

Analytical Data Package Prepared For
CH2M Hill Plateau Remediation

Radiochemical Analysis By
TestAmerica Inc

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

Assigned Laboratory Code: TARL
Data Package Contains 74 Pages

Report No.: 65070

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.
W07071	I15-012	B303H6	J5B110430-1	M55701AG	9M557010	5051041
		B303H6	J5B110430-1	M55701AH	9M557010	5051044
		B303H6	J5B110430-1	M55701AF	9M557010	5051045
		B303H6	J5B110430-1	M55701AE	9M557010	5051046
		B303H6	J5B110430-1	M55701AJ	9M557010	5051047
		B303H6	J5B110430-1	M55701AA	9M557010	5051048
		B303H6	J5B110430-1	M55701AK	9M557010	5051049
		B303H6	J5B110430-1	M55702AC	9M557020	5062022
		B303H6	J5B110430-1	M55702AD	9M557020	5062023
W15-002		B305M5	J5B190427-1	M57WW1AA	9M57WW10	5051049
		B305M9	J5B180423-1	M57M91AA	9M57M910	5051049
		B305P1	J5B180423-2	M57NC1AA	9M57NC10	5051049
		B305P5	J5B190427-2	M57WX1AA	9M57WX10	5051049
I15-015		B30707	J5B110413-1	M552J1AA	9M552J10	5051047
		B30707	J5B110413-1	M552J1AC	9M552J10	5051049
		B30726	J5B140401-1	M56XD1AD	9M56XD10	5051044
		B30726	J5B140401-1	M56XD1AC	9M56XD10	5051045
		B30726	J5B140401-1	M56XD1AE	9M56XD10	5051047
		B30726	J5B140401-1	M56XD1AA	9M56XD10	5051048
		B30726	J5B140401-1	M56XD1AF	9M56XD10	5051049
		B30729	J5B110405-1	M551J1AC	9M551J10	5051045
		B30729	J5B110405-1	M551J1AA	9M551J10	5051048
S15-003		B30F74	J5B110406-1	M551K1AF	9M551K10	5051044
		B30F74	J5B110406-1	M551K1AE	9M551K10	5051045
		B30F74	J5B110406-1	M551K1AA	9M551K10	5051048
		B30F74	J5B110406-1	M551K2AC	9M551K20	5062022

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SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W07071	S15-003	B30F74	J5B110406-1	M551K2AD	9M551K20	5062023
		B30F82	J5B110406-2	M551L1AF	9M551L10	5051044
		B30F82	J5B110406-2	M551L1AE	9M551L10	5051045
		B30F82	J5B110406-2	M551L1AA	9M551L10	5051048
		B30F82	J5B110406-2	M551L1AG	9M551L10	5051049
		B30F82	J5B110406-2	M551L2AC	9M551L20	5062022
		B30F82	J5B110406-2	M551L2AD	9M551L20	5062023
	B30FH9	J5B190428-1	M57W01AA	9M57W010	5051049	
	B30FJ5	J5B190426-1	M57WN1AA	9M57WN10	5051049	
	I15-019	B30H64	J5B140402-1	M56XE1AC	9M56XE10	5051045
		B30H64	J5B140402-1	M56XE1AD	9M56XE10	5051047
		B30H64	J5B140402-1	M56XE1AA	9M56XE10	5051048
		B30H64	J5B140402-1	M56XE1AE	9M56XE10	5051049
		B30H74	J5B140402-2	M56XF1AC	9M56XF10	5051045
		B30H74	J5B140402-2	M56XF1AD	9M56XF10	5051047
		B30H74	J5B140402-2	M56XF1AA	9M56XF10	5051048
		B30H74	J5B140402-2	M56XF1AE	9M56XF10	5051049
		B30H79	J5B140402-3	M56XG1AC	9M56XG10	5051040
		B30H79	J5B140402-3	M56XG2AE	9M56XG20	5051041
		B30H79	J5B140402-3	M56XG1AD	9M56XG10	5051045
		B30H79	J5B140402-3	M56XG1AF	9M56XG10	5051047
		B30H79	J5B140402-3	M56XG1AH	9M56XG10	5051048
		B30H79	J5B140402-3	M56XG1AG	9M56XG10	5051049
		B30H88	J5B140402-4	M56XH1AC	9M56XH10	5051040
		B30H88	J5B140402-4	M56XH1AE	9M56XH10	5051041
		B30H88	J5B140402-4	M56XH1AD	9M56XH10	5051045
		B30H88	J5B140402-4	M56XH1AF	9M56XH10	5051047
B30H88		J5B140402-4	M56XH1AH	9M56XH10	5051048	
B30H88		J5B140402-4	M56XH1AG	9M56XH10	5051049	
B30HB2	J5B140402-5	M56XJ1AC	9M56XJ10	5051040		
B30HB2	J5B140402-5	M56XJ1AE	9M56XJ10	5051041		
B30HB2	J5B140402-5	M56XJ1AD	9M56XJ10	5051045		
B30HB2	J5B140402-5	M56XJ1AF	9M56XJ10	5051047		
B30HB2	J5B140402-5	M56XJ1AH	9M56XJ10	5051048		
B30HB2	J5B140402-5	M56XJ1AG	9M56XJ10	5051049		
B30HB7	J5B140402-6	M56XK1AC	9M56XK10	5051045		
B30HB7	J5B140402-6	M56XK1AD	9M56XK10	5051047		
B30HB7	J5B140402-6	M56XK1AA	9M56XK10	5051048		

