

APRIL 26, 2010

Analytical Data Package Prepared For
CH2M Hill Plateau Remediation

Radiochemical Analysis By
TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains _____ Pages

Report No.: 43699

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

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W05799	L10-007	B23PY8	J0B050583-9	LVAWM1AA	9LVAWM10	0039242
		B23PY9	J0B050583-1	LVAVW1AA	9LVAVW10	0039242
		B23R00	J0B050583-2	LVAV01AA	9LVAV010	0039242
		B23R01	J0B050583-3	LVAV21AA	9LVAV210	0039242
		B23R03	J0B050583-4	LVAV91AA	9LVAV910	0039242
		B23R04	J0B050583-5	LVAWD1AA	9LVAWD10	0039242
		B23R05	J0B050583-6	LVAWF1AA	9LVAWF10	0039242
		B23R06	J0B050583-7	LVAWG1AA	9LVAWG10	0039242
		B23R08	J0B050583-8	LVAWK1AA	9LVAWK10	0039242
		B23R09	J0B050583-10	LVAWP1AA	9LVAWP10	0039242

Certificate of Analysis

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Richland, WA 99352

April 26, 2010

Attention: John Trechter

SAF Number	:	L10-007
Date SDG Closed	:	February 4, 2010
Number of Samples	:	Ten (10)
Sample Type	:	Water
SDG Number	:	W05799
Data Deliverable	:	30/30 Day

CASE NARRATIVE

I. Introduction

On February 4, 2010 TestAmerica received a request to analyze ten water samples for radiochemical analysis. Upon receipt, the samples were assigned to lot JOB050583 and assigned the following laboratory ID number to correspond with the CH2M specific ID:

<u>CH2M ID#</u>	<u>TARL ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B23PY9	LVAVW	WATER	02/04/10
B23R00	LVAV0	WATER	02/04/10
B23R01	LVAV2	WATER	02/04/10
B23R03	LVAV9	WATER	02/04/10
B23R04	LVAWD	WATER	02/04/10
B23R05	LVAWF	WATER	02/04/10
B23R06	LVAWG	WATER	02/04/10
B23R08	LVAWK	WATER	02/04/10
B23PY8	LVAWM	WATER	02/04/10
B23R09	LVAWP	WATER	02/04/10

April 26, 2010

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:

Liquid Scintillation Counting

Mid Level Tritium by method RL-LSC-005 (RICH-RC-5007)*

*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

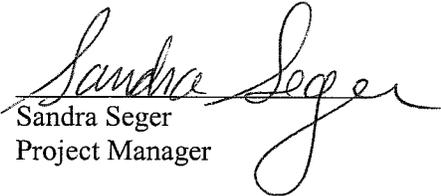
Liquid Scintillation Counting

Mid Level Tritium by method RL-LSC-005 (RICH-RC-5007):

