10	0.0830 g	36.1 mg	200				
12/29/2010 09:10 pd		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

Comments:

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

MA2PK1AD-SAMP Constituent List:

I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
MCVTC1AA-BLK:					
I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
MCVTC1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

MA2PK1AD-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MCVTC1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MCVTC1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

1/18/2011 11:21:13 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/18/2010, 1/23/2011, Batch: '0363125', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0363125						
AC		Rev1C	ONeillD	12/29/2010 4:30:28		
SC			wagarr	IsBatched	12/29/2010 9:11:38 AM	ICOC_RADCALC v4.8.49
SC			ONeillD	InPrep	12/29/2010 4:30:28 PM	RL-PRP-004 REVISION 1
SC			ONeillD	InPrep2	1/3/2011 2:44:23 PM	RL-GAM-002 REVISION 1
SC			ONeillD	Prep2C	1/7/2011 5:26:42 PM	RL-GAM-002 REVISION 1
SC			DAWKINSO	InCnt1	1/7/2011 5:41:35 PM	RL-CI-007 REVISION 1
SC			ClarkR	CalcC	1/12/2011 2:57:05 PM	RL-CI-007 REVISION 1
SC			antonsonl	Rev1C	1/18/2011 11:21:03 AM	RL-DR-001 Rev 2
AC			ONeillD	1/3/2011 2:44:23 PM		
AC			ONeillD	1/7/2011 5:26:42 PM		
AC			DAWKINSO	1/7/2011 5:41:35 PM		
AC			ClarkR	1/12/2011 2:57:05 PM		
AC			antonsonl	1/18/2011 11:21:03		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

5,28

12/29/2010 9:10:25 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 01/10/2011 WO6077

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

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

Batch: 0363134 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MA2PK-1-AA								
J0L080557-1-SAMP								
12/05/2010 12:50		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
2 MA2PK-1-AE-X								
J0L080557-1-DUP								
12/05/2010 12:50		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
3 MA2T0-1-AA								
J0L080557-2-SAMP								
12/05/2010 10:21		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
4 MA2XX-1-AA								
J0L080557-3-SAMP								
12/05/2010 07:30		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
5 MA22V-1-AA								
J0L080557-4-SAMP								
12/05/2010 10:33		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
6 MA22X-1-AA								
J0L080557-5-SAMP								
12/05/2010 09:22		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
7 MA222-1-AA								
J0L080557-6-SAMP								
12/05/2010 13:46		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa

12/29/2010 9:10:26 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

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

AnalyDueDate: 01/10/2011

Batch: 0363134 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MA224-1-AA J0L080557-7-SAMP 12/05/2010 12:38		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
9 MA226-1-AA J0L080557-8-SAMP 12/05/2010 08:45		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
10 MA227-1-AA J0L080557-9-SAMP 12/05/2010 11:40		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha: 0.00E+00 uCi/Sa	Beta: 0.00E+00 uCi/Sa
11 MA23D-1-AA J0L080557-10-SAMP 12/05/2010 10:57		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
12 MA230-1-AA J0L080557-11-SAMP 12/05/2010 07:00		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
13 MA24G-1-AA J0L080557-12-SAMP 12/05/2010 13:44		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
14 MA24K-1-AA J0L080557-13-SAMP 12/05/2010 08:45		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:

12/29/2010 9:10:26 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 01/10/2011

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

Batch: 0363134 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MA24N-1-AA J0L080557-14-SAMP 12/05/2010 11:40		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
16 MA24W-1-AA J0L080557-16-SAMP 12/05/2010 14:01		AmtRec: 1XVIAL;2X1LP;3X4LP	#Containers: 6			Scr:	Alpha:	Beta:
17 MA3D1-1-AA J0L080557-17-SAMP 12/05/2010 11:53		AmtRec: 1XVIAL;2X1LP;1X4LP	#Containers: 4			Scr:	Alpha:	Beta:
18 MCVTL-1-AA-B J0L290000-134-BLK 12/29/2010 09:10 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
19 MCVTL-1-AC-C J0L290000-134-LCS 12/29/2010 09:10 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
20 MCVTL-1-AD-BN J0L290000-134-IBLK 12/29/2010 09:10 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
21 MCVTL-1-AE-BN J0L290000-134-IBLK 12/29/2010 09:10 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

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

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ISV - Insufficient Volume for Analysis

WO Cnt: **21**
ICOC v4.8.49

12/29/2010 9:10:27 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 01/10/2011

Batch: 0363134 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

MA2PK1AA-SAMP Constituent List:
  C-14        RDL:2.00E+02    pCi/L     LCL:70      UCL:130     RPD:20
MCVTL1AA-BLK:

MCVTL1AC-LCS:

MCVTL1AD-IBLK:

MCVTL1AE-IBLK:

MA2PK1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MCVTL1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MCVTL1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MCVTL1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MCVTL1AE-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

1/7/2011 11:12:05 AM

ICOC Fraction Transfer/Status Report

ByDate: 1/7/2010, 1/12/2011, Batch: '0363134', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0363134						
AC		Rev1C	WagnerF	1/3/2011 3:04:21 PM		
SC			wagarr	IsBatched	12/29/2010 9:11:38 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	1/3/2011 3:04:21 PM	RL-LSC-008 REVISION 1
SC			BlackCL	InCnt1	1/4/2011 11:46:08 AM	RL-CI-005 REVISION 1
SC			BlackCL	CalcC	1/5/2011 11:11:19 AM	RL-CI-005 REVISION 1
SC			whelands	Rev1C	1/7/2011 11:11:49 AM	RL-DR-001 Rev 2
AC			BlackCL	1/4/2011 11:46:08		
AC			BlackCL	1/5/2011 11:11:19		
AC			whelands	1/7/2011 11:11:49		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 4

ICOCFractions v4.8.44