March 23, 2015

Report No.: 65070

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SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W07071	I15-019	B30HB7	J5B140402-6	M56XK1AE	9M56XK10	5051049



Certificate of Analysis

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

March 23, 2015

Attention: Scot Fitzgerald

SAF Number	:	I15-012, I15-015, I15-019, S15-003, W15-002
Date SDG Closed	:	February 20, 2015
Number of Samples	:	Eighteen (18)
Sample Type	:	Water
SDG Number	:	W07071
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

Between February 10, 2015, and February 19, 2015, eighteen samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned laboratory ID numbers to correspond with the CH2M specific IDs.

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.

CH2M Hill Plateau Remediation Company
March 23, 2015

The requested analyses were:

Alpha Spectroscopy

Americium 241 by method RL-ALP-003

Plutonium-238, -239/240 by method RL-ALP-002

Gas Proportional Counting

Gross Alpha by method RL-GPC-001

Gross Beta by method RL-GPC-001

Strontium-90 by method RL-GPC-003

Gamma Spectroscopy

Iodine-129 (LL) by method RL-GAM-002

Liquid Scintillation Counting

Carbon-14 by method RL-LSC-008

Technetium-99 by TEVA method RL-LSC-014

Tritium by method RL-LSC-005

Laser Induced Phosphorimetry

Total Uranium by method RL-KPA-003

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Americium 241 by method RL-ALP-003:

Samples B30H88, B30HB2, B30H79, Batch Blank and the LCS have elevated tracer recoveries from 106% to 112%. The data calculation program assumes a maximum recovery of 100%. There is no detected activity in the samples except for the LCS. Except as noted, the sample results and associated batch QC results are within contractual requirements.

Plutonium-238, -239/240 by method RL-ALP-002:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:

The MDA for sample B30F74, B30F82 and B30F74 DUP exceeds the CRDL due to aliquot reductions based on weight screening results. Except as noted, the sample results and associated batch QC results are within contractual requirements.

CH2M Hill Plateau Remediation Company
March 23, 2015

Gross Beta by method RL-GPC-001:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Strontium-90 by method RL-GPC-003:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Gamma Spectroscopy

Iodine-129 (LL) by method RL-GAM-002:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Liquid Scintillation Counting

Carbon-14 by method RL-LSC-008:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Technetium-99 by TEVA method RL-LSC-014:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Tritium by method RL-LSC-005:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Laser Induced Phosphorimetry

Total Uranium by method RL-KPA-003:

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager (or designee) and the laboratory's client services representative as verified by their signatures on this report.

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, $R = \text{constants} * f(x,y,z,...)$. 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.
CSU (#s) <i>u_c Combined Standard Uncert.</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 standard 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.

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # 115-015-026				
K.C. Patterson Collector CHPRC		Contact/Requester Karen Waters-Husted		Telephone No. 509-376-4650				
SAF No. I15-015		Sampling Origin Hanford Site		Purchase Order/Charge Code 300071				
Project Title 200-UP-1, FEB 2015		Logbook No. HNF-N-506 WA 184		Ice Chest No. N/A				
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE		Bill of Lading/Air Bill No. N/A				
Protocol CERCLA		Priority: 30 Days		Offsite Property No. N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30729	N		FEB 10 2015	1321	1x1-LP	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30729	N		W	↓	2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None



J5B 110 405
 SPC # WO 7071
 JF21115 Date 3/13/15
 One 3/12/15

Relinquished By K.C. Patterson CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 10 2015 1400	Received By F.M. HaidichPRC	Sign <i>[Signature]</i>	Date/Time FEB 10 2015 1400	Matrix *
Relinquished By F.M. HaidichPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 10 2015 1400	Received By J. Friesz, TARL	Sign <i>[Signature]</i>	Date/Time FEB 10 2015	S = Soil DS = Drum Solids DL = Drum Liquids T = Tissue SO = Sediment SL = Sludge W = Water O = Oil A = Air V = Vegetation X = Other
Relinquished By	Print	Sign	Date/Time	Received By	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Sign	Date/Time	
FINAL SAMPLE DISPOSITION			Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		

March 23, 2015



Sample Check-in List

Date/Time Received: 2/10/15 1440 Container GM Screen Result: (Airlock) 0 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [J]

Client: PGW SDG #: W07071 SAF #: IIS-015 NA []

Lot Number: H07071 JB116405

Chain of Custody # IIS-015-024

Shipping Container ID or Air Bill Number : Hand Delivered NA [X]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
3. Cooler temperature: 7.8 SNICE NA []
4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1 x LP; 2 x 4LP

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
9. Samples have: tape hazard labels J custody seals J appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) J I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

- 11. Samples: J are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

- 13. Were any anomalies identified in sample receipt? Yes [] No [J]
14. Description of anomalies (include sample numbers): NA [J]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.