The LCS, batch blank, samples and sample duplicate (B23PY9) 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, $R = \text{constants} * f(x,y,z, \dots)$. 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/\sqrt{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) <i>u_c - Combined Uncertainty.</i>	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, <i>u_c the combined uncertainty.</i> 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%. $Lc = (1.645 * \sqrt{2 * (BkgndCnt / BkgndCntMin) / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. 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%. $MDC = (4.65 * \sqrt{((BkgndCnt / BkgndCntMin) / SCntMin) + 2.71 / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D) / [\sqrt{TPUs^2 + TPUD^2}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUD is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Isotope	Richland SOP #	Old Richland SOP #	Method Reference	Title
Asbestos	RL-ASB-001	N/A	NIOSH 7400	Fiber Counting by Phase Contrast Microscopy based on NIOSH 7400
Asbestos	RL-ASB-002	N/A	NIOSH 9002	Sample Prep and Analysis for Asbestos (bulk) by Polarized Light Microscopy based on NIOSH 9002
Alpha - Gross	ARCHIVED	RICH-RB-5035	Liquid Scintillation Anal/ Packard	DETERMINATION OF GROSS ALPHA IN NASAL SMEARS BY LIQUID SCINTILLATION COUNTING
Alpha - Gross	RL-GPC-001	RICH-RC-5014	9310 / EPA SW846 900.0 / EPA 600	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN WATER BY METHOD 9310
Alpha - Gross	RL-GPC-007	RICH-RC-5020	SM 7110B EPA 680	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN SOIL, SHORELINE SOIL, FOOD AND VEGETATION
Alpha - Gross	RL-GPC-002	RICH-RC-5021	00-02 EPA 520	DETERMINATION OF GROSS ALPHA ACTIVITY IN WATER BY COPRECIPITATION
Alpha - Gross	RL-GPC-008	RICH-RC-5036	ER100 / LANL	PREPARATION OF AIR FILTERS FOR GROSS ALPHA/BETA AND COMPOSITING AIR FILTERS
Am	RL-ALP-003	RICH-RC-5072	Mod RP 725 / DOE0089T EXT Chromatography	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
Am	RL-ALP-010	RICH-RC-5080	Am03/Pu11HASL 300 NAS-NS-3006	SEQUENTIAL SEPARATION OF PLUTONIUM AND AMERICIUM
Beta - Gross	RL-GPC-001	RICH-RC-5014	9310 / EPA SW846 900.0 / EPA 600	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN WATER BY METHOD 9310
Beta - Gross	RL-GPC-007	RICH-RC-5020	SM 7110B EPA 680	DETERMINATION OF GROSS ALPHA AND GROSS BETA IN SOIL, SHORELINE SOIL, FOOD AND VEGETATION
Beta - Gross	RL-GPC-008	RICH-RC-5036	ER100 / LANL	PREPARATION OF AIR FILTERS FOR GROSS ALPHA/BETA AND COMPOSITING AIR FILTERS
C14	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
C14	RL-LSC-008	RICH-RC-5022	EPA C-01 / EPA 520	CARBON 14 BY DIGESTION METHOD
C14	RL-LSC-009	RICH-RC-5040	Mod C14 / EPA 680	DETERMINATION OF CARBON-14 BY BENZENE SYNTHESIS
C14	RL-LSC-010	RICH-RC-5046	EPA C-01 / EPA 520	DETERMINATION OF CARBON-14 IN GRAPHITE AND SOIL
C14	RL-LSC-011	RICH-RC-5047	Mod H-02 / EPA 520	DETERMINATION OF CARBON-14 IN WATER BY DIRECT COUNTING
Cm	RL-ALP-003	RICH-RC-5072	Mod RP 725 / DOE0089T EXT Chromatography	SEPARATION OF AMERICIUM, CURIUM, AND URANIUM BY EXTRACTION CHROMATOGRAPHY
Coliform	RL-WC-001	RICH-WC-5001	9222B	DETERMINATION OF TOTAL COLIFORM: MULTIPLE TUBE FERMENTATION TECHNIQUE
Coliform	RL-WC-002	RICH-WC-5002	9131	TOTAL COLIFORMS BY MEMBRANE FILTRATION
Coliform	RL-WC-005	RICH-WC-5007	9223	TOTAL COLIFORM BY THE COLILERT METHOD
Cr6+	RL-WC-003	RICH-WC-5003	7196A, SW846	DETERMINATION OF HEXAVALENT CHROMIUM [Cr(VI)] IN WATER, SOIL, AND SIMILAR MATRICES
Cr6+	RL-WC-004	RICH-WC-5005	3060 / SW846	DETERMINATION OF HEXAVALENT CHROMIUM (CrVI) IN SOLID MATRICES WITH ALKALINE DIGESTION
Fe	RL-LSC-015	RICH-RC-5074	EXT Chromatography Mod Fe55/PNL-ALO-435	SEPARATION OF IRON AND NICKEL BY EXTRACTION CHROMATOGRAPHY
Fe55	RL-LSC-016	RICH-RC-5023	R4-73-014 / EPA HASL 300	DETERMINATION OF IRON-55 AND IRON-59 IN WATER
Fe59	RL-LSC-016	RICH-RC-5023	R4-73-014 / EPA HASL 300	DETERMINATION OF IRON-55 AND IRON-59 IN WATER
Gamma	RL-GAM-001	RICH-RC-5017	901.0 / HASL 300 ASTM D3649	PREPARATION OF ALL MATRICES FOR ANALYSIS BY GAMMA SPECTROSCOPY
H3	RL-LSC-001	RICH-RB-5013	Mod H-02 / EPA 520	TRITIUM, CARBON-14, NICKEL-63 OR PHOSPHORUS-32 ANALYSIS IN URINE
H3	RL-LSC-003	RICH-RB-5034	7500-3 / SM	DETERMINATION OF TRITIUM IN URINE BY DISTILLATION
H3	RL-LSC-004	RICH-RC-5004	H3 / EPA LV539	DETERMINATION OF TRITIUM IN AIR
H3	RL-LSC-005	RICH-RC-5007	Mod '906.0 / EPA 600	SEPARATION OF TRITIUM IN WATER AND AQUEOUS COMPONENT OF WINE
H3	RL-LSC-007	RICH-RC-5024	H-3 by EE EPA LV539 / HASL 300	DETERMINATION OF LOW LEVEL TRITIUM IN WATER BY ELECTROLYTIC ENRICHMENT
H3	RL-LSC-002	RICH-RC-5037	H-3 in Water/Tissue / LV 539	DETERMINATION OF TRITIUM BY CRYOGENIC DISTILLATION
H3	RL-LSC-006	RICH-RC-5048	H-3 in Water/Tissue / LV 539	TRITIUM PREPARATION IN MILK SAMPLES
I129	RL-GAM-002	RICH-RC-5025	R4-73-014I/EPA ASTM D2334 (Discontinued)	DETERMINATION OF IODINE-131 AND 129 IN WATER BY SOLVENT EXTRACTION METHOD
I131	RL-GAM-002	RICH-RC-5025	R4-73-014I/EPA ASTM D2334 (Discontinued)	DETERMINATION OF IODINE-131 AND 129 IN WATER BY SOLVENT EXTRACTION METHOD
I131	ARCHIVED	RICH-RC-5049	HASL 300 (1983)	DETERMINATION OF IODINE-131 IN MILK BY BATCH ION-EXCHANGE
Metals	ARCHIVED	BHI-MT-0001	6010	ICP-AE SPECTROSCOPY, SPECTROMETRIC METHOD FOR TRACE ELEMENT ANALYSIS, METHOD 6010A FOR Bechtel

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

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

APRIL 26, 2010

Sample Results Summary

Date: 26-Apr-10

TestAmerica TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 43699

SDG No: W05799

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
0039242	906.0ML_H3_LSC								
	B23PY8								
	LVAWM1AA H-3		2.74E+01 +- 1.5E+01		pCi/L	100%	2.37E+01	2.50E+01	
	B23PY9								
	LVAVW1AA H-3		2.24E+03 +- 2.4E+02		pCi/L	100%	2.36E+01	2.50E+01	
	B23PY9 DUP								
	LVAVW1AC H-3		2.21E+03 +- 2.3E+02		pCi/L	100%	2.34E+01	2.50E+01	1.4
	B23R00								
	LVAV01AA H-3		2.41E+02 +- 3.2E+01		pCi/L	100%	2.40E+01	2.50E+01	
	B23R01								
	LVAV21AA H-3		1.96E+01 +- 1.5E+01	U	pCi/L	100%	2.39E+01	2.50E+01	
	B23R03								
	LVAV91AA H-3		2.38E+01 +- 1.5E+01		pCi/L	100%	2.37E+01	2.50E+01	
	B23R04								
	LVAWD1AA H-3		8.90E+02 +- 9.7E+01		pCi/L	100%	2.40E+01	2.50E+01	
	B23R05								
	LVAWF1AA H-3		1.35E+01 +- 1.5E+01	U	pCi/L	100%	2.38E+01	2.50E+01	
	B23R06								
	LVAWG1AA H-3		9.39E+00 +- 1.5E+01	U	pCi/L	100%	2.41E+01	2.50E+01	
	B23R08								
	LVAWK1AA H-3		1.36E+01 +- 1.5E+01	U	pCi/L	100%	2.35E+01	2.50E+01	
	B23R09								
	LVAWP1AA H-3		4.47E+00 +- 1.4E+01	U	pCi/L	100%	2.32E+01	2.50E+01	
	No. of Results:		11						

