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: 45190

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06028	X10-081	B26566	J0I010454-1	L6EA61AA	9L6EA610	0279352
		B26566	J0I010454-1	L6EA61AC	9L6EA610	0279345
		B26566	J0I010454-1	L6EA61AD	9L6EA610	0279344
		B265V7	J0I010454-2	L6ECD1AA	9L6ECD10	0279352
		B265V7	J0I010454-2	L6ECD1AC	9L6ECD10	0279345
		B265V7	J0I010454-2	L6ECD1AD	9L6ECD10	0279344
	X10-072	B25M57	J0I010475-1	L6EGF1AA	9L6EGF10	0279344
	X10-099	B26M18	J0I080511-1	L6NGJ1AA	9L6NGJ10	0279352
		B26M18	J0I080511-1	L6NGJ1AC	9L6NGJ10	0279345
		B26M18	J0I080511-1	L6NGJ1AD	9L6NGJ10	0279344
	X10-081	B26537	J0I080556-1	L6NP41AA	9L6NP410	0279352
		B26537	J0I080556-1	L6NP41AC	9L6NP410	0279345
		B26537	J0I080556-1	L6NP41AD	9L6NP410	0279344
	X10-097	B26MC0	J0I080569-1	L6NTP1AA	9L6NTP10	0279344
	X10-107	B275K1	J0I080570-1	L6NTW1AA	9L6NTW10	0279352

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Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06028	X10-107	B275K1	J0I080570-1	L6NTW1AC	9L6NTW10	0279345
		B275K1	J0I080570-1	L6NTW1AD	9L6NTW10	0279344
		B275K1	J0I080570-1	L6NTW1AE	9L6NTW10	0279348
		B275L3	J0I080570-2	L6PFJ1AA	9L6PFJ10	0279352
		B275L3	J0I080570-2	L6PFJ1AC	9L6PFJ10	0279345
		B275L3	J0I080570-2	L6PFJ1AD	9L6PFJ10	0279344
		B275L3	J0I080570-2	L6PFJ1AE	9L6PFJ10	0279348
		B275M5	J0I080570-3	L6PGA1AA	9L6PGA10	0279352
		B275M5	J0I080570-3	L6PGA1AC	9L6PGA10	0279345
		B275M5	J0I080570-3	L6PGA1AD	9L6PGA10	0279344
		B275M5	J0I080570-3	L6PGA1AE	9L6PGA10	0279348
		B275N7	J0I080570-4	L6PGG1AA	9L6PGG10	0279352
		B275N7	J0I080570-4	L6PGG1AC	9L6PGG10	0279345
		B275N7	J0I080570-4	L6PGG1AD	9L6PGG10	0279344
		B275N7	J0I080570-4	L6PGG1AE	9L6PGG10	0279348
		B275R5	J0I080570-5	L6PGK1AA	9L6PGK10	0279352
		B275R5	J0I080570-5	L6PGK1AC	9L6PGK10	0279345
		B275R5	J0I080570-5	L6PGK1AD	9L6PGK10	0279344
		B275R5	J0I080570-5	L6PGK1AE	9L6PGK10	0279348
		B275T1	J0I080570-6	L6PGX1AA	9L6PGX10	0279352
		B275T1	J0I080570-6	L6PGX1AC	9L6PGX10	0279345
		B275T1	J0I080570-6	L6PGX1AD	9L6PGX10	0279344
		B275T1	J0I080570-6	L6PGX1AE	9L6PGX10	0279348
		B27621	J0I080570-7	L6PG21AA	9L6PG210	0279352
		B27621	J0I080570-7	L6PG21AC	9L6PG210	0279345
		B27621	J0I080570-7	L6PG21AD	9L6PG210	0279344

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W06028	X10-107	B27621	J0I080570-7	L6PG21AE	9L6PG210	0279348

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

November 19, 2010

Attention: Mike Neely

SAF Number	:	X10-081, X10-072, X10-099, X10-097, X10-107
Date SDG Closed	:	September 13, 2010
Number of Samples	:	Thirteen (13)
Sample Type	:	Water
SDG Number	:	W06028
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between August 30, 2010 and September 3, 2010 thirteen 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
B26566	L6E46	08/30/10	WATER
B265V7	L6ECD	08/30/10	WATER
B25M57	L6EGF	08/30/10	WATER
B26M18	L6NGJ	09/02/10	WATER
B26537	L6NP4	09/02/10	WATER
B26MC0	L6NTP	09/03/10	WATER
B275K1	L6NTW	09/03/10	WATER
B275L3	L6PFJ	09/03/10	WATER
B275M5	L6PGA	09/03/10	WATER
B275N7	L6PGG	09/03/10	WATER
B275R5	L6PGK	09/03/10	WATER
B275T1	L6PGX	09/03/10	WATER
B27621	L6PG2	09/03/10	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)*
Nickel-63 by method RL-LCS-017 (RICH-RC-5069)*

*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 B26537 was recounted on a different detector for the duplicate (B26537 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B26537) results are within contractual requirements.

Iodine-129 (LL) by method RL-GAM-002 (RICH-RC-5025):
The LCS, batch blank, samples and sample duplicate (B26MC0) 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 (B26566) results are within contractual requirements.

Nickel-63 by method RL-LCS-017 (RICH-RC-5069):
The LCS, batch blank, sample and sample duplicate (B275K1) 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/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Asbestos	RL-ASB-001	N/A	NIOSH 7400	Fiber Counting by Phase Contrast Microscopy based on NIOSH 7400
Asbestos	RL-ASB-002	N/A	NIOSH 9002	Sample Prep and Analysis for Asbestos (bulk) by Polarized Light Microscopy based on NIOSH 9002
Alpha - Gross	ARCHIVED	RICH-RB-5035	Liquid Scintillation Anal/ Packard	DETERMINATION OF GROSS ALPHA IN NASAL SMEARS BY LIQUID SCINTILLATION COUNTING
Alpha - Gross	RL-GPC-001	RICH-RC-5014	9310 / EPA SW846 900.0 / EPA 600	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN WATER BY METHOD 9310
Alpha - Gross	RL-GPC-007	RICH-RC-5020	SM 7110B EPA 680	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN SOIL, SHORELINE SOIL, FOOD AND VEGETATION
Alpha - Gross	RL-GPC-002	RICH-RC-5021	00-02 EPA 520	DETERMINATION OF GROSS ALPHA ACTIVITY IN WATER BY COPRECIPITATION
Alpha - Gross	RL-GPC-008	RICH-RC-5036	ER100 / LANL	PREPARATION OF AIR FILTERS FOR GROSS ALPHA/BETA AND COMPOSITING AIR FILTERS
Am	RL-ALP-005	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-5015	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-5015	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 LV339	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 LV339 / 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 339	DETERMINATION OF TRITIUM BY CRYOGENIC DISTILLATION
H3	RL-LSC-006	RICH-RC-5048	H-3 in Water/Tissue / LV 339	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
Metals	RL-MT-001	RICH-MT-0001	6010B	ICP-AES for TRACE ELEMENT ANALYSIS, METHOD 6010B

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Metals	RL-MT-002	RICH-MT-0002	SW846 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 Mod Fe05/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-013	RICH-RC-5076	EXT Chromatography	DETERMINATION OF LEAD-210 BY EXTRACTION CHROMATOGRAPHY
Po	RL-ALP-007	RICH-RB-5001	NAS-NS-3037 HASL 300	DETERMINATION OF POLONIUM-210 IN URINE
Po	RL-ALP-012	RICH-RC-5012	Po-01 / HASL 300 Mod U01 HASL 300	SEPARATION OF ISOTOPIC URANIUM AND POLONIUM-210 IN WATER, SOIL AND FILTERS
Prep - Bioassay	ARCHIVED	RICH-RB-0001		PREPARATION FOR RAPID BIOASSAY ANALYSES
Prep - Bioassay	RL-PRP-001	RICH-RB-5002	Mod Pu06 / HASL 300	PREPARATION OF URINE AND BLOOD SAMPLES
Prep - Bioassay	ARCHIVED	RICH-RB-5004	ASTM D1429-95	DETERMINATION OF SPECIFIC GRAVITY OF URINE
Prep - Bioassay	RL-RPL-002	RICH-RB-5036	Pub 6490,6601 / PNL	PREPARATION OF SYNTHETIC URINE AND FECES USING RECIPES FROM HPS N13.30 PREFORMANCE TESTING
Prep - Bioassay	RL-PRP-002	RICH-RB-5037	LA-10300-M R200 ASTM D3865	PREPARATION OF FECAL SAMPLES USING HYDROFLUORIC ACID DIGESTION
Prep - Bioassay	RL-RPL-003	RICH-RC-5028	ICRP Publication 23	PREPARATION OF SYNTHETIC URINE AND FECES
Prep - Count	RL-ALP-016	RICH-RC-5003	G-03 / HASL 300	COPRECIPITATION OF SOME ACTINIDES ON NEODYMIUM FLUORIDE FOR ALPHA-PARTICLE SPECTROMETRY
Prep - Count	RL-ALP-015	RICH-RC-5039	G-03 / HASL 300 Anal Chem 1972	ELECTRODEPOSITION OF ACTINIDES
Prep - Count	RL-ALP-014	RICH-RC-5085	Morrison & Freiser NAS-NS-3050	ANHYDROUS ETHER EXTRACTION OF URANIUM
Prep - Env	RL-KPA-001	RICH-RC-5015	ASTM / D5174-97	ENVIRONMENTAL SAMPLE PREPARATION FOR URANIUM BY LASER-INDUCED PHOSPHORESCENCE
Prep - Env	RL-PRP-004	RICH-RC-5016	Sr02 / HASL 300	PREPARATION OF ENVIRONMENTAL MATRICES
Prep - Env	RL-PRP-007	RICH-RC-5045	Mod Pu02 / HASL 300	PREPARATION OF MIXED BED RESINS AND PRE-FILTERS
Prep - Env	RL-PRP-008	RICH-RC-5068	Mod ER100 / LA10300	PREPARATION OF SOIL, VEGETATION AND AIR FILTERS BY MIXED STRONG ACID LEACHING
Prep - Resin	RL-ALP-017	RICH-RC-5018	Mod Pu11 / Mod 300	ION-EXCHANGE PREPARATION
Prep - Soil	RL-PRP-003	RICH-RC-5013	Pu02A / HASL 300	PREPARATION OF SOIL SAMPLES
Prep - Soil	RL-PRP-005	RICH-RC-5019	D5259 / ASTM SW 846/3015/3051/3052	PREPARATION AND DISSOLUTION OF SEDIMENTS AND SOIL BY MICROWAVE BOMB DIGESTION
Prep - Soil	RL-PRP-006	RICH-RC-5032	Pu02A / HASL 300	COMPLETE DISSOLUTION BY MIXED ACIDS IN A TEFLON BEAKER
Prep - Soil	RL-PRP-009	RICH-RC-5077	Mod ER100 / LA10300	PREPARATION OF SMALL SOIL SAMPLES FOR GAMMA SPEC AND/OR RADIOCHEM ANAL BY ACID DIGESTION
Prep - Urine	RL-PRP-010	RICH-RC-5086	AnalyticaChemActa1992 RP800 / DOE0089T	URINE AND WATER SAMPLE PREPARATION BY CALCIUM PHOSPHATE PRECIPITATION
Prep - Water	RL-PRP-010	RICH-RC-5086	AnalyticaChemActa1992 RP800 / DOE0089T	URINE AND WATER SAMPLE PREPARATION BY CALCIUM PHOSPHATE PRECIPITATION
Pu	ARCHIVED	RICH-RB-5015	Pu11 / HASL 300	RAPID DETERMINATION OF PLUTONIUM IN FECES
Pu	RL-ALP-002	RICH-RC-5010	Pu11 / HASL 300	DETERMINATION OF ISOTOPIC PLUTONIUM IN ALL MATRICES
Pu	RL-ALP-010	RICH-RC-5080	Am05 HASL 300 Pu11 / HASL 300	SEQUENTIAL SEPARATION OF PLUTONIUM AND AMERICIUM
Pu	RL-ALP-001	RICH-RC-5087	AnalyticaChemActa1992 RP800 / DOE0089T	DETERMINATION OF PLUTONIUM BY EXTRACTION CHROMATOGRAPHY
Ra	RL-RA-001	RICH-RC-5005	903.1 / EPA 600	RADIUM-226 AND RADIUM-228 SEPARATION IN RADIOCHEMICAL MATRICES - ADAPTED FROM EPA 903.1 AND 904.0
Ra	RL-RA-001	RICH-RC-5005	904.0 / EPA 600	RADIUM-226 AND RADIUM-228 SEPARATION IN RADIOCHEMICAL MATRICES - ADAPTED FROM EPA 903.1 AND 904.0
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