16. Additional Information: N/A

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2/10/15

Client Notification needed? Yes [] No [J] Date:
By:
Person contacted:

[X] No action necessary; process as is
Project Manager [Signature] Date 2-11-15

CH2M HILL Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S15-003-237			
Collector K.C. Patterson CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1			
SAF No. S15-003		Sampling Origin Hanford Site	Purchase Order/Charge Code 300071				
Project Title SURV, MARCH 2015		Logbook No. HNF-N-506 6984	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 SURV		Priority: 30 Days	Offsite Property No. N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS Hold Time		Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Sample No.	Filter *	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30F74	N	FEB 10 2015	1207	1x1-L P	906-0_TRITIUM_LSC: COMMON	6 Months	None
B30F74	N	↓	↓	1x1-L P	9310_ALPHABETA_GPC: COMMON	6 Months	HNO3 to pH <2
B30F74	N	↓	↓	2x4-L G/P	1129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30F74	N	↓	↓	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2



J5B110406

055B110406
SDG#607071
JF 2/10/15 Done at Due 3/12/15

Relinquished By K.C. Patterson CHPRC	Print 	Sign	Received By F.M. HaliczPRC	Print 	Sign	Date/Time FEB 10 2015 12:40	Date/Time FEB 10 2015 12:40
Relinquished By F.M. HaliczPRC	Print 	Sign	Received By J. Friesz, TARL	Print 	Sign	Date/Time FEB 10 2015 14:40	Date/Time FEB 10 2015 14:40
Relinquished By	Print	Sign	Received By	Print	Sign	Date/Time	Date/Time
Relinquished By	Print	Sign	Received By	Print	Sign	Date/Time	Date/Time

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

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

PRINTED O 1/28/2015

A-6004-842 (REV 2)

J5B110406
w07071

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # S15-003-239	
Collector: K.C. Patterson CHPRC		Contact/Requester: Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1	
SAF No. S15-003		Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071		
Project Title: SURV, MARCH 2015		Logbook No. HNF-N-506	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: SURV		Priority: 30 Days	Offsite Property No. N/A		
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS: HOLD TIME	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30F82	N		FEB 10 2015	1026	1x1-LP	906.0_TITANIUM_LSC: COMMON	6 Months	None
B30F82	N				1x1-LP	9310_ALPHABETA_GPC: COMMON	6 Months	HNO3 to pH <2
B30F82	N				2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30F82	N				1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30F82	N				3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2



J5B110406

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.C. Patterson			FEB 10 2015 12:40	F.M. HANCOCK			FEB 10 2015 12:40	S = Soil, DS = Drum Solids, SE = Sediment, DL = Drum Liquids, SO = Solid, T = Tissue, SL = Sludge, WI = Wipe, W = Water, L = Liquid, O = Oil, V = Vegetation, A = Air, X = Other
Relinquished By			FEB 10 2015 14:40	J. Friesz, TARL			FEB 10 2015	
Relinquished By			FEB 10 2015 14:40					
Relinquished By								

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

PRINTED O 1/28/2015 A-6004-842 (REV 2)

March 23, 2015



THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2/10/15 1440 Container GM Screen Result: (Airlock) 0 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [J]

Client: PGW SDG #: W07071 SAF #: S15-003 NA []

Lot Number:

Chain of Custody # S15-003-237, 239

Shipping Container ID or Air Bill Number : Hand Delivered NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
3. Cooler temperature: 7.8 SWICE NA []
4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
6. Number of samples received (Each sample may contain multiple bottles): 2
7. Containers received: 1 x 500 mL, 10 x 4L, 4 x 4L

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
9. Samples have: tape hazard labels J custody seals J appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) J I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

- 11. Samples: J are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

- 13. Were any anomalies identified in sample receipt? Yes [] No [J]

- 14. Description of anomalies (include sample numbers): NA [J]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.

- 16. Additional Information: N/A

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2/10/15

Client Notification needed? Yes [] No [J] Date:
By:
Person contacted:

[J] No action necessary; process as is
Project Manager [Signature] Date 2-11-15

CH2M Hill Plateau Remediation Company
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST
 C.O.C. # **I15-015-016**
 Page 1 of 1

Collector **RA_Shepard/CHPRC** Telephone No. **509-376-4650**
 SAF No. **I15-015** Purchase Order/Charge Code **300071**
 Project Title **200-JP-1, FEB 2015** Ice Chest No. **N/A**
 Shipped To (Lab) **TestAmerica Incorporated, Richland** Bill of Lading/Air Bill No. **N/A**
 Protocol **CERCLA** Priority: **30 Days** **PRIORITY** Offsite Property No. **N/A**

POSSIBLE SAMPLE HAZARDS/REMARKS
 *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B30707	N	W	2/10/15	12:05/1440	2x4 G/P	H2O/LL_SEP_LEPS_GS_LL-COMMON	6 Months	None
B30707	N	W	2/10/15	12:05/1440	1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30707	N	W	2/10/15	14:40/1440	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

* - WAS NOT ABLE TO FILL 4L POLY FOR WELL # ~~17-299~~ - W 19-18
 2/10/15



J5B110413
 W07071
 Due 3/13/15

Relinquished By	Signature	Date/Time	Received By	Signature	Date/Time	Print	Sign	Matrix *
RA_Shepard/CHPRC	<i>[Signature]</i>	FEB 10 2015 15:00	SSU-1	<i>[Signature]</i>	FEB 10 2015 15:10			S = Soil, SE = Sediment, SO = Solid, SL = Sludge, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
SSU-1	<i>[Signature]</i>	FEB 11 2015 07:30	FM: Hall	<i>[Signature]</i>	FEB 11 2015 07:30			
CHPRC	<i>[Signature]</i>	FEB 11 2015 08:45	CHPRC	<i>[Signature]</i>	FEB 11 2015 08:45			
Relinquished By			Received By	J. Friesz, TARL	FEB 11 2015			
Relinquished By			Received By					