TestAmerica

RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V5.2.5
A2002

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

APRIL 26, 2010

QC Results Summary

Date: 26-Apr-10

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 43699

SDG No.: W05799

Batch	Work Order	Parameter	Result +/- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC MDA
906.0ML_H3_LSC	0039242	BLANK QC,							
	LVD781AA	H-3	-4.60E-01 +/- 2.9E+01	U	pCi/L	100%			2.29E+01
	0039242	LCS,							
	LVD781AC	H-3	1.96E+03 +/- 2.1E+02		pCi/L	100%	72%	-0.3	2.35E+01
No. of Results: 2									

TestAmerica

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchQcSummary V5.2.5 A2002

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-9
 Client Sample ID: B23PY8

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-001
 Matrix: WATER LIQUID

Collection Date: 2/2/2010 8:29:00 AM
 Received Date: 2/4/2010 2:30:00 PM

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	2.74E+01		1.1E+01	1.5E+01	2.37E+01 pCi/L	1.17E+01	100%	(1.2)	2/17/10 08:10 a		0.01	LSCQ1
						1.17E+01	2.50E+01	(3.6)			L	

Work Order: LVAWM1AA Report DB ID: 9LVAWM10

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: J0B050583-2
 Client Sample ID: B23R00

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-003

Collection Date: 2/2/2010 10:03:00 AM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	2.41E+02		1.5E+01	3.2E+01	2.40E+01 pCi/L		100%	(10.1)	2/17/10 08:10 a		0.01	LSCQ1
							2.50E+01	(15.3)			L	

Work Order: LVAV01AA Report DB ID: 9LVAV010

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-3
 Client Sample ID: B23R01

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-004

Collection Date: 2/2/2010 10:54:00 AM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	1.96E+01	U	1.1E+01	1.5E+01	2.39E+01 pCi/L	1.18E+01	100%	0.82	2/17/10 08:10 a		0.01	LSCQ1
						2.50E+01		(2.6)			L	

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-4
 Client Sample ID: B23R03

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-006

Collection Date: 2/2/2010 11:50:00 AM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
			1.1E+01	1.5E+01	2.37E+01 pCi/L		100%	(1.)	2/17/10 08:10 a		0.01	LSCQ1
	2.38E+01					1.17E+01	2.50E+01	(3.2)			L	

Work Order: LVAV91AA Report DB ID: 9LVAV910

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-5
 Client Sample ID: B23R04

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-007

Collection Date: 2/2/2010 1:49:00 PM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RI), Rst/TotUcert	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
		8.90E+02	2.3E+01	9.7E+01	2.40E+01 pCi/L		100%	(37.)	2/17/10 08:10 a		0.01	LSCQ1
							2.50E+01	(18.4)			L	

Work Order: LVAWD1AA Report DB ID: 9LVAWD10

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-6
 Client Sample ID: B23R05

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-008

Collection Date: 2/2/2010 12:54:00 PM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	1.35E+01	U	1.1E+01	1.5E+01	2.38E+01 pCi/L	1.17E+01	100%	0.57	2/17/10 08:10 a		0.01	LSCQ1
						2.50E+01		(1.8)			L	

Work Order: LVAVF1AA Report DB ID: 9LVAVF10

No. of Results: 1 Comments:

APRIL 26, 2010

TestAmerica MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRchSample U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda or Total Uncert or not identified by gamma scan software.
 V5.2.5 A2002

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: J0B050583-8
 Client Sample ID: B23R08

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-011

Collection Date: 2/3/2010 9:04:00 AM

Received Date: 2/4/2010 2:30:00 PM

Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	1.36E+01	U	1.1E+01	1.5E+01	2.35E+01 pCi/L	1.16E+01	100%	0.58	2/17/10 08:10 a		0.01	LSCQ1
						2.50E+01		(1.9)			L	

Work Order: LVAWK1AA Report DB ID: 9LVAWK10

No. of Results: 1 Comments:

APRIL 26, 2010

FORM I

Date: 26-Apr-10

SAMPLE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: JOB050583-10
 Client Sample ID: B23R09

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-012

Collection Date: 2/2/2010 12:54:00 PM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	4.47E+00	U	1.1E+01	1.4E+01	2.32E+01 pCi/L	1.14E+01	100%	0.19	2/17/10 08:10 a		0.01	LSCQ1
						1.14E+01	2.50E+01	0.63			L	

Work Order: LVAWP1AA Report DB ID: 9LVAWP10

No. of Results: 1 Comments:

APRIL 26, 2010

FORM II

Date: 26-Apr-10

DUPLICATE RESULTS

Lab Name: TestAmerica
 Lot-Sample No.: J0B050583-1
 Client Sample ID: B23PY9 DUP

SDG: W05799
 Report No.: 43699
 COC No.: L10-007-002
 Collection Date: 2/2/2010 9:03:00 AM
 Received Date: 2/4/2010 2:30:00 PM
 Matrix: WATER LIQUID

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	2.21E+03		3.3E+01	2.3E+02	2.34E+01	pCi/L	100%	(94.3)	2/17/10 08:10 a		0.01	LSCQ1
	2.24E+03					2.50E+01		(19.)			L	

No. of Results: 1 Comments:

APRIL 26, 2010

FORM II

Date: 26-Apr-10

BLANK RESULTS

Lab Name: TestAmerica
Matrix: WATER

SDG: W05799
Report No.: 43699

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC											
H-3	-4.60E-01	U	2.8E+01	2.9E+01	2.29E+01	pCi/L	100%	-0.02	2/17/10 08:10 a		0.01	LSCQ1
					1.13E+01	2.50E+01		-0.03			L	

Work Order: LVD781AA Report DB ID: LVD781AB

No. of Results: 1 Comments:

APRIL 26, 2010

FORM II

Date: 26-Apr-10

LCS RESULTS

Lab Name: TestAmerica

SDG: W05799

Matrix: WATER

Report No.: 43699

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 0039242	906.0ML_H3_LSC												
H-3	1.96E+03		3.8E+01	2.1E+02	2.35E+01 pCi/L		100%	2.71E+03	8.13E+01	72%	2/17/10 08:10 a	0.01	LSCQ1
Work Order: LVD781AC Report DB ID: LVD781CS Rec Limits: -0.3 L													

No. of Results: 1 Comments:

APRIL 26, 2010

APRIL 26, 2010

Lot No., Due Date: **JOB050583; 03/03/2010**
 Client, Site: **1378399; RUS TEDF HANFORD**
 QC Batch No., Method Test: **0039242; RTRITIUM Midlevel Tritium**
 SDG, Matrix: **W05799; 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 *4/26/10*

Data Review Checklist
RADIOCHEMISTRY
 Second Level Review

Batch Number: 00 39242

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:  Date: 4/26/10

APRIL 26, 2010

COLLECTOR
S.J. Southerland
CHPRC

COMPANY CONTACT
BOWMAN, MW
373-9379

PROJECT COORDINATOR
BOWMAN, M

PROJECT DESIGNATION
H3 GROUNDWATER MONITORING WELLS - FY 2010

FIELD LOGBOOK NO.
HNF-N-506-28 47

OFFSITE PROPERTY NO.
N/A

SAF NO.
L10-007

COA
400776CA40

BILL OF LADING/AIR BILL NO.
N/A

PRICE CODE
7H

AIR QUALITY
30 Days / 30 Days

METHOD OF SHIPMENT
Govt. Vehicle

SAMPLING LOCATION
299-W6-11

ICE CHEST NO.
RWSA

SHIPPED TO
TestAmerica Incorporated, Richland

POSSIBLE SAMPLE HAZARDS/REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23PY9		W	2-2-10	0903	1X1L P	Tritium;	None
B23PY9		W			1X20mL G/P	Rad Screen;	None
<p><i>2/2/10 J. Wall</i></p> <p><i>SOB050583</i></p> <p><i>SDGT # W05799</i></p> <p><i>DUE-3/05/10</i></p> <p><i>03</i></p> <p><i>LVAVW</i></p> <p><i>SKS0610</i></p>							



CHAIN OF POSSESSION	SIGN/PRINT NAMES	DATE/TIME	RECEIVED BY/STORED IN	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC	<i>[Signature]</i>	FEB 02 2010	SSU #1	TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt. TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM SSU #1	<i>[Signature]</i>	FEB 04 2010	KE Hamilton	
RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC	<i>[Signature]</i>	FEB 04 2010	FedEx	
RELINQUISHED BY/REMOVED FROM KE Hamilton	<i>[Signature]</i>	FEB 04 2010	John Trechter	
RELINQUISHED BY/REMOVED FROM John Trechter	<i>[Signature]</i>	FEB 04 2010	John Trechter	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td>DISPOSED BY <td></td> <td></td> </td>	DISPOSED BY <td></td> <td></td>		

COLLECTOR: S.J. Southerland
 CHPRC
 TELEPHONE NO.: 373-9379
 PROJECT COORDINATOR: BOWMAN, M
 PRICE CODE: 7H
 DATA TURNAROUND: 30 Days / 30 Days

SAMPLING LOCATION: 299-W6-12
 PROJECT DESIGNATION: H3 GROUNDWATER MONITORING WELLS - FY 2010
 SAF NO.: L10-007
 AIR QUALITY: 30 Days / 30 Days

ICE CHEST NO.:
 FIELD LOGBOOK NO.: HNF-N-506-28 pg. 47
 ACTUAL SAMPLE DEPTH: N/A
 COA: 400776CA40
 METHOD OF SHIPMENT: Gov't. Vehicle

SHIPPED TO: TestAmerica Incorporated, Richland
 OFFSITE PROPERTY NO.: N/A
 BILL OF LADING/AIR BILL NO.: N/A

MATRIX*: OL = OTHER LIQUID
 OS = OTHER SOLID
 S = SOIL
 W = WATER

SPECIAL HANDLING AND/OR STORAGE: NONE

POSSIBLE SAMPLE HAZARDS/REMARKS: Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R00		W	2/2/10	1003	1X1L P	LVAVO	None
B23R00		W			1X20mL G/P	JOB050583 JDE*WC8799 DUE-3/08/10 03 SFS/10/10	None

APRIL 26, 2010

CHAIN OF POSSESSION	SIGN/PRINT NAMES	DATE/TIME	RECEIVED BY/STORED IN	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: CHPRC	<i>[Signature]</i>	FEB 02 2010 1410	KE Hamilton	TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
RELINQUISHED BY/REMOVED FROM: SSU #1	<i>[Signature]</i>	FEB 04 2010 1200	CHPRC	TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM: KE Hamilton	<i>[Signature]</i>	FEB 04 2010 1430	CHPRC	
RELINQUISHED BY/REMOVED FROM: CHPRC	<i>[Signature]</i>	FEB 04 2010 1430	CHPRC	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td></td> <td></td> <td></td>			