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
S35	ARCHIVED	RICH-RB-5020	Hillebrand, Lundell, 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 RF550 / 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 RF725 / DOE0089T	SEPARATION OF URANIUM BY EXTRACTION CHROMATOGRAPHY
U	RL-ALP-003	RICH-RC-5072	EXT Chrom Mod RF725 & 800 / DOE0089T	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
U	RL-ALP-009	RICH-RC-5079	EXT Chromatography Mod RF725 / DOE0089T	DETERMINATION OF ISOTOPIC URANIUM IN ALL MATRICES

11/19/2010 7:46:55 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.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:
9L6EA610	B26566		MW6-SBB-A1	X10-081	W06028					08/29/2010 08:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	1.17E+01	pCi/L	3.8E+00	4.3E+00		8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 00:27	I
0279345	BE-7	13966-02-4	-7.68E+00	pCi/L	2.6E+01	2.6E+01	U	4.47E+01		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	CO-60	10198-40-0	7.97E-02	pCi/L	1.8E+00	1.8E+00	U	3.27E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	CS-134	13967-70-9	9.83E-01	pCi/L	1.8E+00	1.8E+00	U	3.49E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	CS-137	10045-97-3	-1.47E+00	pCi/L	1.7E+00	1.7E+00	U	2.71E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	EU-152	14683-23-9	7.72E-01	pCi/L	4.0E+00	4.0E+00	U	7.27E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	EU-154	15585-10-1	-4.79E+00	pCi/L	5.1E+00	5.1E+00	U	8.01E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	EU-155	14391-16-3	-9.07E-01	pCi/L	3.2E+00	3.2E+00	U	5.40E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	K-40	13966-00-2	-3.21E+01	pCi/L	3.7E+01	3.7E+01	U	7.39E+01		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	RU-106	13967-48-1	1.09E+01	pCi/L	1.7E+01	1.7E+01	U	3.16E+01		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279345	SB-125	14234-35-6	-2.56E+00	pCi/L	4.0E+00	4.0E+00	U	6.73E+00		GAMMALL_GS	2.0037E+00	L	10/29/2010 11:10	I
0279344	I-129	15046-84-1	3.74E+00	pCi/L	5.4E-01	5.4E-01		2.46E-01	93.2	I129LL_SEP_LEPS	3.8817E+00	L	11/12/2010 09:24	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6ECD10	B265V7		MW6-SBB-A1	X10-081	W06028					08/29/2010 13:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	2.21E+00	pCi/L	3.5E+00	4.0E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 01:53	I
0279345	BE-7	13966-02-4	4.42E+00	pCi/L	2.4E+01	2.4E+01	U	4.15E+01		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	CO-60	10198-40-0	1.07E+00	pCi/L	1.9E+00	1.9E+00	U	3.57E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	CS-134	13967-70-9	-1.60E+00	pCi/L	1.8E+00	1.8E+00	U	2.89E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	CS-137	10045-97-3	7.82E-01	pCi/L	1.5E+00	1.5E+00	U	2.75E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	EU-152	14683-23-9	-1.66E+00	pCi/L	4.1E+00	4.1E+00	U	6.77E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	EU-154	15585-10-1	-6.45E+00	pCi/L	5.1E+00	5.1E+00	U	7.68E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	EU-155	14391-16-3	-4.83E-01	pCi/L	3.8E+00	3.8E+00	U	6.36E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	K-40	13966-00-2	-2.96E+01	pCi/L	4.8E+01	4.8E+01	U	9.91E+01		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	RU-106	13967-48-1	-2.39E+00	pCi/L	1.4E+01	1.4E+01	U	2.51E+01		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279345	SB-125	14234-35-6	-1.77E+00	pCi/L	3.6E+00	3.6E+00	U	6.18E+00		GAMMALL_GS	2.0002E+00	L	10/29/2010 11:10	I
0279344	I-129	15046-84-1	2.46E-02	pCi/L	9.1E-02	9.1E-02	U	1.68E-01	94.1	I129LL_SEP_LEPS	3.893E+00	L	11/12/2010 09:24	I

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

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.

11/19/2010 7:46:55 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

9L6EGF10 B25M57 MW6-SBB-A1 X10-072 W06028 08/26/2010 10:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279344	I-129	15046-84-1	5.60E-02	pCi/L	1.2E-01	1.2E-01	U	2.15E-01	94.1	I129LL_SEP_LEPS	3.8924E+00	L	11/12/2010 12:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6NGJ10	B26M18		MW6-SBB-A1	X10-099	W06028					09/01/2010 13:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	2.66E+00	pCi/L	3.5E+00	4.0E+00	U	8.25E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 02:36	I
0279345	BE-7	13966-02-4	1.36E+01	pCi/L	2.9E+01	2.9E+01	U	5.20E+01		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	CO-60	10198-40-0	4.21E-02	pCi/L	1.9E+00	1.9E+00	U	3.50E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	CS-134	13967-70-9	-5.95E-02	pCi/L	1.9E+00	1.9E+00	U	3.47E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	CS-137	10045-97-3	-3.05E-01	pCi/L	1.9E+00	1.9E+00	U	3.41E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	EU-152	14683-23-9	-2.24E-01	pCi/L	4.9E+00	4.9E+00	U	8.51E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	EU-154	15585-10-1	4.02E-01	pCi/L	5.3E+00	5.3E+00	U	9.84E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	EU-155	14391-16-3	-5.51E+00	pCi/L	4.8E+00	4.8E+00	U	7.72E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	K-40	13966-00-2	-5.58E+01	pCi/L	4.9E+01	4.9E+01	U	1.02E+02		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	RU-106	13967-48-1	-8.42E+00	pCi/L	1.9E+01	1.9E+01	U	3.26E+01		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279345	SB-125	14234-35-6	-2.43E+00	pCi/L	4.6E+00	4.6E+00	U	7.78E+00		GAMMALL_GS	2.0022E+00	L	10/29/2010 11:10	I
0279344	I-129	15046-84-1	1.14E-01	pCi/L	9.7E-02	9.7E-02	U	1.92E-01	95.1	I129LL_SEP_LEPS	3.8826E+00	L	11/12/2010 12:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6NP410	B26537		MW6-SBB-A1	X10-081	W06028					09/01/2010 10:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	3.28E+00	pCi/L	3.5E+00	4.0E+00	U	8.25E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 03:19	I
0279345	BE-7	13966-02-4	1.42E+00	pCi/L	2.8E+01	2.8E+01	U	4.90E+01		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	CO-60	10198-40-0	-7.23E-01	pCi/L	1.7E+00	1.7E+00	U	2.91E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	CS-134	13967-70-9	-8.58E-02	pCi/L	2.0E+00	2.0E+00	U	3.59E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	CS-137	10045-97-3	-1.54E-01	pCi/L	1.9E+00	1.9E+00	U	3.45E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	EU-152	14683-23-9	-2.65E+00	pCi/L	4.7E+00	4.7E+00	U	7.87E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	EU-154	15585-10-1	4.51E-01	pCi/L	4.7E+00	4.7E+00	U	8.86E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	EU-155	14391-16-3	-3.17E+00	pCi/L	4.6E+00	4.6E+00	U	7.71E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	K-40	13966-00-2	-2.06E+01	pCi/L	5.1E+01	5.1E+01	U	1.07E+02		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I
0279345	RU-106	13967-48-1	-1.32E+01	pCi/L	1.9E+01	1.9E+01	U	3.13E+01		GAMMALL_GS	2.0017E+00	L	10/29/2010 14:47	I

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

11/19/2010 7:46:55 AM **TestAmerica Report** **Lab Code:** TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

0279345	SB-125	14234-35-6	-8.92E-01	pCi/L	4.6E+00	4.6E+00	U	7.95E+00		GAMMALL_GS	2.0017E+00	L	10/29/2010	14:47	I
0279344	I-129	15046-84-1	6.68E-02	pCi/L	1.2E-01	1.2E-01	U	2.14E-01	93.0	I129LL_SEP_LEPS	3.8599E+00	L	11/12/2010	16:46	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6NTP10	B26MC0		MW6-SBB-A1	X10-097	W06028					09/02/2010 09:14