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

March 23, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2/11/15 6845 Container GM Screen Result: (Airlock) 20 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [J]

Client: PGW SDG #: W07071 SAF #: I15-015 NA []

Lot Number: J5B110413

Chain of Custody # I15-015-016

Shipping Container ID or Air Bill Number : Hand Delivered NA BCS

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
3. Cooler temperature: 4.3 w/ GCE NA []
4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
6. Number of samples received (Each sample may contain multiple bottles): 2
7. Containers received: 2x 500mlp

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
9. Samples have: tape hazard labels custody seals appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) J I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: J are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

13. Were any anomalies identified in sample receipt? Yes [] No [J]

14. Description of anomalies (include sample numbers): NA [J]

15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.

16. Additional Information: N/A

[] Client/Courier denied temperature check. BCS Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2/11/15

Client Notification needed? Yes [] No [J] Date:
By:
Person contacted:

[J] No action necessary; process as is
Project Manager [Signature] Date 2-11-15
2-15 SICS
2-11-15

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I15-012-092	
Collector J.R. Aguilar/CHPRC		Contact/Requester WATERS-HUSTED, K	Telephone No. 376-4650	Page 1 of 1	
SAF No. I15-012	Sampling Origin HANFORD SITE	Purchase Order/Charge Code 300071			
Project Title Special Surv Sampling, January 2014	Logbook No. HNF-N-506 71 / 75	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 SURV	Priority 30 Days	Offsite Property No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.					

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Hold Time	Preservative
B303H6	N	W	2-11-15	0936	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B303H6	N	W			1x1-L P	9310_ALPHA BETA_GPC: COMMON	6 Months	HNO3 to pH <2
B303H6	N	W			2x1-L G/P	C14_LSC: COMMON	6 Months	None
B303H6	N	W			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B303H6	N	W			1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B303H6	N	W			1x1-L G/P	PUISO_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B303H6	N	W			3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2
B303H6	N	W	2-11-15	0936	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

558110430

W00001



J5B110430

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.R. Aguilar/CHPRC			FEB 11 2015 1625	F.M. Hall			FEB 11 2015 1025
			FEB 11 2015 1400	CHPRC			FEB 11 2015 1400
			FEB 11 2015 1400	J. Book-Talk			FEB 11 2015 1400

Relinquished By	Date/Time	Received By	Date/Time
J.R. Aguilar/CHPRC			

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

March 23, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2-11-15/1400 Container GM Screen Result: (Airlock) 20 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: Pbw SDG #: W07071 SAF #: I15-012 NA []

Lot Number: JSB110430

Chain of Custody # I15-012-092

Shipping Container ID or Air Bill Number: hand deliv. NA [B]

Samples received inside shipping container/cooler/box Yes [B]] Continue with 1 through 4. Initial appropriate response.
No []] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 6.6°C Ice NA []
4. Vermiculite/packing materials is NA [B]] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [B]] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 2 1x500; 8 x 4; 2 x 4 L
2-11-15

- 8. Sample holding times exceeded? NA [] Yes [] No [B]]
9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [B] are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

12. Sample pH appropriate for analysis requested Yes [B]] No [] NA []
(If acidification is necessary go to pH area & document sample ID) initial pH, amount of HNO3 added and pH after addition on table

13. Were any anomalies identified in sample receipt? Yes [] No [B]]

14. Description of anomalies (include sample numbers): NA [B]]

15. Sample Location, Sample Collector Listed on COC? * Yes [B]] No []
*For documentation only. No corrective action needed.

16. Additional Information: N/A

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2-11-15

Client Notification needed? Yes [] No [B]] Date:
By:
Person contacted:

[B] No action necessary; process as is
Project Manager: [Signature] Date: 2-12-15

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# I15-015-025			
Collector DL Floyd/CHPRC		Contact/Requester Karen Waters-Husted		Telephone No. 509-376-4650			
SAF No. I15-015		Sampling Origin Hanford Site		Purchase Order/Charge Code 300071			
Project Title 200-UP-1, FEB 2015		Logbook No. HNF-N-506 69185		Ice Chest No. N/A			
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE		Bill of Lading/Air Bill No. N/A			
Protocol CERCLA		Priority: 30 Days		Offsite Property No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS		Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Sample No.	Filter *	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B30726	N	FEB 17 2015	1234	1x1-L P	906.0_TITANIUM_LSC: COMMON	6 Months	None
B30726	N			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30726	N			1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30726	N			3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2
B30726	N			1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

J56140401
WDM071



Relinquished By DL Floyd/CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 1250	Received By F.M. Hall	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 1250	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge W1 = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By F.M. Hall	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 1435	Received By <i>[Signature]</i>	Print 3. Bock, TARL	Sign 1435	Date/Time FEB 12 2015	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