APRIL 26, 2010

COLLECTOR
S.J. Southerland
CHPRC

COMPANY CONTACT
BOWMAN, MW
373-9379

PROJECT COORDINATOR
BOWMAN, M

PRICE CODE
7H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
299-W7-3 January

PROJECT DESIGNATION
H3 GROUNDWATER MONITORING WELLS - FY 2010

SAF NO.
L10-007

AIR QUALITY
METHOD OF SHIPMENT
Govt. Vehicle

ICE CHEST NO.
FIELD LOGBOOK NO.
HNF-N-506-28 pgs. 47+48 N/A

ACTUAL SAMPLE DEPTH
N/A

COA
400776CA40

BILL OF LADING/AIR BILL NO.
N/A

SHIPPED TO
TestAmerica Incorporated, Richland

MATRIX*
OL = OTHER LIQUID
OS = OTHER SOLID
S = SOIL
W = WATER

SPECIAL HANDLING AND/OR STORAGE

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R01		W	2/2/10	1054	1X1L P Tritium;	L V A N Z	None
B23R01		W	↓	↓	1X20mL G/P Rad Screen;	JOB BOS 0583 SDB WCC 57C9 DUE 3/05/10 03 SKS 2/6/10	None

2/2/10 J. Wall

CHAIN OF POSSESSION	SIGN / PRINT NAMES	DATE/TIME	DATE/TIME	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC	RECEIVED BY/STORED IN SSU #1 KE Hamilton	FEB 02 2010 1200	FEB 02 2010 1410	TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
RELINQUISHED BY/REMOVED FROM SSU #1 KE Hamilton	RECEIVED BY/STORED IN CHPRC KE Hamilton	FEB 04 2010 1200	FEB 04 2010 1200	TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM CHPRC KE Hamilton	RECEIVED BY/STORED IN FEB EX 154 KE Hamilton	FEB 04 2010 1430	FEB 04 2010 1430	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td>DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td></td>	DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td>	DISPOSED BY <td>DATE/TIME</td>	DATE/TIME

APRIL 26, 2010

COLLECTOR S.J. Southerland CHPRC
 COMPANY CONTACT BOWMAN, MW TELEPHONE NO. 373-9379 PROJECT COORDINATOR BOWMAN, M
 SAMPLING LOCATION H3 GROUNDWATER MONITORING WELLS - FY 2010 PROJECT DESIGNATION H3 GROUNDWATER MONITORING WELLS - FY 2010
 SAF NO. L10-007 AIR QUALITY 30 Days / 30 Days
 ICE CHEST NO. HNF-N-506-28 pg. 48 FIELD LOGBOOK NO. N/A ACTUAL SAMPLE DEPTH N/A METHOD OF SHIPMENT Gov't. Vehicle
 SHIPPED TO TestAmerica Incorporated, Richland OFFSITE PROPERTY NO. N/A BILL OF LADING/AIR BILL NO. N/A

MATRIX* OIL = OTHER LIQUID OS = OTHER SOLID S = SOIL W = WATER
 SPECIAL HANDLING AND/OR STORAGE POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that may, or may not, be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R03		W	2/2/10	1150	1X1L P Tritium;	LVAV9	None
B23R03		W	↓	↓	1X20mL G/P Rad Screen;	30B050583 SDGWO5799 DUG 3/05/10 b3 SKS 2/6/10	None

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC SIGN/ PRINT NAMES DATE/TIME 1410 RECEIVED BY/STORED IN KE Hamilton CHPRC FEB 02 2010 1200
 RELINQUISHED BY/REMOVED FROM S.S. #1 SIGN/ PRINT NAMES DATE/TIME 1430 RECEIVED BY/STORED IN KE Hamilton CHPRC FEB 04 2010 1200
 RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC SIGN/ PRINT NAMES DATE/TIME 1430 RECEIVED BY/STORED IN KE Hamilton CHPRC FEB 04 2010 1200
 RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC SIGN/ PRINT NAMES DATE/TIME 1430 RECEIVED BY/STORED IN KE Hamilton CHPRC FEB 04 2010 1200

SPECIAL INSTRUCTIONS
 TARTL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
 TARTL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).

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LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSED BY		DATE/TIME

APRIL 26, 2010

COLLECTOR S.J. Southerland
CHPRC
COMPANY CONTACT BOWMAN, MW
TELEPHONE NO. 373-9379
PROJECT COORDINATOR BOWMAN, M
PRICE CODE 7H
DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION H3 GROUNDWATER MONITORING WELLS - FY 2010
PROJECT DESIGNATION H3 GROUNDWATER MONITORING WELLS - FY 2010
SAF NO. L10-007
AIR QUALITY
ICE CHEST NO. HNF-N-506-28 Pg. 48
FIELD LOGBOOK NO. N/A
ACTUAL SAMPLE DEPTH N/A
COA 400776CA40
METHOD OF SHIPMENT Govt. Vehicle
SHIPPED TO TestAmerica Incorporated, Richland
OFFSITE PROPERTY NO. N/A
BILL OF LADING/AIR BILL NO. N/A

MATRIX*
 OL = OTHER LIQUID
 OS = OTHER SOLID
 S = SOIL
 W = WATER

POSSIBLE SAMPLE HAZARDS/ REMARKS
 Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R04		W	2/2/10	1349	1X1L P Tritium;	LVAWD	None
B23R04		W	↓	↓	1X20mL G/P Rad Screen;	TORBOSU583 SDG-WO 8799 DUE-3/08/10 03 SKS 2/6/10	None

CHAIN OF POSSESSION	SIGN / PRINT NAMES	DATE/TIME	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC	RECEIVED BY/STORED IN SSU #1	FEB 02 2010 12:00	DATE/TIME H10 TARI: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
RELINQUISHED BY/REMOVED FROM SSU #1 KE Hamilton CHPRC	RECEIVED BY/STORED IN KE Hamilton CHPRC	FEB 04 2010 12:00	DATE/TIME TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM CHPRC	RECEIVED BY/STORED IN FEB EX 1430	FEB 04 2010 12:00	DATE/TIME ANCL 1430