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279344	I-129	15046-84-1	2.42E-02	pCi/L	8.5E-02	8.5E-02	U	1.59E-01	90.8	I129LL_SEP_LEPS	3.874E+00	L	11/12/2010 16:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6NTW10	B275K1		MW6-SBB-A1	X10-107	W06028					09/02/2010 08:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	1.16E+00	pCi/L	3.4E+00	3.9E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 04:02	I
0279345	BE-7	13966-02-4	3.62E+00	pCi/L	2.4E+01	2.4E+01	U	4.31E+01		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	CO-60	10198-40-0	2.54E-01	pCi/L	1.6E+00	1.6E+00	U	3.03E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	CS-134	13967-70-9	1.01E+00	pCi/L	1.7E+00	1.7E+00	U	3.23E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	CS-137	10045-97-3	5.18E-01	pCi/L	1.5E+00	1.5E+00	U	2.80E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	EU-152	14683-23-9	1.36E+00	pCi/L	4.1E+00	4.1E+00	U	7.39E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	EU-154	15585-10-1	2.19E+00	pCi/L	4.5E+00	4.5E+00	U	9.02E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	EU-155	14391-16-3	-7.92E-01	pCi/L	2.8E+00	2.8E+00	U	4.70E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	K-40	13966-00-2	-6.49E+01	pCi/L	3.6E+01	3.6E+01	U	6.83E+01		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	RU-106	13967-48-1	4.04E+00	pCi/L	1.5E+01	1.5E+01	U	2.78E+01		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279345	SB-125	14234-35-6	1.16E+00	pCi/L	3.8E+00	3.8E+00	U	6.89E+00		GAMMALL_GS	2.0003E+00	L	10/29/2010 14:48	I
0279344	I-129	15046-84-1	4.37E-02	pCi/L	8.9E-02	8.9E-02	U	1.68E-01	95.1	I129LL_SEP_LEPS	3.7936E+00	L	11/12/2010 20:13	I
0279348	NI-63	13981-37-8	9.91E-01	pCi/L	1.6E+00	2.4E+00	U	3.70E+00	93.7	NI63_LSC	4.009E-01	L	10/18/2010 17:11	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:
9L6PFJ10	B275L3		MW6-SBB-A1	X10-107	W06028					09/02/2010 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	3.36E+00	pCi/L	3.5E+00	4.0E+00	U	8.25E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 04:45	I
0279345	BE-7	13966-02-4	-3.22E+00	pCi/L	1.5E+01	1.5E+01	U	2.66E+01		GAMMALL_GS	2.001E+00	L	10/29/2010 14:49	I
0279345	CO-60	10198-40-0	-3.03E-01	pCi/L	1.2E+00	1.2E+00	U	2.10E+00		GAMMALL_GS	2.001E+00	L	10/29/2010 14:49	I
0279345	CS-134	13967-70-9	-3.42E-01	pCi/L	1.0E+00	1.0E+00	U	1.81E+00		GAMMALL_GS	2.001E+00	L	10/29/2010 14:49	I
0279345	CS-137	10045-97-3	6.56E-01	pCi/L	1.1E+00	1.1E+00	U	2.10E+00		GAMMALL_GS	2.001E+00	L	10/29/2010 14:49	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.

11/19/2010 7:46:55 AM **TestAmerica Report** **Lab Code:** TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

0279345	EU-152	14683-23-9	8.24E-01	pCi/L	2.4E+00	2.4E+00	U	4.34E+00		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279345	EU-154	15585-10-1	-2.04E+00	pCi/L	2.8E+00	2.8E+00	U	4.61E+00		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279345	EU-155	14391-16-3	1.45E-01	pCi/L	1.9E+00	1.9E+00	U	3.41E+00		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279345	K-40	13966-00-2	-8.92E-01	pCi/L	2.3E+01	2.3E+01	U	4.40E+01		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279345	RU-106	13967-48-1	2.02E+00	pCi/L	9.7E+00	9.7E+00	U	1.77E+01		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279345	SB-125	14234-35-6	-1.38E+00	pCi/L	2.4E+00	2.4E+00	U	4.06E+00		GAMMALL_GS	2.001E+00	L	10/29/2010	14:49	I
0279344	I-129	15046-84-1	-2.04E-02	pCi/L	1.9E-01	1.9E-01	U	3.35E-01	63.8	I129LL_SEP_LEPS	3.8066E+00	L	11/12/2010	23:39	I
0279348	NI-63	13981-37-8	-8.49E-01	pCi/L	1.5E+00	2.3E+00	U	3.63E+00	95.6	NI63_LSC	4.00E-01	L	10/18/2010	20:37	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:
9L6PG210	B27621		MW6-SBB-A1	X10-107	W06028					09/02/2010 10:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	3.07E+00	pCi/L	3.5E+00	4.0E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 09:02	I
0279345	BE-7	13966-02-4	-5.46E+00	pCi/L	3.1E+01	3.1E+01	U	5.34E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	CO-60	10198-40-0	6.78E-01	pCi/L	2.3E+00	2.3E+00	U	4.32E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	CS-134	13967-70-9	1.31E+00	pCi/L	2.5E+00	2.5E+00	U	4.64E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	CS-137	10045-97-3	-1.82E+00	pCi/L	2.1E+00	2.1E+00	U	3.44E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	EU-152	14683-23-9	-7.34E-01	pCi/L	5.7E+00	5.7E+00	U	9.80E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	EU-154	15585-10-1	-4.34E+00	pCi/L	6.7E+00	6.7E+00	U	1.12E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	EU-155	14391-16-3	4.18E-01	pCi/L	3.6E+00	3.6E+00	U	6.13E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	K-40	13966-00-2	-3.28E+01	pCi/L	5.3E+01	5.3E+01	U	1.10E+02		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	RU-106	13967-48-1	2.04E+00	pCi/L	2.1E+01	2.1E+01	U	3.76E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279345	SB-125	14234-35-6	1.71E+00	pCi/L	5.5E+00	5.5E+00	U	9.73E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:22	I
0279344	I-129	15046-84-1	1.83E-02	pCi/L	1.0E-01	1.0E-01	U	1.84E-01	93.2	I129LL_SEP_LEPS	3.6425E+00	L	11/13/2010 16:28	I
0279348	NI-63	13981-37-8	1.12E+00	pCi/L	1.5E+00	2.4E+00	U	3.56E+00	97.0	NI63_LSC	4.022E-01	L	10/19/2010 05:13	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6PGA10	B275M5		MW6-SBB-A1	X10-107	W06028					09/02/2010 11:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	7.56E+00	pCi/L	3.7E+00	4.2E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 05:27	I
0279345	BE-7	13966-02-4	1.01E+01	pCi/L	3.2E+01	3.2E+01	U	5.60E+01		GAMMALL_GS	2.0006E+00	L	10/29/2010 14:49	I
0279345	CO-60	10198-40-0	9.48E-02	pCi/L	2.1E+00	2.1E+00	U	3.93E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010 14:49	I
0279345	CS-134	13967-70-9	1.56E+00	pCi/L	2.5E+00	2.5E+00	U	4.61E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010 14:49	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.

11/19/2010 7:46:55 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

0279345	CS-137	10045-97-3	-2.06E+00	pCi/L	2.2E+00	2.2E+00	U	3.58E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	EU-152	14683-23-9	-1.79E+00	pCi/L	5.5E+00	5.5E+00	U	9.40E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	EU-154	15585-10-1	2.52E+00	pCi/L	7.2E+00	7.2E+00	U	1.34E+01		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	EU-155	14391-16-3	-2.78E+00	pCi/L	3.8E+00	3.8E+00	U	6.12E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	K-40	13966-00-2	-3.87E+01	pCi/L	5.2E+01	5.2E+01	U	1.07E+02		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	RU-106	13967-48-1	7.51E+00	pCi/L	1.9E+01	1.9E+01	U	3.54E+01		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279345	SB-125	14234-35-6	-1.80E+00	pCi/L	5.5E+00	5.5E+00	U	9.24E+00		GAMMALL_GS	2.0006E+00	L	10/29/2010	14:49	I
0279344	I-129	15046-84-1	9.34E-02	pCi/L	7.8E-02	7.8E-02	U	1.60E-01	95.7	I129LL_SEP_LEPS	3.8493E+00	L	11/12/2010	23:40	I
0279348	NI-63	13981-37-8	-1.22E+00	pCi/L	1.6E+00	2.4E+00	U	3.81E+00	91.3	NI63_LSC	3.991E-01	L	10/18/2010	22:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6PGG10	B275N7		MW6-SBB-A1	X10-107	W06028					09/02/2010 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	2.82E+00	pCi/L	3.5E+00	4.0E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 06:10	I
0279345	BE-7	13966-02-4	6.79E+00	pCi/L	2.4E+01	2.4E+01	U	4.38E+01		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	CO-60	10198-40-0	1.23E-01	pCi/L	1.7E+00	1.7E+00	U	3.21E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	CS-134	13967-70-9	1.12E+00	pCi/L	1.8E+00	1.8E+00	U	3.49E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	CS-137	10045-97-3	-1.75E-02	pCi/L	1.6E+00	1.6E+00	U	2.91E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	EU-152	14683-23-9	-2.25E-01	pCi/L	4.1E+00	4.1E+00	U	7.22E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	EU-154	15585-10-1	-2.20E-01	pCi/L	4.9E+00	4.9E+00	U	9.03E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	EU-155	14391-16-3	-1.59E+00	pCi/L	3.2E+00	3.2E+00	U	5.33E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	K-40	13966-00-2	1.31E+01	pCi/L	3.8E+01	3.8E+01	U	2.71E+01		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	RU-106	13967-48-1	-2.11E-01	pCi/L	1.5E+01	1.5E+01	U	2.75E+01		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279345	SB-125	14234-35-6	3.17E+00	pCi/L	3.9E+00	3.9E+00	U	7.44E+00		GAMMALL_GS	2.0038E+00	L	10/29/2010 14:50	I
0279344	I-129	15046-84-1	5.85E-02	pCi/L	8.5E-02	8.5E-02	U	1.66E-01	93.5	I129LL_SEP_LEPS	3.8659E+00	L	11/13/2010 03:46	I
0279348	NI-63	13981-37-8	1.98E+00	pCi/L	1.5E+00	2.4E+00	U	3.57E+00	97.1	NI63_LSC	3.997E-01	L	10/19/2010 00:04	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6PGK10	B275R5		MW6-SBB-A1	X10-107	W06028					09/02/2010 11:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	6.79E+00	pCi/L	3.6E+00	4.1E+00	U	8.24E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 06:53	I
0279345	BE-7	13966-02-4	1.23E+01	pCi/L	2.2E+01	2.2E+01	U	3.89E+01		GAMMALL_GS	2.0024E+00	L	10/29/2010 14:50	I
0279345	CO-60	10198-40-0	9.08E-03	pCi/L	1.7E+00	1.7E+00	U	3.05E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010 14:50	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.