March 23, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2-12-15/1425 Container GM Screen Result: (Airlock) 0 cpm Initials []
Sample GM Screen Result (Sample Receiving) 0 cpm Initials []

Client: Plw SDG #: W07071 SAF #: IIS-015 NA []

Lot Number: J58140401

Chain of Custody # IIS-015-025

Shipping Container ID or Air Bill Number : hand de Q.v. NA []

Samples received inside shipping container/cooler/box Yes [] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal []
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal []
3. Cooler temperature: 5.7 °C Ice NA []
4. Vermiculite/packing materials is NA [] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 2 x 500 mL; 4 x 4L; 2 x 4L

- 8. Sample holding times exceeded? NA [] Yes [] No []
9. Samples have: tape hazard labels [] custody seals [] appropriate sample labels []
10. Matrix: A (FLT, Wipe, Solid, Soil) [] I (Water) [] S (Air, Niosh 7400) [] T (Biological, Ni-63) []

11. Samples: [] are in good condition [] are leaking [] are broken
[] have air bubbles (Only for samples requiring no head space) Other []

12. Sample pH appropriate for analysis requested Yes [] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

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

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

15. Sample Location, Sample Collector Listed on COC? * Yes [] No []
*For documentation only. No corrective action needed.

16. Additional Information: W/A

[] Client/Courier denied temperature check. [] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [] Date: 2-12-15

Client Notification needed? Yes [] No [] Date:
By:
Person contacted:

[] No action necessary; process as is
Project Manager: [] Date: 2-17-15

CH2M Hill Plateau Remediation Company		C.O.C. # I15-019-032	
Page 1 of 1			
Collector S.W. King/CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	
SAF No. I15-019	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071	
Project Title 200ZP1, MARCH 2015	Logbook No. HNF-N-50674/146	Ice Chest No. N/A	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol CERCLA	Priority: 30 Days	Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1			
SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Sample No.	Filter *	Date	Time
B30H64	N	FEB 12 2015	1036
B30H64	N	W	↓
B30H64	N	W	↓
B30H64	N	FEB 12 2015	1036
No/Type Container	Sample Analysis	Holding Time	Preservative
1x1-LP	906.0_TRITIUM_LSC: COMMON	6 Months	None
2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

J580140402
W07071



Relinquished By S.W. King/CHPRC	Print F.M. Hall	Signature <i>[Signature]</i>	Date/Time FEB 12 2015 1045
Relinquished By F.M. Hall	Print CHPRC	Signature <i>[Signature]</i>	Date/Time FEB 12 2015
Relinquished By CHPRC	Print J. Bock, TARL	Signature <i>[Signature]</i>	Date/Time FEB 12 2015 1425
Relinquished By CHPRC	Print CHPRC	Signature <i>[Signature]</i>	Date/Time FEB 12 2015 1425
Relinquished By CHPRC	Print CHPRC	Signature <i>[Signature]</i>	Date/Time FEB 12 2015 1425

S	=	Soil	DS	=	Drum Solids
SE	=	Sediment	DL	=	Drum Liquids
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)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I15-019-037	
Collector: D.L. Floyd/CHPRC		Contact/Requester: Karen Waters-Husted		Telephone No.: 509-376-4650	
SAF No.: I15-019		Sampling Origin: Hanford Site		Purchase Order/Charge Code: 300071	
Project Title: 200ZP1, MARCH 2015		Logbook No.: HNF-N-506 69/85		Ice Chest No.: N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland		Method of Shipment: GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.: N/A	
Protocol: CERCLA		Priority: 30 Days		Offsite Property No.: N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					
SPECIAL INSTRUCTIONS		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Sample No.	Filter	*	Date	Time	No/Type Container
B30H74	N		FEB 12 2015	1127	1x1-L P
B30H74	N	W			2x4-L G/P
B30H74	N	W			1x500-mL G/P
B30H74	N	W			1x500-mL P
					Sample Analysis
					906.0_TRITIUM_LSC: COMMON
					1129LL_SEP_LEPS_GS_LL: COMMON
					KPA_UTOT: COMMON
					TC99_ETVDSK_LSC: COMMON
					MSL 4 F
					Holding Time
					6 Months
					6 Months
					6 Months
					6 Months
					Preservative
					None
					None
					HNO3 to pH <2
					HCl to pH <2

55B140402
W07071

Relinquished By D.L. Floyd/CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 137	Received By F.M. Hall CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 137	Matrix *
Relinquished By CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 1425	Received By J. Bock, TARL	Print <i>[Signature]</i>	Sign	Date/Time FEB 12 2015 1425	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time
PRINTED O 1/28/2015								A-6004-842 (REV 2)

CH2M Hill Plateau Remediation Company		C.O.C.# I15-019-039	
Collector: DL Floyd/CHPRC		Telephone No. 509-376-4650	
SAF No. I15-019		Purchase Order/Charge Code 300071	
Project Title 200ZP1, MARCH 2015		Ice Chest No. N/A	
Shipped To (Lab) <u>TestAmerica Incorporated, Richland</u>		Bill of Lading/Air Bill No. N/A	
Protocol CERCLA		Offsite Property No. N/A	
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1			
Special Instructions		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30H79	N	W	FEB 12 2015	1004	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30H79	N	W			1x1-L G/P	AMCMISO_EIE_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30H79	N	W			2x4-L G/P	I129LL_SEP_LEFS_GS_LL: COMMON	6 Months	None
B30H79	N	W			1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30H79	N	W			1x1-L G/P	PUISO_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30H79	N	W			1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