LABORATORY SECTION RECEIVED BY
FINAL SAMPLE DISPOSITION DISPOSAL METHOD
TITLE
DISPOSED BY
DATE/TIME

APRIL 26, 2010

COLLECTOR
S.J. Southerland
CHPRC

COMPANY CONTACT
BOWMAN, MW
373-9379

PROJECT COORDINATOR
BOWMAN, M

PRICE CODE
7H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
699-49-79

PROJECT DESIGNATION
H3 GROUNDWATER MONITORING WELLS - FY 2010

SAF NO.
L10-007

AIR QUALITY

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-506-28 Pg. 48

ACTUAL SAMPLE DEPTH
N/A

METHOD OF SHIPMENT
Govt. Vehicle

SHIPPED TO
TestAmerica Incorporated, Richland

OFFSITE PROPERTY NO.
N/A

BILL OF LADING/AIR BILL NO.
N/A

MATRIX*
QL = OTHER LIQUID
OS = OTHER SOLID
S = SOIL
W = WATER

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R05		W	2/2/10	1254	1X1L P Tritium;	LVAWF	None
B23R05		W	2/2/10	↓	1X20mL G/P Rad Screen;	30B050583 SDG W05799 DUL-3/05/10 03 SKs 2/6/10	None

2/2/10 J. Wall

CHAIN OF POSSESSION	SIGN / PRINT NAMES	DATE/TIME	DATE/TIME	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC	RECEIVED BY/STORED IN SSU #1	FEB 02 2010 1410	FEB 02 2010 1410	TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
RELINQUISHED BY/REMOVED FROM SSU #1	RECEIVED BY/STORED IN KE Hamilton	FEB 04 2010 1200	FEB 04 2010 1200	TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM KE Hamilton	RECEIVED BY/STORED IN CHPRC Kevin E. Hamilton	FEB 04 2010 1430	FEB 04 2010 1430	
RELINQUISHED BY/REMOVED FROM CHPRC Kevin E. Hamilton	RECEIVED BY/STORED IN FEDEX	FEB 04 2010	FEB 04 2010	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td>DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td></td>	DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td>	DISPOSED BY <td>DATE/TIME</td>	DATE/TIME

APRIL 26, 2010

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COLLECTOR S.J. Southerland
CHPRC

COMPANY CONTACT BOWMAN, MW
373-9379

PROJECT COORDINATOR BOWMAN, M

PROJECT DESIGNATION H3 GROUNDWATER MONITORING WELLS - FY 2010

FIELD LOGBOOK NO. HNF-N-506-28 Pg. 49

ACTUAL SAMPLE DEPTH N/A

OFFSITE PROPERTY NO. N/A

SHIPPED TO TestAmerica Incorporated, Richland

SAF NO. L10-007

COA 400776CA40

BILL OF LADING/AIR BILL NO. N/A

PRICE CODE 7H

AIR QUALITY

METHOD OF SHIPMENT Govt. Vehicle

L10-007-009

PAGE 1 OF 1

DATA TURNAROUND 30 Days / 30 Days

SPECIAL HANDLING AND/OR STORAGE

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R06		W	2/3/10	1035	1X1L P Tritium;	LVAW 61	None
B23R06		W		↓	1X20mL G/P Rad Screen;	DOBOSO S83 SDG # W05799 DUE 3.0570 03 SKS 2/6/10	None

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC

RECEIVED BY/STORED IN KE Hamilton

DATE/TIME FEB 03 2010 1200

SIGN/ PRINT NAMES [Signature]

RELINQUISHED BY/REMOVED FROM KE Hamilton

RECEIVED BY/STORED IN [Signature]

DATE/TIME FEB 07 2010 1430

RELINQUISHED BY/REMOVED FROM KE Hamilton

RECEIVED BY/STORED IN [Signature]

DATE/TIME FEB 04 2010

SPECIAL INSTRUCTIONS
TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).

LABORATORY SECTION RECEIVED BY

FINAL SAMPLE DISPOSITION DISPOSED BY

TITLE

DATE/TIME

DATE/TIME

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APRIL 26, 2010

COLLECTOR S.J. Southerland
 CHPRC
 COMPANY CONTACT BOWMAN, MW
 TELEPHONE NO. 373-9379
 PROJECT COORDINATOR BOWMAN, M
 PRICE CODE 7H
 DATA TURNAROUND 30 Days / 30 Days

SAMPLING LOCATION H3 GROUNDWATER MONITORING WELLS - FY 2010
 PROJECT DESIGNATION H3 GROUNDWATER MONITORING WELLS - FY 2010
 SAF NO. L10-007
 AIR QUALITY
 METHOD OF SHIPMENT Govt. Vehicle

ICE CHEST NO. HNF-N-506-28 Pg 49
 FIELD LOGBOOK NO. N/A
 COA 400776CA40

SHIPPED TO TestAmerica Incorporated, Richland
 OFFSITE PROPERTY NO. N/A
 BILL OF LADING/AIR BILL NO. N/A

MATRIX*
 OL = OTHER LIQUID
 OS = OTHER SOLID
 S = SOIL
 W = WATER

SPECIAL HANDLING AND/OR STORAGE

POSSIBLE SAMPLE HAZARDS/REMARKS
 Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23R08		W	2/3/10	0904	1X1L P Tritium;	LVAWK	None
B23R08		W	↓	↓	1X20mL G/P Rad Screen;	SOBOSO533 SDG W05799 DUE-3.08.10 03 S/S 2/6/10	None