11/19/2010 7:46:55 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 45190 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

0279345	CS-134	13967-70-9	3.77E-01	pCi/L	1.7E+00	1.7E+00	U	3.02E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	CS-137	10045-97-3	-6.46E-01	pCi/L	1.5E+00	1.5E+00	U	2.56E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	EU-152	14683-23-9	-3.41E-01	pCi/L	3.7E+00	3.7E+00	U	6.34E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	EU-154	15585-10-1	-1.73E+00	pCi/L	5.6E+00	5.6E+00	U	9.62E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	EU-155	14391-16-3	-3.15E+00	pCi/L	3.7E+00	3.7E+00	U	6.02E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	K-40	13966-00-2	-7.54E+01	pCi/L	4.7E+01	4.7E+01	U	9.34E+01		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	RU-106	13967-48-1	1.57E+00	pCi/L	1.3E+01	1.3E+01	U	2.34E+01		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279345	SB-125	14234-35-6	1.20E+00	pCi/L	3.5E+00	3.5E+00	U	6.26E+00		GAMMALL_GS	2.0024E+00	L	10/29/2010	14:50	I
0279344	I-129	15046-84-1	-4.19E-02	pCi/L	1.1E-01	1.1E-01	U	1.84E-01	93.5	I129LL_SEP_LEPS	3.4452E+00	L	11/13/2010	07:09	I
0279348	NI-63	13981-37-8	-3.86E-02	pCi/L	1.5E+00	2.3E+00	U	3.61E+00	95.7	NI63_LSC	4.017E-01	L	10/19/2010	01:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9L6PGX10	B275T1		MW6-SBB-A1	X10-107	W06028					09/02/2010 13:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
0279352	C-14	14762-75-5	5.61E+00	pCi/L	3.6E+00	4.1E+00	U	8.25E+00	100.0	C14_LSC	2.00E-01	L	10/21/2010 07:36	I
0279345	BE-7	13966-02-4	-4.33E+00	pCi/L	2.2E+01	2.2E+01	U	3.85E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	CO-60	10198-40-0	3.35E-01	pCi/L	1.7E+00	1.7E+00	U	3.10E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	CS-134	13967-70-9	7.13E-01	pCi/L	1.7E+00	1.7E+00	U	3.09E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	CS-137	10045-97-3	3.02E-01	pCi/L	1.4E+00	1.4E+00	U	2.58E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	EU-152	14683-23-9	-8.07E-01	pCi/L	4.0E+00	4.0E+00	U	6.75E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	EU-154	15585-10-1	-3.39E+00	pCi/L	5.1E+00	5.1E+00	U	8.33E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	EU-155	14391-16-3	2.01E+00	pCi/L	3.7E+00	3.7E+00	U	6.47E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	K-40	13966-00-2	-1.50E+01	pCi/L	4.8E+01	4.8E+01	U	9.95E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	RU-106	13967-48-1	1.24E+01	pCi/L	1.4E+01	1.4E+01	U	2.61E+01		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279345	SB-125	14234-35-6	9.64E-01	pCi/L	3.6E+00	3.6E+00	U	6.37E+00		GAMMALL_GS	2.002E+00	L	10/29/2010 18:21	I
0279344	I-129	15046-84-1	6.87E-02	pCi/L	9.3E-02	9.3E-02	U	1.81E-01	92.7	I129LL_SEP_LEPS	3.6593E+00	L	11/13/2010 10:31	I
0279348	NI-63	13981-37-8	7.83E-01	pCi/L	1.5E+00	2.4E+00	U	3.60E+00	96.1	NI63_LSC	4.012E-01	L	10/19/2010 03:30	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.

Friday, November 19, 2010

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73F61AB	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 08/29/2010 08:03
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 08/30/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AR	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
0279352	C-14	2.08E+00	pCi/L	4.0E+00	U	8.25E+00	100.0		C14_LSC	2.00E-01	10/21/2010				D
BLK	14762-75-5			3.5E+00						L	09:45				

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.

I

Friday, November 19, 2010

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73FC1AB	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/02/2010 09:14
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 09/03/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0279344	I-129	-4.32E-02	pCi/L	8.5E-02	U	1.47E-01	92.7		I129LL_SEP_L	3.9177E+00	11/13/2010				D
BLK	15046-84-1			8.5E-02						L	19:51				

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.

Friday, November 19, 2010

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id: L73FE1AB **Sdg/Rept Nbr:** W06028 45190 **Collection Date:** 09/01/2010 10:06

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 09/02/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0279345	BE-7	6.60E-01	pCi/L	1.6E+01	U	2.77E+01			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	13966-02-4			1.6E+01						L	18:22				
0279345	CO-60	-4.06E-01	pCi/L	1.6E+00	U	2.96E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	10198-40-0			1.6E+00						L	18:22				
0279345	CS-134	-2.11E-01	pCi/L	1.8E+00	U	3.16E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	13967-70-9			1.8E+00						L	18:22				
0279345	CS-137	-1.87E-01	pCi/L	1.7E+00	U	3.05E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	10045-97-3			1.7E+00						L	18:22				
0279345	EU-152	3.27E+00	pCi/L	4.1E+00	U	7.69E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	14683-23-9			4.1E+00						L	18:22				
0279345	EU-154	-5.16E-01	pCi/L	4.3E+00	U	7.93E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	15585-10-1			4.3E+00						L	18:22				
0279345	EU-155	2.62E+00	pCi/L	3.1E+00	U	5.64E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	14391-16-3			3.1E+00						L	18:22				
0279345	K-40	-5.08E+00	pCi/L	3.8E+01	U	7.86E+01			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	13966-00-2			3.8E+01						L	18:22				
0279345	RU-106	-4.74E+00	pCi/L	1.4E+01	U	2.48E+01			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	13967-48-1			1.4E+01						L	18:22				
0279345	SB-125	8.66E-01	pCi/L	3.8E+00	U	6.94E+00			GAMMALL_GS	2.001E+00	10/29/2010				D
BLK	14234-35-6			3.8E+00						L	18:22				

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

Friday, November 19, 2010

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73FL1AB	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/02/2010 08:32
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 09/03/2010

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
0279348	NI-63	6.25E-03	pCi/L	3.1E+00	U	4.79E+00	72.3		NI63_LSC	4.01E-01	10/19/2010				D
BLK	13981-37-8			2.0E+00						L	06:56				

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.

Friday, November 19, 2010

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id: L73F61CS **Sdg/Rept Nbr:** W06028 45190 **Collection Date:** 08/29/2010 08:03

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 08/30/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0279352	C-14	7.42E+03	pCi/L	4.3E+02		3.31E+02	100.0	7.26E+03	C14_LSC	5.00E-03	10/21/2010			70	D
BS	14762-75-5			3.0E+02				102.2		L	10:28			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.

Friday, November 19, 2010

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73FC1CS	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/02/2010 09:14
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 09/03/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0279344	I-129	9.54E+00	pCi/L	1.1E+00		2.11E-01	93.5	9.98E+00	I129LL_SEP_L	3.9014E+00	11/13/2010			70	D
BS	15046-84-1			1.1E+00				95.6		L	23:21			130	

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

Friday, November 19, 2010

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73FE1CS	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/01/2010 10:06
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 09/02/2010

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
0279345	CO-60	4.25E+01	pCi/L	7.0E+00		3.48E+00		3.82E+01	GAMMALL_GS	2.00E+00	10/29/2010			70	D
BS	10198-40-0			7.0E+00				111.5		L	18:23			130	
0279345	CS-137	5.74E+01	pCi/L	1.0E+01		3.65E+00		4.99E+01	GAMMALL_GS	2.00E+00	10/29/2010			70	D
BS	10045-97-3			1.0E+01				115.0		L	18:23			130	
0279345	EU-152	7.62E+01	pCi/L	2.4E+01		9.02E+00		7.70E+01	GAMMALL_GS	2.00E+00	10/29/2010			70	D
BS	14683-23-9			2.4E+01				99.0		L	18:23			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.

Friday, November 19, 2010

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L73FL1CS	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/02/2010 08:32
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 09/03/2010

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
0279348	NI-63	3.14E+02	pCi/L	2.0E+01		4.45E+00	78.2	3.80E+02	NI63_LSC	3.992E-01	10/19/2010			70	D
BS	13981-37-8			5.8E+00				82.7		L	08:39			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.

Friday, November 19, 2010

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L6EA61ER	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 08/29/2010 08:03
Client Id:	B26566	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**DUP**		**Received Date:** 08/30/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X10-081	MW6-SBB-A19981								AN	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
0279352	C-14	1.48E+01	pCi/L	4.5E+00		8.24E+00	100.0		C14_LSC	2.00E-01	10/21/2010	24.0	1.		D
DUP	14762-75-5	1.17E+01		3.9E+00						L	01:11	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.

Friday, November 19, 2010

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L6NP41ER	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/01/2010 10:06
Client Id:	B26537	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 09/02/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X10-081	MW6-SBB-A19981								AO	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
0279345	BE-7	1.24E+01	pCi/L	2.3E+01	U	4.31E+01			GAMMALL_GS	2.0017E+00	10/29/2010	158.8	0.7		D
DUP	13966-02-4	1.42E+00		2.3E+01						L	18:23	20.0	3		
0279345	CO-60	4.09E-01	pCi/L	1.2E+00	U	2.55E+00			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	1.3		D
DUP	10198-40-0	-7.23E-01		1.2E+00						L	18:23	20.0	3		
0279345	CS-134	-1.41E+00	pCi/L	1.8E+00	U	2.91E+00			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	1.		D
DUP	13967-70-9	-8.58E-02		1.8E+00						L	18:23	20.0	3		
0279345	CS-137	-4.72E-01	pCi/L	1.7E+00	U	3.00E+00			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	0.3		D
DUP	10045-97-3	-1.54E-01		1.7E+00						L	18:23	20.0	3		
0279345	EU-152	2.31E-01	pCi/L	3.6E+00	U	6.54E+00			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	1.1		D
DUP	14683-23-9	-2.65E+00		3.6E+00						L	18:23	20.0	3		
0279345	EU-154	-2.44E-01	pCi/L	4.0E+00	U	7.47E+00			GAMMALL_GS	2.0017E+00	10/29/2010	673.8	0.2		D
DUP	15585-10-1	4.51E-01		4.0E+00						L	18:23	20.0	3		
0279345	EU-155	7.71E-01	pCi/L	2.7E+00	U	4.77E+00			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	2.1		D
DUP	14391-16-3	-3.17E+00		2.7E+00						L	18:23	20.0	3		
0279345	K-40	-3.30E+01	pCi/L	3.6E+01	U	7.24E+01			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	0.5		D
DUP	13966-00-2	-2.06E+01		3.6E+01						L	18:23	20.0	3		
0279345	RU-106	-7.17E+00	pCi/L	1.5E+01	U	2.52E+01			GAMMALL_GS	2.0017E+00	10/29/2010	0.0	0.6		D
DUP	13967-48-1	-1.32E+01		1.5E+01						L	18:23	20.0	3		
0279345	SB-125	1.06E+00	pCi/L	3.8E+00	U	6.81E+00			GAMMALL_GS	2.0017E+00	10/29/2010	2319.4	0.7		D
DUP	14234-35-6	-8.92E-01		3.8E+00						L	18:23	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.