556140402
wononi

Relinquished By DL Floyd/CHPRC	Print 00500	Sign <i>[Signature]</i>	Date/Time FEB 12 2015 1105	Received By M. Hall	Print CHPRC	Sign <i>[Signature]</i>	Date/Time FEB 12 2015 1105
Relinquished By CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 12 2015 1435	Received By J. Bock, TARL	Print 1435	Sign <i>[Signature]</i>	Date/Time FEB 12 2015
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquids
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
PRINTED O 1/28/2015	A-6004-842 (REV 2)		

CH2MHHI Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I15-019-043	
Collector S.W. King/CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1	
SAF No. I15-019		Sampling Origin Hanford Site	Purchase Order/Charge Code 300071		
Project Title 200ZP1, MARCH 2015		Logbook No. HNF-N-506 74/46	Ice Chest No. N/A		
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A		
Protocol CERCLA		Priority: 30 Days	Offsite Property No. N/A		
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					
		SPECIAL INSTRUCTIONS		Hold Time	
				Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30H88	N	FEB 12 2015	1152	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30H88	N			1x1-L G/P	AMCMISO_EIE_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30H88	N			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30H88	N			1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30H88	N			1x1-L G/P	PUISO_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30H88	N	FEB 12 2015	1152	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

55B140402
W00001

Relinquished By	Print	Signature	Date/Time	Received By	Signature	Date/Time	Matrix *
S.W. King/CHPRC			FEB 12 2015 1447	F.M. Hall/CHPRC		FEB 12 2015 1233	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
F.M. Hall/CHPRC			FEB 12 2015 1445	J. Bock, TARL		FEB 12 2015	
Relinquished By				Received By			
Relinquished By				Received By			

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

PRINTED O 1/28/2015 A-6004-842 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # I15-019-049				
Collector D.L. Floyd/CHPRC		Contact/Requester Karen Waters-Husted		Telephone No. 509-376-4650				
SAF No. I15-019		Sampling Origin Hanford Site		Purchase Order/Charge Code 300071				
Project Title 200ZP1, MARCH 2015		Logbook No. HNF-N-506 6/1/85		Ice Chest No. N/A				
Shipped To (Lab) TestAmerica Incorporated, Richland		Method of Shipment GOVERNMENT VEHICLE		Bill of Lading/Air Bill No. N/A				
Protocol CERCLA		Priority: 30 Days		Offsite Property No. N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1								
SPECIAL INSTRUCTIONS		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30HB2	N	W	FEB 12 2015	0903	1x1-LP	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30HB2	N	W			1x1-L G/P	AMCMISO_EIE_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30HB2	N	W			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30HB2	N	W			1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30HB2	N	W			1x1-L G/P	PUISO_PLATE_AEA: COMMON	6 Months	HNO3 to pH <2
B30HB2	N	W			1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

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207071

Relinquished By D.L. Floyd/CHPRC	Print 	Sign	Date/Time FEB 12 2015 1105	Received By F.M. Hall	Print 	Sign	Date/Time FEB 12 2015 1105	Matrix *
Relinquished By F.M. Hall	Print 	Sign	Date/Time FEB 12 2015 1435	Received By J. Bock, TARL	Print 	Sign	Date/Time FEB 12 2015	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By			Date/Time	Received By			Date/Time	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

CH2MHHI Plateau Remediation Company		C.O.C. # I15-019-051					
Project Title 200ZP1, MARCH 2015		Page 1 of 1					
Collector S.W. King/CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650					
SAF No. I15-019	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071					
Shipped To (Lab) TestAmerica Incorporated, Richland	Logbook No. HNF-N-50674/46	Ice Chest No. N/A					
Protocol CERCLA	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		Priority: 30 Days	Offsite Property No. N/A				
SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30HB7	N	FEB 12 2015	0851	1x1-LP	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30HB7	N	FEB 12 2015	0851	2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B30HB7	N	FEB 12 2015	0851	1x500-mL G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2
B30HB7	N	FEB 12 2015	0851	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

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Relinquished By S.W. King/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 17 2015	Received By F.M. Hall/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 17 2015
Relinquished By F.M. Hall/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 17 2015	Received By J. Bock, TARL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 12 2015
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

March 23, 2015



Sample Check-in List

Date/Time Received: 2-12-15 / 1425 Container GM Screen Result: (Airlock) 0 cpm Initials [B] Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: RBW SDG #: W07071 SAF #: FIS-019 NA []

Lot Number: JSB140402

Chain of Custody # FIS-019-032; 037; 039; 043; 049; 051

Shipping Container ID or Air Bill Number: hand de Q.v. NA [B]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 5.7 °C TC NA []
4. Vermiculite/packing materials is NA [B] Wet [] Dry []

- Item 5 through 16 for samples. Initial appropriate response.
5. Chain of Custody record present? Yes [B] No []
6. Number of samples received (Each sample may contain multiple bottles): 6
7. Containers received: 12 x 500 mL, 12 x 4L, 12 x 4L