2/3/10 A. Wall

CHAIN OF POSSESSION	SIGN / PRINT NAMES	RECEIVED BY/STORED IN	DATE/TIME	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC	<i>[Signature]</i>	RECEIVED BY/STORED IN SSU #1	1410 FEB 02 2010 3 08 24 10	TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
RELINQUISHED BY/REMOVED FROM SSU #1	<i>[Signature]</i>	RECEIVED BY/STORED IN KE Hamilton CHPRC	1200 FEB 04 2010	TARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
RELINQUISHED BY/REMOVED FROM KE Hamilton	<i>[Signature]</i>	RECEIVED BY/STORED IN KE Hamilton CHPRC	4446 FEB 04 2010	
RELINQUISHED BY/REMOVED FROM KE Hamilton	<i>[Signature]</i>	RECEIVED BY/STORED IN KE Hamilton CHPRC	1430 FEB 04 2010	

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LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td>DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td></td>	DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td>	DISPOSED BY <td>DATE/TIME</td>	DATE/TIME

APRIL 26, 2010

CH2MHill Plateau Remediation Company
 CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST
 L10-007-001 PAGE 1 OF 1
 COLLECTOR S.J. Southerland
 COMPANY CONTACT BOWMAN, MW TELEPHONE NO. 373-9379 PROJECT COORDINATOR BOWMAN, M
 CHPRC
 SAMPLING LOCATION H3 GROUNDWATER MONITORING WELLS - FY 2010 PROJECT DESIGNATION H3 GROUNDWATER MONITORING WELLS - FY 2010
 299-W6-6 FIELD LOGBOOK NO. N/A ACTUAL SAMPLE DEPTH N/A
 ICE CHEST NO. HNF-N-506-28 OFFSITE PROPERTY NO. N/A
 SHIPPED TO TestAmerica Incorporated, Richland N/A
 BILL OF LADING/AIR BILL NO. N/A
 SAF NO. L10-007 COA 400776CA40
 METHOD OF SHIPMENT Gov't. Vehicle
 PRICE CODE 7H AIR QUALITY 30 Days / 30 Days
 DATA TURNAROUND 30 Days

MATRIX*
 OIL = OTHER LIQUID
 OS = OTHER SOLID
 S = SOIL
 W = WATER
 SPECIAL HANDLING AND/OR STORAGE
 POSSIBLE SAMPLE HAZARDS/ REMARKS
 Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SAMPLE NO.	LAB ID	MATRIX*	SAMPLE DATE	SAMPLE TIME	NO./TYPE CONTAINER(S)	ANALYSIS	PRESERVATION
B23PY8		W	2/2/10	0829	1X1L P Tritium;	LVAWM	None
B23PY8		W			1X20mL G/P Rad Screen;	SDB050583 SDG0505799 DUG-30510 03 Sks 2/6/10	None

CHAIN OF POSSESSION
 RECEIVED BY/REMOVED FROM S.J. Southerland/CHPRC DATE/TIME FEB 02 2010 1410
 RECEIVED BY/STORED IN KE Hamilton DATE/TIME FEB 04 2010 1200
 RECEIVED BY/REMOVED FROM KE Hamilton DATE/TIME FEB 04 2010 1430
 RECEIVED BY/STORED IN CHPRC Ken & Martha DATE/TIME FEB 04 2010 2:4:10
 RECEIVED BY/REMOVED FROM CHPRC Ken & Martha DATE/TIME FEB 04 2010 1430
 RECEIVED BY/STORED IN CHPRC Ken & Martha DATE/TIME FEB 04 2010 2:4:10
 RECEIVED BY/REMOVED FROM CHPRC Ken & Martha DATE/TIME FEB 04 2010 2:4:10
 RECEIVED BY/STORED IN CHPRC Ken & Martha DATE/TIME FEB 04 2010 2:4:10
 SPECIAL INSTRUCTIONS
 TARL: Send copy of chain of custody to John Trechter 24 hours after sample receipt. E-Mail preliminary report within 30 days from sample receipt, followed by final hard copy to John Trechter within 45 days of sample receipt.
 ARL: Analyze samples for "Mid-Level" Tritium (with MDL of 25 pCi/L).
 34 of 39

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION <td>DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td></td>	DISPOSAL METHOD <td>DISPOSED BY <td>DATE/TIME</td> </td>	DISPOSED BY <td>DATE/TIME</td>	DATE/TIME