Friday, November 19, 2010

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id: L6NTP1CR **Sdg/Rept Nbr:** W06028 45190 **Collection Date:** 09/02/2010 09:14

Client Id: B26MC0 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 09/03/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X10-097	MW6-SBB-A19981								AP	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
0279344	I-129	1.09E-01	pCi/L	1.1E-01	U	2.15E-01	98.9		I129LL_SEP_L	3.8622E+00	11/12/2010	127.4	1.		D
DUP	15046-84-1	2.42E-02		1.1E-01						L	20:11	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.

Friday, November 19, 2010

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W06028.Edd, h:\Reportdb\edd\FeadIV\Rad\45190.Edd

Lab Sample Id:	L6NTW1FR	**Sdg/Rept Nbr:**	W06028	45190	**Collection Date:** 09/02/2010 08:32
Client Id:	B275K1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 09/03/2010

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X10-107	MW6-SBB-A19981								AQ	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
0279348	NI-63	-2.01E-02	pCi/L	2.6E+00	U	4.07E+00	85.1		NI63_LSC	4.008E-01	10/18/2010	208.3	0.5		D
DUP	13981-37-8	9.91E-01		1.7E+00						L	18:54	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

11/1/2010 5:23:16 PM

Lot No., Due Date: J0I010454,J0I080511,J0I080556,J0I080570; 10/28/2010
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0279345; RGAMMA Gamma by GER
SDG, Matrix: W06028; WATER

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

6.0 Comments on any No response:

First Level Lisa Antonson Date 11/1/10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0279345

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

Comments on any "No" response: _____

Second Level Review: Jodie G Date: 11/5/10

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

11/15/2010 1:48:39 PM

Lot No., Due Date: J0I010454,J0I010475,J0I080511,J0I080556,J0I080569,J0I080570; 10/28/2010
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0279344; RGAMLEPS Gamma by LEPS
SDG, Matrix: W06028; WATER

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

6.0 Comments on any No response:

First Level [signature] **Date** 11-15-10

TestAmerica Richland
QAS_RADCALCv4.8.44

Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0279344

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

Comments on any "No" response: _____

Second Level Review: Jodie C Date: 11/15/10

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

10/27/2010 2:33:59 PM

Lot No., Due Date: J0I010454,J0I080511,J0I080556,J0I080570; 10/28/2010
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0279352; RC14 C-14 by LSC
SDG, Matrix: W06028; WATER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:

First Level Lisa Anderson Date 10/27/10

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0279352

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

Comments on any "No" response: _____

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

11/9/2010 10:51:24 AM

Lot No., Due Date: J0I080570; 10/28/2010
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 0279348; RNI63 Ni-63 by LSC
SDG, Matrix: W06028; WATER

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

6.0 Comments on any No response:

First Level Lisa Anderson **Date** 11/9/10

TestAmerica Richland
QAS_RADCALCv4.8.44

Page 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 0279348

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

Comments on any "No" response: _____

Second Level Review: Jodie C Date: 11/9/10

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

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-081-35 Page 1 of 1

Collector JOSH ARTZER CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X10-081	Sampling Origin Hanford site	Purchase Order/Charge Code 300118ES20
Project Title IU2 IU6DURA JULY 2010	Logbook No: HNF-N-506 33 149	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS **Hold Time** 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.

L6E46

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B26566	N	W	8-24-10	0803	1x20-mL P	Activity Scan	6 Months	None
B26566	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B26566	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B26566	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JUI010454
SDGW06028

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTZER CHPRC		Josh Artzer	AUG 29 2010 1600				AUG 29 2010 1600
SSU-1			AUG 30 2010 1100	KC Patterson CHPRC			AUG 30 2010 1100
KC Patterson CHPRC			AUG 30 2010 1320				AUG 30 2010 1320
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 (05/10)

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-081-193 Page 1 of 1

Collector: JOSH ARTZER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X10-081	Sampling Origin: Hanford site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA_JULY 2010	Logbook No: HNF-N-506 33 149	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time** 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.
L6ECD

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B265V7	N	W	8-29-10	1353	1x20-mL P	Activity Scan	6 Months	None
B265V7	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B265V7	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B265V7	N	W	8-29-10	1353	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOI010454
SDG WO6028

JOI010454

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTZER CHPRC			AUG 29 2010 1600	SSU- 1			AUG 29 2010 1600
SSU- 1			AUG 30 2010 1100	KC Patterson CHPRC			AUG 30 2010 1100
KC Patterson CHPRC			AUG 30 2010 1320				AUG 30 2010 1320

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: 1320 8-30-10 GM Screen Results (out) 0 (in) .4 Initials [✓]

Client: PEW SDG #: W06028: ~~JOI010454~~ NA [ ] SAF #: X10-081 NA [ ]

Work Order Number: JOI010454 Chain of Custody # X10-081 -35,081-193

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   ____tape ✓ custody seals
   ✓ hazard labels ✓ appropriate sample labels
9. Samples are:
   ✓ in good condition ____broken (BOTH)
   ____leaking ____have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [X] _____

see other side for additional comments

Sample Custodian: [signature] Date: 8-30-10 @ 1320 TAL R

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

[X] No action necessary; process as is.

Project Manager [signature] Date 9/2/10

LS-023, Rev. 10, 10/09

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-072-166 Page 1 of 1

Collector JOSH ARTZER CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X10-072	Sampling Origin Hanford Site	Purchase Order/Charge Code 300206ES20
Project Title 300DURA June 2010	Logbook No: HNF-N-506 33 / 49	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401930.

L6EGF

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B25M57	N	W	8-26-10	1030	1x20-mL P	Activity Scan	6 Months	None
B25M57	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOI010475
JDG1W06028

JOI010475

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTZER CHPRC		Josh Artzer	AUG 29 2010 / 1600	SSU-1			AUG 29 2010 / 1600
SSU-1			AUG 30 2010 / 1100	KC Patterson CHPRC			AUG 30 2010 / 1100
KC Patterson CHPRC			AUG 30 2010 / 1320	ANGEL GARCIA			AUG 30 2010 / 1320
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

A-6004-842 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: Aug. 30 10 @ 1320 GM Screen Results (out) 3 (in) 4 Initials [ ]

Client: PGW SDG #: W06028 NA [ ] SAF #: X10-072 NA [ ]

Work Order Number: JUI0104 75 Chain of Custody # X10-072-166

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 3 Containers
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - [✓] tape
   - [✓] custody seals
   - [✓] hazard labels
   - [✓] appropriate sample labels
9. Samples are:
   - [✓] in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)

   (I129LL)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [X] _____

see other side for additional comments

Sample Custodian: [signature] Date: Aug. 30. 10 TALR

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

[X] No action necessary; process as is.

Project Manager [signature] Date 9/2/10

LS-023, Rev. 10, 10/09

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X10-099-3

Page 1 of 1

Collector: JOSH ARTIZER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X10-099	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300118ES20
Project Title: IU2_IU6DURA	Logbook No: HNF-N-506 32/57	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

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

Total Activity Exemption: Yes ☑ No ☐

L6NGTJ

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B26M18	N	W	9-1-10	1319	1x20-mL P	Activity Scan	6 Months	None
B26M18	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B26M18	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B26M18	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOI080511
SDGW06028

J0I080511

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTIZER CHPRC			SEP 01 2010 1450	SSU #1			SEP 01 2010 1450
SSU #1			SEP 02 2010 0700	KC Patterson CHPRC			SEP 02 2010 0700
KC Patterson CHPRC			SEP 02 2010 0945	ANGEL Garcia			9-02-10 0945
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 (05/10)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 9021 0@ GM Screen Results (out) .3 (in) .3 Initials ✓

Client: PGW SDG # W06028 NA [ ] SAF #: X10-099 NA [ ]

Work Order Number: JOI080511 Chain of Custody # X10-099-3

Shipping Container ID: H SKS 9/8/10 NA [✓] Air Bill # _____ NA [✓]

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 6 containers
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   ✓ tape
   ✓ custody seals
   ✓ hazard labels
   ✓ appropriate sample labels
9. Samples are:
   ✓ in good condition
   ____ broken
   (BOTH)
   ____ leaking
   ____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [✓] _____

see other side for additional comments

Sample Custodian: [signature] Date: 9.02.10@ 0945 TAL

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

[✓] No action necessary, process as is.

Project Manager [signature] Date 9/8/10

LS-023, Rev. 10, 10/09

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-081-3 Page 1 of 1

Collector JOSH ARTZER CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X10-081	Sampling Origin Hanford site	Purchase Order/Charge Code 300118ES20
Project Title JU2 JU6DURA JULY 2010	Logbook No: HNF-N-506 32 / 57	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time
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 ☐

L6NP4

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B26537	N	W	9-1-10	1006	1x20-mL P	Activity Scan	6 Months	None
B26537	N	W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B26537	N	W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B26537	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOI 080 556
SDG W06028

J0I080556

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JOSH ARTZER CHPRC			SEP 0 1 2010 1450	SSU #1			SEP 0 1 2010 1450
SSU #1			SEP 0 2 2010 0700	KC Patterson CHPRC			SEP 0 2 2010 0700
KC Patterson CHPRC			SEP 0 2 2010 0945	ANGEL Garcia			9.02.10 0945
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 (05/10)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 0945 AM 9-02-10 GM Screen Results (out) .2 (in) -3 Initials [✓]

Client: PGW SDG #: W06028 NA [ ] SAF #: X10-081 NA [✓]

Work Order Number: JQI080556 Chain of Custody # X10-081-3

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 6 containers
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   ____ tape
   [✓] custody seals
   [✓] hazard labels
   [✓] appropriate sample labels
9. Samples are:
   [✓] in good condition
   ____ broken
   (BOTH)
   ____ leaking
   ____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [X] _____

see other side for additional comments

Sample Custodian: [signature] Date: 9-02-10 @ 0945 AM TMR

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

[X] No action necessary; process as is.