- 8. Sample holding times exceeded? NA [] Yes [] No [B]
9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [B] are in good condition are leaking are broken have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [B] No [] NA []
13. Were any anomalies identified in sample receipt? Yes [] No [B]
14. Description of anomalies (include sample numbers): NA [B]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [B] No []
*For documentation only. No corrective action needed.
16. Additional Information: w/a

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian: Signature: [Signature] Date: 2-12-15

Client Notification needed? Yes [] No [B] Date: By: Person contacted:

[B] No action necessary; process as is Project Manager: [Signature] Date: 2-17-15

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W15-002-072				
Collector: J.R. Aguilar/CHPRC		Contact/Requester: Karen Waters-Husted		Telephone No. 509-376-4650				
SAF No. W15-002		Sampling Origin: Hanford Site		Purchase Order/Charge Code: 300071				
Project Title: RCRA, FEBRUARY 2015		Logbook No. HNF-N-506 74 / 48		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: RCRA		Priority: 30 Days		Offsite Property No. N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Total Activity Exemption: Yes <input type="checkbox"/> No <input type="checkbox"/>				
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		Submit deliverables & invoices to ACP Sample Management.						
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B305M9	N	W	2-18-15	1015	1x500-ml G/P	KPA_UTOT: COMMON	6 Months	HNO3 to pH <2



J5B180423
SDG# W07071
Dye 3/2015

Relinquished By: J.R. Aguilar/CHPRC	Print	Sign	Date/Time: FEB 18 2015	Received By: F.M. Hall/CHPRC	Print	Sign	Date/Time: FEB 18 2015	Matrix *
Relinquished By: F.M. Hall/CHPRC	Print	Sign	Date/Time: FEB 18 2015	Received By: SSU-1	Print	Sign	Date/Time: FEB 18 2015	S = Soil
Relinquished By: SSU-1	Print	Sign	Date/Time: FEB 18 2015	Received By: F.M. Hall/CHPRC	Print	Sign	Date/Time: FEB 18 2015	SE = Sediment
Relinquished By: F.M. Hall/CHPRC	Print	Sign	Date/Time: FEB 18 2015	Received By: Bob J. Koch-TALU	Print	Sign	Date/Time: FEB 18 2015	SO = Solid
								SL = Sludge
								W = Water
								O = Oil
								A = Air
								DS = Drum Solids
								DL = Drum Liquids
								T = Tissue
								WI = Wipe
								L = Liquid
								V = Vegetation
								X = Other

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W15-002-073	
Collector J.R. Aguilar/CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1	
SAF No. W15-002	Sampling Origin Hanford Site	Logbook No. HNF-N-506 74 / 48	Purchase Order/Charge Code 300071		
Project Title RCRA, FEBRUARY 2015	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	Ice Chest No. N/A		
Shipped To (Lab) TestAmerica Incorporated, Richland	Priority 30 Days	Offsite Property No. N/A			
Protocol RCRA	SPECIAL INSTRUCTIONS Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					
Sample No. B305P-1	Filter N	Date 2-18-15	Time 0919	No/Type Container 1x500-mL GIP	Sample Analysis M57NC
Holding Time 6 Months		Preservative HNO3 to pH <2			



J5B180423
W07071

Relinquished By J.R. Aguilar/CHPRC	Print	Sign	Date/Time FEB 18 2015	Received By F.M. Hall/CHPRC	Print	Sign	Date/Time FEB 18 2015	Matrix *
Relinquished By F.M. Hall/CHPRC			FEB 18 2015	Received By SSU-1			FEB 18 2015	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By SSU-1			FEB 18 2015	Received By F.M. Hall/CHPRC			FEB 18 2015	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By F.M. Hall/CHPRC			FEB 18 2015	Received By SSU-1			FEB 18 2015	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By Jacob J. Bold-Tall		Date/Time FEB 18 2015		

March 23, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2-18-15/1330 Container GM Screen Result: (Airlock) 25 cpm Initials [B] Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: PLSW SDG#: W07071 SAF#: W15-002 NA []

Lot Number: J5 B280423 JF 2/18/15

Chain of Custody # W15-002-072; 073

Shipping Container ID or Air Bill Number: hand deliv. NA [B]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 6.5 c Ice NA []
4. Vermiculite/packing materials is NA [B] Wet [] Dry []

- Item 5 through 16 for samples. Initial appropriate response.
5. Chain of Custody record present? Yes [B] No []
6. Number of samples received (Each sample may contain multiple bottles): 2
7. Containers received: 2 x 500 ml

- 8. Sample holding times exceeded? NA [] Yes [] No [B]
9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [B] are in good condition are leaking are broken have air bubbles (Only for samples requiring no head space) Other

12. Sample pH appropriate for analysis requested Yes [B] No [] NA [] (If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

13. Were any anomalies identified in sample receipt? Yes [] No [B]

14. Description of anomalies (include sample numbers): NA [B]

15. Sample Location, Sample Collector Listed on COC? * Yes [B] No [] *For documentation only. No corrective action needed.