APRIL 26, 2010

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

L10-007-012 PAGE 1 OF 1

CH2M Hill Plateau Remediation Company

COLLECTOR S.J. Southerland
CHPRC

COMPANY CONTACT
BOWMAN, MW
373-9379

TELEPHONE NO.
373-9379

PROJECT COORDINATOR
BOWMAN, M

PRICE CODE 7H
AIR QUALITY
METHOD OF SHIPMENT
Govt. Vehicle

DATA
TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
699-49-79

PROJECT DESIGNATION
H3 GROUNDWATER MONITORING WELLS - FY 2010

SAF NO.
L10-007

METHOD OF SHIPMENT
Govt. Vehicle

FIELD LOGBOOK NO.
HNF-N-506-28 Pg. 48
ACTUAL SAMPLE DEPTH
N/A

COA
400776CA40
BILL OF LADING/AIR BILL NO.
N/A

OFFSITE PROPERTY NO.
N/A

SHIPPED TO
TestAmerica Incorporated, Richland

POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

MATRIX*
CL = OTHER LIQUID
OS = OTHER SOLID
S = SOIL
W = WATER

SAMPLE NO. LAB ID MATRIX* SAMPLE DATE SAMPLE TIME NO./TYPE CONTAINER(S) ANALYSIS PRESERVATION

B23R09 W 2/2/10 01254 1X1L P Tritium; None

B23R09 W 2/2/10 1254 1X20mL G/P Rad Screen; None

SOBOSO583
STDEWOS799
DUE-308510
03 SKS 2/6/10
LVAWP

2/2/10 P. Wall

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM S.J. Southerland CHPRC

DATE/TIME FEB 03 2010 1400

DATE/TIME FEB 02 2010 1410

SIGN/ PRINT NAMES RECEIVED BY/STORED IN SSV #1

DATE/TIME FEB 03 2010 1400

DATE/TIME FEB 02 2010 1410

RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC

DATE/TIME FEB 04 2010 1200

DATE/TIME FEB 04 2010 1200

SIGN/ PRINT NAMES RECEIVED BY/STORED IN KE Hamilton

DATE/TIME FEB 04 2010 1200

DATE/TIME FEB 04 2010 1200

RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

SIGN/ PRINT NAMES RECEIVED BY/STORED IN KE Hamilton

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

SIGN/ PRINT NAMES RECEIVED BY/STORED IN KE Hamilton

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

RELINQUISHED BY/REMOVED FROM KE Hamilton CHPRC

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

SIGN/ PRINT NAMES RECEIVED BY/STORED IN KE Hamilton

DATE/TIME FEB 04 2010 1430

DATE/TIME FEB 04 2010 1430

LABORATORY SECTION RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

APRIL 26, 2010

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

1430
Date/Time Received: FEB:04:10 GM Screen Results (out) 3 (in) 3 Initials []

Client: RUSA SDG #: W05999 NA [] SAF #: L10-007 NA []

Work Order Number: JOB 050583 Chain of Custody # L10-007-002; 003;

Shipping Container ID: hand delivery NA [] Air Bill # 004; 006; 007; 008; 009; 011; NA []

Item 1 through 5 for shipping container only. Initial appropriate response. 004; 012

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 10

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

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

9. Samples are:
 in good condition leaking
 broken have air bubbles
 (H3) (C14)
 (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: FEB 04 20 @ 1430

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

[] No action necessary; process as is.

Project Manager [Signature] Date 2/7/10

2/8/2010 3:11:30 PM **Sample Preparation/Analysis** Balance Id: *12454*
 1378399, Fluor Hanford Inc AR H-3 Prp/Sep LSC005 Pipet #: *217-10 em/17N*
 Hanford Inc T0 Tritium - Midlevel, by Liquid Scint
 AnalytDueDate: 03/03/2010 *W05799* 51 CLIENT: HANFORD
 Batch: 0039242 WATER PM, Quote: SS, 81939
 SEQ Batch, Test: None pCi/L

Work Order, Lot, Sample Date Time	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:
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1 LVAVW-1-AA
 JOB050583-1-SAMP
 02/02/2010 09:03
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

2 LVAVW-1-AC-X
 JOB050583-1-DUP
 02/02/2010 09:03
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

3 LVAV0-1-AA
 JOB050583-2-SAMP
 02/02/2010 10:03
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

4 LVAV2-1-AA
 JOB050583-3-SAMP
 02/02/2010 10:54
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

5 LVAV9-1-AA
 JOB050583-4-SAMP
 02/02/2010 11:50
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

6 LVAWD-1-AA
 JOB050583-5-SAMP
 02/02/2010 13:49
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

7 LVAWF-1-AA
 JOB050583-6-SAMP
 02/02/2010 12:54
 AmtRec: VIAL20,1XLP #Containers: 2
 Scr: Alpha: Beta:

APRIL 26, 2010

2/8/2010 3:11:30 PM **Sample Preparation/Analysis** Balance Id: _____
 1378399, Fluor Hanford Inc , Fluor AR H-3 Prp/Sep LSC005 Pipet #: _____
 Hanford Inc T0 Tritium - Midlevel, by Liquid Scint 51 CLIENT: HANFORD
Batch: 0039242 WATER PM, Quote: SS , 81939
 SEQ Batch, Test: None pCi/L

Analyte Due Date: 03/03/2010 Sep1 DT/Tm Tech: _____
 Sep2 DT/Tm Tech: _____
 Prep Tech: _____

Work Order, Lot, Sample Date Time	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 LVAWG-1-AA								
JOB050583-7-SAMP 02/03/2010 10:35								
Amt/Rec: VIAL20,1XLP #Containers: 2								
9 LVAWK-1-AA								
JOB050583-8-SAMP 02/03/2010 09:04								
Amt/Rec: VIAL20,1XLP #Containers: 2								
10 LVAWM-1-AA								
JOB050583-9-SAMP 02/02/2010 08:29								
Amt/Rec: VIAL20,1XLP #Containers: 2								
11 LVAWP-1-AA								
JOB050583-10-SAMP 02/02/2010 12:54								
Amt/Rec: VIAL20,1XLP #Containers: 2								
12 LVD78-1-AA-B								
JOB080000-242-BLK 02/08/2010 15:11 pd								
Amt/Rec: _____ #Containers: 1								
13 LVD78-1-AC-C								
JOB080000-242-LCS 02/08/2010 15:11 pd								
Amt/Rec: _____ #Containers: 1								
14 LVD78-1-AD-BN								
JOB080000-242-IBLK 02/08/2010 15:11 pd								
Amt/Rec: _____ #Containers: 1								

APRIL 26, 2010

4/26/2010 9:16:23 AM

ICOC Fraction Transfer/Status Report

APRIL 26 2010

ByDate: 4/26/2009, 5/1/2010, Batch: '0039242', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
0039242				
AC	Rev1C	NelsonT	2/17/2010 2:51:30 PM	
SC		WagarR	IsBatched 2/8/2010 3:13:38 PM	ICOC_RADCALC v4.8.37
SC		NelsonT	Sep1C 2/17/2010 2:51:30 PM	RL-LSC-005 REVISION 0
SC		BlackCL	CalcC 3/8/2010 8:44:54 AM	RL-CI-005 REVISION 0
SC		antonsonl	Rev1C 4/26/2010 9:16:06 AM	RL-DR-001 Rev 0
AC		BlackCL	3/8/2010 8:44:54 AM	
AC		antonsonl	4/26/2010 9:16:06	

AC: Accepting Entry; SC: Status Change

TestAmerica Richland
Richland Wa.