Project Manager [signature] Date 9/14/10

LS-023, Rev. 10, 10/09

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-097-63 Page 1 of 1

Collector JOSH ARTZER CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X10-097	Sampling Origin Hanford Site	Purchase Order/Charge Code 300206ES20
Project Title 300DURA, August 2010	Logbook No: HNF-N-506 31 / 80	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B26MC0	N	W	9/02/10	0914	1x20-mL P	Activity Scan	6 Months	None
B26MC0	N	W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None

JOI080569
DUE
SDG W06023 ~~XX~~ 168910

JOI080569

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
JOSH ARTZER CHPRC		1313 SEP 02 2010	SSU- 1		1313 SEP 02 2010
SSU- 1		0800 SEP 03 2010	RE Hamilton CHPRC		0800 SEP 03 2010
RE Hamilton CHPRC		0900 SEP 03 2010	ANGEL		0900 SEP 03 2010
Relinquished By		Date/Time	Received By		Date/Time

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

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

A-6004-842 (05/10)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 0900AM Sep 3 10 GM Screen Results (out) .3 (in) .4 Initials [✓]

Client: PGW SDG #: W06028 NA [ ] SAF #: X10-097 NA [ ]

Work Order Number: J0T080569 Chain of Custody # X10-097-63

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 @ 3 Containers
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   [✓] tape
   [✓] custody seals
   [✓] hazard labels
   [✓] appropriate sample labels
9. Samples are:
   [✓] in good condition
   [ ] broken
   [ ] leaking
   [ ] have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [✓] _____

see other side for additional comments

Sample Custodian: [signature] Date: Sep 3 10 0900AM

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

[✓] No action necessary; process as is.

Project Manager: [signature] Date 9/14/10

LS-023, Rev. 10, 10/09

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X10-107-55

Page 1 of 1

Collector DJ Sparks	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. CHPRC X10-107	Sampling Origin Hanford Site	Purchase Order/Charge Code 300078ES20
Project Title BDURA, SEPTEMBER 2010	Logbook No: HNF-N-506 33/52	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

Total Activity Exemption: Yes ☑ No ☐

L6NTW

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275K1	N	W	09/02/10	0832	1x20-mL P	Activity Scan	6 Months	None
B275K1	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275K1	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275K1	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275K1	N	W	09/02/10	0832	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JOI080570
SDG1W06028

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Sparks CHPRC			1500 SEP 02 2010	SSU-1			1500 SEP 02 2010
SSU-1			0800 SEP 03 2010	KE Hamilton CHPRC			0800 SEP 03 2010
KE Hamilton CHPRC			0900 SEP 03 2010	TACH			0900 SEP 03 2010

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 (05/10)

CHPRC
PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X10-107-75

Page 1 of 1

Collector: MS McCoy, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X10-107	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300078ES20
Project Title: BDURA SEPTEMBER 2010	Logbook No: HNF-N-506 34 / 68	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.
L6PFJ

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275L3	N	W	9-2-10	1236	1x20-mL P	Activity Scan	6 Months	None
B275L3	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275L3	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275L3	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275L3	N	W	9-2-10	1236	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JOI080570
SDGW06028

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
MS McCoy, CHPRC	SEP 02 2010 1330	SSU-1	SEP 02 2010 1330
SSU-1	SEP 03 2010 0800	KE Hamilton, CHPRC	SEP 03 2010 0800
KE Hamilton, CHPRC	SEP 03 2010 0900	Angel Garcia	SEP 03 2010 0900
Relinquished By	Date/Time	Received By	Date/Time

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

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

A-6004-842 (05/10)

CHPRC PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X10-107-95

Page 1 of 1

Collector: MS McCoy	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: CHPRC X10-107	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300078ES20
Project Title: BDURA SEPTEMBER 2010	Logbook No: HNF-N-506 34168	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time**
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

Total Activity Exemption: Yes ☑ No ☐

L6PG1A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275M5	N	W	9-2-10	1130	1x20-mL P	Activity Scan	6 Months	None
B275M5	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275M5	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275M5	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275M5	N	W	9-2-10	1130	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JQI080570
SDGW06028
Due

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
MS McCoy CHPRC			1330 SEP 02 2010	SSU- 1			1330 SEP 02 2010
SSU- 1			0800 SEP 03 2010	KE Hamilton CHPRC			0800 SEP 03 2010
KE Hamilton CHPRC			0900 SEP 03 2010	Angel Garcia			0900 SEP 03 2010
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

A-6004-842 (05/10)

CHPRC

PGW

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X10-107-115

Page 1 of 1

Collector: MS McCoy, CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X10-107	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300078ES20
Project Title: BDURA SEPTEMBER 2010	Logbook No: HNF-N-506 34168	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS Hold Time
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

Total Activity Exemption: Yes ☑ No ☐

L6PGG1

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275N7	N	W	9-2-10	0955	1x20-mL P	Activity Scan	6 Months	None
B275N7	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275N7	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275N7	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275N7	N	W	9-2-10	0955	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JQI080570
SDG1W06028

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
MS McCoy, CHPRC			330 SEP 02 2010	SSU- 1			SEP 02 2010 1330
SSU- 1			0800 SEP 03 2010	KE Hamilton, CHPRC			0800 SEP 03 2010
KE Hamilton, CHPRC			0900 SEP 03 2010	Rosa Garcia			0900 SEP 03 2010
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 (05/10)

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-107-145 Page 1 of 1

Collector: DJ Sparks	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No. CHPRC: X10-107	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300078ES20
Project Title: BDURA, SEPTEMBER 2010	Logbook No: HNF-N-506 53 / 52	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time**
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

Total Activity Exemption: Yes ☑ No ☐

L6PGK

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275R5	N	W	09/02/10	1150	1x20-mL P	Activity Scan	6 Months	None
B275R5	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275R5	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275R5	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275R5	N	W	09/02/10	1150	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JOI080570
SDGW06028

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
DJ Sparks, CHPRC	SEP 02 2010 1500	SSU-1	SEP 02 2010 1500
SSU-1	0800 SEP 03 2010	KE Hamilton, CHPRC	0800 SEP 03 2010
KE Hamilton, CHPRC	SEP 03 2010 0900	ANGEL Garcia TALK	SEP 03 2010 0900
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)

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-107-155 Page 1 of 1

Collector: DJ Sparks ~~CHPRC~~	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650
SAF No.: X10-107	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300078ES20
Project Title: BDURA SEPTEMBER 2010	Logbook No: HNF-N-506 53 / 52	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.: N/A

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

L6PGTX

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B275T1	N	W	09/02/10	1333	1x20-mL P	Activity Scan	6 Months	None
B275T1	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B275T1	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B275T1	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B275T1	N	W	09/02/10	1333	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JOI080570
SDGW06028

JOI080570

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Sparks CHPRC			SEP 0 2 2010 1500	SSU-..1			SEP 0 2 2010 1500
SSU-..1			0800 SEP 0 3 2010	KE Hamilton CHPRC			0800 SEP 0 3 2010
KE Hamilton CHPRC			SEP 0 3 2010 0900				0900 SEP 0 3 2010
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 (05/10)

CHPRC PGW	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X10-107-208
		Page 1 of 1

Collector DJ Sparks CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAF No. X10-107	Sampling Origin Hanford Site	Purchase Order/Charge Code 300078ES20
Project Title BDURA, SEPTEMBER 2010	Logbook No: HNF-N-506 33 / 52	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 45 Days	Offsite Property No. N/A

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401736.

L6PG12

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B27621	N	W	09/02/10	1038	1x20-mL P	Activity Scan	6 Months	None
B27621	N	W			2x1000-mL G/P	C14_LSC: C-14 (1)	6 Months	None
B27621	N	W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	6 Months	HNO3 to pH <2
B27621	N	W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	6 Months	None
B27621	N	W	09/02/10	1038	1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	6 Months	HNO3 to pH <2

JQT080570
SDGW06028

1500 1500

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DJ Sparks CHPRC	DJ Sparks	DJ Sparks	SEP 02 2010	SSU- .1			SEP 02 2010
SSU- .1			0800 SEP 03 2010	KE Hamilton CHPRC		Karen E Hamilton	0800 SEP 03 2010
KE Hamilton CHPRC		Karen E Hamilton	0900 SEP 03 2010			TALR Angel Garcia	0900 SEP 03 2010
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 (05/10)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 0900AM Sep 3.10 GM Screen Results (out) .3 (in) -5 Initials [✓]

Client: PGW SDG #: W06028 NA [ ] SAF #: X10-107 NA [ ]

Work Order Number: JOI080570 Chain of Custody # X10-107-55; 75; 95; 115; 145; 155; 208

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 7
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - [✓] tape
   - [✓] custody seals
   - [✓] hazard labels
   - [✓] appropriate sample labels
9. Samples are:
   - [✓] in good condition
   - [ ] broken
   - [ ] leaking
   - [ ] have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ] Amount of HNO3 Added
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [X]

see other side for additional comments

Sample Custodian: [signature] Date: Sep 3.10 TMM

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

[X] No action necessary, process as is.

Project Manager [signature] Date 9/14/10

LS-023, Rev. 10, 10/09

10/22/2010 9:59:20 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279345 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,Barcott

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 L6EA6-1-AC J0I010454-1-SAMP 08/29/2010 08:03			2003.70g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2003.70g		100mS	200	G7 Scr: Alpha: 5.97E-04 uCi/Sa	1430	10/29/10 Beta: 8.29E-04 uCi/Sa	
2 L6ECD-1-AC J0I010454-2-SAMP 08/29/2010 13:53			2000.20g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2000.20g				G13 Scr: Alpha: -1.95E-04 uCi/Sa	1430	Beta: 1.88E-03 uCi/Sa	
3 L6NGJ-1-AC J0I080511-1-SAMP 09/01/2010 13:19			2002.20g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 8	2002.20g				G5 Scr: Alpha: -9.55E-04 uCi/Sa	1430	Beta: 1.40E-03 uCi/Sa	
4 L6NP4-1-AC J0I080556-1-SAMP 09/01/2010 10:06			2001.70g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	2001.70g				G5 Scr: Alpha: 1.28E-03 uCi/Sa	1807	10/29/10 [illegible] Beta: -1.00E-04 uCi/Sa	
5 L6NP4-1-AE-X J0I080556-1-DUP 09/01/2010 10:06	ISV		AmtRec: VIAL20,2XLP,3X4LP #Containers: 6					G15 Scr: Alpha: 1.28E-03 uCi/Sa	2143	Beta: -1.00E-04 uCi/Sa	
6 L6NTW-1-AC J0I080570-1-SAMP 09/02/2010 08:32			2000.30g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	2000.30g				G15 Scr: Alpha: -1.08E-03 uCi/Sa	1808	10/29/10 [illegible] Beta: 2.68E-04 uCi/Sa	
7 L6PFJ-1-AC J0I080570-2-SAMP 09/02/2010 12:36			2001.00g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	2001.00g				G11 Scr: Alpha: -6.79E-04 uCi/Sa	1809	Beta: 8.61E-04 uCi/Sa	

10/22/2010 9:59:22 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279345 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,Barcotl

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 L6PGA-1-AC J0I080570-3-SAMP 09/02/2010 11:30			2000.60g,in AmtRec: VIAL20,3XLP,3X4LP	2000.60g #Containers: 7		100mls	200	G14 Scr:	1809 Alpha: -1.62E-03 uCi/Sa	10/29/10m Beta: 2.15E-04 uCi/Sa	
9 L6PGG-1-AC J0I080570-4-SAMP 09/02/2010 09:55			2003.80g,in AmtRec: VIAL20,3XLP,3X4LP	2003.80g #Containers: 7				G7 Scr:	1810 Alpha: 1.30E-04 uCi/Sa	Beta: 8.59E-04 uCi/Sa	
10 L6PGK-1-AC J0I080570-5-SAMP 09/02/2010 11:50			2002.40g,in AmtRec: VIAL20,3XLP,3X4LP	2002.40g #Containers: 7				G13 Scr:	1810 Alpha: 3.32E-03 uCi/Sa	Beta: -1.55E-03 uCi/Sa	
11 L6PGX-1-AC J0I080570-6-SAMP 09/02/2010 13:33			2002.00g,in AmtRec: VIAL20,3XLP,3X4LP	2002.00g #Containers: 7				G 13 Scr:	2141 Alpha: 7.88E-04 uCi/Sa	10/29/1000 Beta: -5.01E-04 uCi/Sa	
12 L6PG2-1-AC J0I080570-7-SAMP 09/02/2010 10:38			2002.00g,in AmtRec: VIAL20,3XLP,3X4LP	2002.00g #Containers: 7				G 14 Scr:	2142 Alpha: 1.53E-04 uCi/Sa	Beta: 2.15E-04 uCi/Sa	
13 L73FE-1-AA-B J0J060000-345-BLK 10/06/2010 15:29 pd			2001.00g,in AmtRec:	2001.00g #Containers: 1				G 7 10/29/1000 Scr:	2143 Alpha:	Beta:	
14 L73FE-1-AC-C J0J060000-345-LCS 10/06/2010 15:29 pd			2000.00g,in AmtRec:	2000.00g #Containers: 1	QCAG1674 09/16/10,pd 11/07/03,r			G5 Scr:	2143 Alpha:	Beta:	

10/22/2010 9:59:23 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279345 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,Barcotl

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:

Comments: L6NP4-SAMP "Comments : no dup due to ISV please recount on sep dector HH 10-22-10"

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

L6EA61AC-SAMP Constituent List:

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

L73FE1AA-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:

L73FE1AC-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						

L6EA61AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

L73FE1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

L73FE1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

10/6/2010 3:29:51 PM

Sample Preparation/Analysis

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

AnalyDueDate: 10/28/2010

Batch: 0279345 pCi/L
SEQ Batch, Test: None

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

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:

Comments:

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

L6EA61AC-SAMP Constituent List:

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

L73FE1AA-BLK:

L73FE1AC-LCS:

L6EA61AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
L73FE1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
L73FE1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

11/1/2010 5:21:18 PM

ICOC Fraction Transfer/Status Report

ByDate: 11/1/2009, 11/6/2010, Batch: '0279345', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
0279345							
AC			Rev1C	Barcotl	10/22/2010 9:58:33		
SC				wagarr	IsBatched	10/6/2010 3:32:47 PM	ICOC_RADCALC v4.8.40
SC				Barcotl	InPrep	10/22/2010 9:58:33 AM	RL-PRP-004 REVISION 1
SC				BockJ	InPrep2	10/26/2010 12:41:05 PM	RL-GAM-001 REVISION 1
SC				BockJ	Prep2C	10/29/2010 9:30:05 AM	RL-GAM-001 REVISION 1
SC				ClarkR	InCnt1	10/29/2010 9:36:58 AM	RL-CI-007 REVISION 1
SC				DAWKINSO	CalcC	10/29/2010 9:54:19 PM	RL-CI-007 REVISION 1
SC				antonsonl	Rev1C	11/1/2010 5:20:53 PM	RL-DR-001 Rev 2
AC				BockJ	10/26/2010 12:41:05		
AC				BockJ	10/29/2010 9:30:05		
AC				ClarkR	10/29/2010 9:36:58		
AC				DAWKINSO	10/29/2010 9:54:19		
AC				antonsonl	11/1/2010 5:20:53 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

11/9/2010 9:36:21 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 10/28/2010 WO6028

Batch: 0279344 **WATER** **pCi/L** **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
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 L6EA6-1-AD J0I010454-1-SAMP 08/29/2010 08:03		3881.70g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	ITA10130 10/15/10		34.5	200	L4	1244 Scr: Alpha: 5.97E-04 uCi/Sa	11/12/10 Beta: 8.29E-04 uCi/Sa	
2 L6ECD-1-AD J0I010454-2-SAMP 08/29/2010 13:53		3893.00g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	ITA10131 10/15/10		34.8		L5	1244 Scr: Alpha: -1.95E-04 uCi/Sa	Beta: 1.88E-03 uCi/Sa	
3 L6EGF-1-AA J0I010475-1-SAMP 08/26/2010 10:30		3892.40g,in AmtRec: VIAL20,2X4LP #Containers: 3	ITA10132 10/15/10		34.8		L4	1607 Scr: Alpha: -1.61E-04 uCi/Sa	11/12/10 Beta: 7.28E-04 uCi/Sa	
4 L6NGJ-1-AD J0I080511-1-SAMP 09/01/2010 13:19		3882.60g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	ITA10133 10/15/10		35.2		L5	1607 Scr: Alpha: -9.55E-04 uCi/Sa	Beta: 1.40E-03 uCi/Sa	
5 L6NP4-1-AD J0I080556-1-SAMP 09/01/2010 10:06		3859.90g,in AmtRec: VIAL20,2XLP,3X4LP #Containers: 6	ITA10134 10/15/10		34.4		L4	2006 Scr: Alpha: 1.28E-03 uCi/Sa	11/12/10 0040 Beta: -1.00E-04 uCi/Sa	
6 L6NTP-1-AA J0I080569-1-SAMP 09/02/2010 09:14		3874.00g,in AmtRec: VIAL20,2X4LP #Containers: 3	ITA10135 10/15/10		33.6		L5	2007 Scr: Alpha: -1.33E-03 uCi/Sa	Beta: 1.58E-03 uCi/Sa	
7 L6NTP-1-AC-X J0I080569-1-DUP 09/02/2010 09:14		3862.20g,in AmtRec: VIAL20,2X4LP #Containers: 3	ITA10136 10/15/10		36.6		L4	2331 Scr: Alpha: -1.33E-03 uCi/Sa	Beta: 1.58E-03 uCi/Sa	

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

11/9/2010 9:36:22 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:
Pipet #:

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279344 WATER pCi/L **PM, Quote: SS , 57671**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

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 L6NTW-1-AD J0I080570-1-SAMP 09/02/2010 08:32		3793.60g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10137 10/15/10		35.2	200	L5	2333	11/12/10	Scr: Alpha: -1.08E-03 uCi/Sa Beta: -2.68E-04 uCi/Sa
9 L6PFJ-1-AD J0I080570-2-SAMP 09/02/2010 12:36		3806.60g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10138 10/15/10		23.6		L4	0259		Scr: Alpha: -6.79E-04 uCi/Sa Beta: 8.61E-04 uCi/Sa
10 L6PGA-1-AD J0I080570-3-SAMP 09/02/2010 11:30		3849.30g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10139 10/15/10		35.4		L5	0300		Scr: Alpha: -1.62E-03 uCi/Sa Beta: 2.15E-04 uCi/Sa
11 L6PGG-1-AD J0I080570-4-SAMP 09/02/2010 09:55		3865.90g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10140 10/15/10		34.6		L5	0806	11/13/10	Scr: Alpha: 1.30E-04 uCi/Sa Beta: 8.59E-04 uCi/Sa
12 L6PGK-1-AD J0I080570-5-SAMP 09/02/2010 11:50		3445.20g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10141 10/15/10		34.6		L5	1009	11/13/10	Scr: Alpha: 3.32E-03 uCi/Sa Beta: -1.55E-03 uCi/Sa
13 L6PGX-1-AD J0I080570-6-SAMP 09/02/2010 13:33		3659.30g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10142 10/15/10		34.3		L6	1357	11/13/10	Scr: Alpha: 7.88E-04 uCi/Sa Beta: -5.91E-04 uCi/Sa
14 L6PG2-1-AD J0I080570-7-SAMP 09/02/2010 10:38		3642.50g,in AmtRec: VIAL20,3XLP,3X4LP #Containers: 7	ITA10143 10/15/10		34.5		L5	1948	11/13/10	Scr: Alpha: 1.53E-04 uCi/Sa Beta: 2.15E-04 uCi/Sa

11/9/2010 9:36:23 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 10/28/2010

Batch: 0279344 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 L73FC-1-AA-B J0J060000-344-BLK 10/06/2010 15:29 pd		3917.70g,in AmtRec:	ITA10144 10/15/10 #Containers: 1		34.3	200	L5 Scr:	2311 Alpha:	11/13/10 OA Beta:	
16 L73FC-1-AC-C J0J060000-344-LCS 10/06/2010 15:29 pd		3901.40g,in AmtRec:	ISD1153 10/18/10 #Containers: 1		35.4		L5 Scr:	0241 Alpha:	Beta:	

Comments: L6NP4-SAMP "Comments : no dup due to ISV please recount on sep dector HH 10-22-10"

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

L6EA61AD-SAMP Constituent List:

I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
L73FC1AA-BLK:					
I-129	RDL:0.50E+00	pCi/L	LCL:	UCL:	RPD:
L73FC1AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

L6EA61AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
L73FC1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
L73FC1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

11/15/2010 1:48:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 11/15/2009, 11/20/2010, Batch: '0279344', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
0279344						
AC		**Rev1C**	**ONeillD**	11/5/2010 3:30:13 PM		
SC			wagarr	IsBatched	10/6/2010 3:32:47 PM	ICOC_RADCALC v4.8.40
SC			ONeillD	InPrep	11/5/2010 3:30:13 PM	RL-PRP-004 REVISION 1
SC			ONeillD	InPrep2	11/10/2010 7:18:28 PM	RL-GAM-002 REVISION 1
SC			ONeillD	Prep2C	11/12/2010 9:05:48 AM	RL-GAM-002 REVISION 1
SC			BlackCL	InCnt1	11/12/2010 9:19:56 AM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	11/14/2010 7:08:14 AM	RL-CI-007 REVISION 1
SC			nortonj	Rev1C	11/15/2010 1:42:32 PM	RL-DR-001 Rev 2
AC			**ONeillD**	11/10/2010 7:18:28		
AC			**ONeillD**	11/12/2010 9:05:48		
AC			**BlackCL**	11/12/2010 9:19:56		
AC			**BlackCL**	11/14/2010 7:08:14		
AC			**nortonj**	11/15/2010 1:42:32		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 6

ICOCFractions v4.8.44

10/6/2010 3:29:52 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 10/28/2010 W0602S

Batch: 0279352 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 L6EA6-1-AA								
J0I010454-1-SAMP								
08/29/2010 08:03		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 5.97E-04 uCi/Sa	Beta: 8.29E-04 uCi/Sa
2 L6EA6-1-AE-X								
J0I010454-1-DUP								
08/29/2010 08:03		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 5.97E-04 uCi/Sa	Beta: 8.29E-04 uCi/Sa
3 L6ECD-1-AA								
J0I010454-2-SAMP								
08/29/2010 13:53		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -1.95E-04 uCi/Sa	Beta: 1.88E-03 uCi/Sa
4 L6NGJ-1-AA								
J0I080511-1-SAMP								
09/01/2010 13:19		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: -9.55E-04 uCi/Sa	Beta: 1.40E-03 uCi/Sa
5 L6NP4-1-AA								
J0I080556-1-SAMP								
09/01/2010 10:06		AmtRec: VIAL20,2XLP,3X4LP	#Containers: 6			Scr:	Alpha: 1.28E-03 uCi/Sa	Beta: -1.00E-04 uCi/Sa
6 L6NTW-1-AA								
J0I080570-1-SAMP								
09/02/2010 08:32		AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7			Scr:	Alpha: -1.08E-03 uCi/Sa	Beta: -2.68E-04 uCi/Sa
7 L6PFJ-1-AA								
J0I080570-2-SAMP								
09/02/2010 12:36		AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7			Scr:	Alpha: -6.79E-04 uCi/Sa	Beta: 8.61E-04 uCi/Sa

10/6/2010 3:29:52 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 10/28/2010

Batch: 0279352 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SS , 57671

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 L6PGA-1-AA J0I080570-3-SAMP 09/02/2010 11:30	AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: -1.62E-03 uCi/Sa	Beta: 2.15E-04 uCi/Sa
9 L6PGG-1-AA J0I080570-4-SAMP 09/02/2010 09:55	AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: 1.30E-04 uCi/Sa	Beta: 8.59E-04 uCi/Sa
10 L6PGK-1-AA J0I080570-5-SAMP 09/02/2010 11:50	AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: 3.32E-03 uCi/Sa	Beta: -1.55E-03 uCi/Sa
11 L6PGX-1-AA J0I080570-6-SAMP 09/02/2010 13:33	AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: 7.88E-04 uCi/Sa	Beta: -5.91E-04 uCi/Sa
12 L6PG2-1-AA J0I080570-7-SAMP 09/02/2010 10:38	AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: 1.53E-04 uCi/Sa	Beta: 2.15E-04 uCi/Sa
13 L73F6-1-AA-B J0J060000-352-BLK 10/06/2010 15:29 pd	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
14 L73F6-1-AC-C J0J060000-352-LCS 10/06/2010 15:29 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 Page 2 ISV - Insufficient Volume for Analysis WO Cnt: **14** ICOC v4.8.40

10/6/2010 3:29:53 PM

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: 10/28/2010

Batch: 0279352 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:
15 L73F6-1-AD-BN								
J0J060000-352-IBLK								
10/06/2010 15:29 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16 L73F6-1-AE-BN								
J0J060000-352-IBLK								
10/06/2010 15:29 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

L6EA61AA-SAMP Constituent List:
  C-14        RDL:2.00E+02    pCi/L     LCL:70      UCL:130     RPD:20
L73F61AA-BLK:

L73F61AC-LCS:

L73F61AD-IBLK:

L73F61AE-IBLK:

L6EA61AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
L73F61AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
L73F61AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
L73F61AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
L73F61AE-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

10/6/2010 3:29:53 PM

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: 10/28/2010

Batch: 0279352 **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:

10/27/2010 2:33:02 PM

ICOC Fraction Transfer/Status Report

ByDate: 10/27/2009, 11/1/2010, Batch: '0279352', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0279352						
AC		Rev1C	NelsonT	10/20/2010 2:38:17		
SC			wagarr	IsBatched	10/6/2010 3:32:47 PM	ICOC_RADCALC v4.8.40
SC			NelsonT	Sep1C	10/20/2010 2:38:17 PM	RL-LSC-008 REVISION 1
SC			ClarkR	InCnt1	10/20/2010 3:17:09 PM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	10/22/2010 11:26:51 AM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	10/27/2010 2:30:12 PM	RL-DR-001 Rev 2
AC			ClarkR	10/20/2010 3:17:09		
AC			ClarkR	10/22/2010 11:26:51		
AC			antonsonl	10/27/2010 2:30:12		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 4

ICOCFractions v4.8.44

10/12/2010 12:03:26 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279348 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,JorgensonD

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 L6NTW-1-AE J0I080570-1-SAMP 09/02/2010 08:32		AmtRec: VIAL20,3XLP,3X4LP	400.90g,in #Containers: 7	400.90g	NITA3628 09/14/10	100		Scr:	Alpha: -1.08E-03 uCi/Sa	Beta: -2.68E-04 uCi/Sa
2 L6NTW-1-AF-X J0I080570-1-DUP 09/02/2010 08:32		AmtRec: VIAL20,3XLP,3X4LP	400.80g,in #Containers: 7	400.80g	NITA3629 09/14/10			Scr:	Alpha: -1.08E-03 uCi/Sa	Beta: -2.68E-04 uCi/Sa
3 L6PFJ-1-AE J0I080570-2-SAMP 09/02/2010 12:36		AmtRec: VIAL20,3XLP,3X4LP	400.00g,in #Containers: 7	400.00g	NITA3630 09/14/10			Scr:	Alpha: -6.79E-04 uCi/Sa	Beta: 8.61E-04 uCi/Sa
4 L6PGA-1-AE J0I080570-3-SAMP 09/02/2010 11:30		AmtRec: VIAL20,3XLP,3X4LP	399.10g,in #Containers: 7	399.10g	NITA3631 09/14/10			Scr:	Alpha: -1.62E-03 uCi/Sa	Beta: 2.15E-04 uCi/Sa
5 L6PGG-1-AE J0I080570-4-SAMP 09/02/2010 09:55		AmtRec: VIAL20,3XLP,3X4LP	399.70g,in #Containers: 7	399.70g	NITA3632 09/14/10			Scr:	Alpha: 1.30E-04 uCi/Sa	Beta: 8.59E-04 uCi/Sa
6 L6PGK-1-AE J0I080570-5-SAMP 09/02/2010 11:50		AmtRec: VIAL20,3XLP,3X4LP	401.70g,in #Containers: 7	401.70g	NITA3633 09/14/10			Scr:	Alpha: 3.32E-03 uCi/Sa	Beta: -1.55E-03 uCi/Sa
7 L6PGX-1-AE J0I080570-6-SAMP 09/02/2010 13:33		AmtRec: VIAL20,3XLP,3X4LP	401.20g,in #Containers: 7	401.20g	NITA3634 09/14/10			Scr:	Alpha: 7.88E-04 uCi/Sa	Beta: -5.91E-04 uCi/Sa

10/12/2010 12:03:27 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279348 WATER pCi/L PM, Quote: SS , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,JorgensonD

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 L6PG2-1-AE J0I080570-7-SAMP			402.20g,in	402.20g	NITA3635 09/14/10					
09/02/2010 10:38			AmtRec: VIAL20,3XLP,3X4LP	#Containers: 7				Scr:	Alpha: 1.53E-04 uCi/Sa	Beta: 2.15E-04 uCi/Sa
9 L73FL-1-AA-B J0J060000-348-BLK			401.00g,in	401.00g	NITA3636 09/14/10					
10/06/2010 15:29 pd			AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
10 L73FL-1-AC-C J0J060000-348-LCS			399.20g,in	399.20g	NISA1262 09/02/10					
10/06/2010 15:29 pd			AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
11 L73FL-1-AD-BN J0J060000-348-IBLK										
10/06/2010 15:29 pd			AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

P.H. < 2.0 [illegible] 10-12-10

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

```
L6NTW1AE-SAMP Constituent List:
  Ni-63        RDL:15        pCi/L    LCL:70     UCL:130    RPD:20
L73FL1AA-BLK:
  Ni-63        RDL:15        pCi/L    LCL:       UCL:       RPD:
L73FL1AC-LCS:
  Ni-63        RDL:15        pCi/L    LCL:70     UCL:130    RPD:20
L73FL1AD-IBLK:
  Ni-63        RDL:15        pCi/L    LCL:       UCL:       RPD:
```

10/12/2010 12:03:28 PM

Sample Preparation/Analysis

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

Balance Id:

Pipet #: _____

AnalyDueDate: 10/28/2010

Sep1 DT/Tm Tech:

Batch: 0279348 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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

```
L6NTW1AE-SAMP Calc Info:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
L73FL1AA-BLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
L73FL1AC-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
L73FL1AD-IBLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

11/9/2010 10:37:30 AM

ICOC Fraction Transfer/Status Report

ByDate: 11/9/2009, 11/14/2010, Batch: '0279348', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
0279348						
AC		**Rev1C**	**JorgensonD**	10/12/2010 12:04:40		
SC			wagarr	IsBatched	10/6/2010 3:32:47 PM	ICOC_RADCALC v4.8.40
SC			JorgensonD	Prep1C	10/12/2010 12:04:40 PM	RL-PRP-004 REVISION 1
SC			JorgensonD	Sep2C	10/18/2010 9:00:00 AM	RL-LSC-017 REVISION 1
SC			BlackCL	InCnt1	10/18/2010 9:13:19 AM	RL-CI-005 REVISION 1
SC			DAWKINSO	CalcC	10/31/2010 9:07:28 PM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	11/9/2010 10:37:19 AM	RL-DR-001 Rev 2
AC			**JorgensonD**	10/18/2010 9:00:00		
AC			**BlackCL**	10/18/2010 9:13:19		
AC			**DAWKINSO**	10/31/2010 9:07:28		
AC			**antonsonl**	11/9/2010 10:37:19		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 5

ICOCFractions v4.8.44