16. Additional Information: N/A

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian: Signature: [Signature] Date: 2-18-15

Client Notification needed? Yes [] No [B] Date: By: Person contacted:

[B] No action necessary; process as is Project Manager: [Signature] Date: 2-19-15

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. # S15-003-255	
Collector J.R. Aquilar/CHPRC		Contact/Requester Karen Waters-Husted		Telephone No. 509-376-4650		Page 1 of 1	
SAF No. S15-003		Sampling Origin Hanford Site		Purchase Order/Charge Code 300071			
Project Title SURV, MARCH 2015		Logbook No. HNF-N-506 74 / SO		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 SURV		Priority 30 Days		Offsite Property No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1							
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time
B30FJ5	N	W	2-19-15	0954	1x500-ml G/P	KPA_UTOT: COMMON <i>MS7W3N</i>	6 Months
						Preservative HNO3 to pH <2	

556190424
wonni



Relinquished By J.R. Aquilar/CHPRC	Print <i>[Signature]</i>	Sign	Date/Time FEB 19 2015 1030	Received By LD. Weil	Print <i>[Signature]</i>	Sign	Date/Time FEB 19 2015 1030	Matrix *
Relinquished By LD. Weil	Print <i>[Signature]</i>	Sign	Date/Time FEB 19 2015 1055	Received By J. Bock	Print <i>[Signature]</i>	Sign	Date/Time FEB 19 2015 1055	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By			Date/Time	Received By			Date/Time	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

March 23, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 2-19-15/1055 Container GM Screen Result: (Airlock) 0 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: Plw SDG #: W07011 SAF #: S15-003 NA []

Lot Number: J5B190426

Chain of Custody # S15-003-255

Shipping Container ID or Air Bill Number: hand de Qu. NA [B]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 10.7 °C Ice NA []
4. Vermiculite/packing materials is NA [B] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [B] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1 x 500 mL

- 8. Sample holding times exceeded? NA [] Yes [] No [B]
9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) [B] S (Air, Niosh 7400) T (Biological, Ni-63)

- 11. Samples: [B] are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [B] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

- 13. Were any anomalies identified in sample receipt? Yes [] No [B]
14. Description of anomalies (include sample numbers): NA [B]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [B] No []
*For documentation only. No corrective action needed.

- 16. Additional Information: N/A

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2-19-15

Client Notification needed? Yes [] No [B] Date:
By:
Person contacted:

[B] No action necessary; process as is
Project Manager [Signature] Date 2-20-15

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # W15-002-071	
Collector J.R. Aguilar/CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1	
SAF No. W15-002	Sampling Origin Hanford Site	Logbook No. HNF-N-506-74 / 49	Purchase Order/Charge Code 300071		
Project Title RCRA, FEBRUARY 2015	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	Ice Chest No. N/A		
Shipped To (Lab) TestAmerica Incorporated, Richland	Priority 30 Days	Offsite Property No. N/A			
Protocol RCRA	SPECIAL INSTRUCTIONS Submit deliverables & invoices to ^CPP Sample Management.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					
Sample No. B305M5	Filter N	Date 2-18-15	No/Type Container 1x500-mL G/P	Sample Analysis KPA_UTOT: COMMON	Preservative HNO3 to pH <2
		Time 1306	Holding Time 6 Months		

556190427
W07011



Relinquished By J.R. Aguilar/CHPRC	Print 	Sign 	Date/Time FEB 18 2015 1425	Received By SSU #1	Print 	Sign 	Date/Time FEB 18 2015 1425	Matrix * S = Soil DL = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By SSU-1	Print 	Sign 	Date/Time FEB 19 2015 0800	Received By F.M. Hall/CHPRC	Print 	Sign 	Date/Time FEB 19 2015 1055	
Relinquished By F.M. Hall/CHPRC	Print 	Sign 	Date/Time FEB 19 2015 1055	Received By J. Bock, TARL	Print 	Sign 	Date/Time FEB 19 2015 1055	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C.# W15-002-074	
Collector J.R. Aquilino/CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1	
SAF No. W15-002		Sampling Origin Hanford Site	Purchase Order/Charge Code 300071		
Project Title RCRA, FEBRUARY 2015		Logbook No. HNF-N-506 74/50	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 RCRA		Priority: 30 Days	Offsite Property No. N/A		
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		Submit deliverables & invoices to ^CPP Sample Management.			
Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis
B305P5	N	W	2-19-15 0832	1x500-mL G/P	KPA_UTOT: COMMON <i>msnwst</i>
				Holding Time	Preservative
				6 Months	HNO3 to pH <2

558190427
WDA001



Relinquished By J.R. Aquilino/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 19 2015 1000	Received By L.D. Wall/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 19 2015 1030	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By L.D. Wall/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 19 2015 1055	Received By J. Bock/TARL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time FEB 19 2015 1055	Matrix * DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		

March 23, 2015

TestAmerica

Sample Check-in List

Date/Time Received: 2-19-15/1055 Container GM Screen Result: (Airlock) 0 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: Plw SDG #: W07071 SAF #: W15-002 NA []

Lot Number: JSB190427

Chain of Custody # W15-002-071, 074

Shipping Container ID or Air Bill Number: hand de Ov. NA [B]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 6.7 °C Ice NA []
4. Vermiculite/packing materials is NA [B] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [B] No []
6. Number of samples received (Each sample may contain multiple bottles): 2
7. Containers received: 2 x 500 mlp

8. Sample holding times exceeded? NA [] Yes [] No [B]

9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels

10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [B] are in good condition are leaking are broken
have air bubbles (Only for samples requiring no head space) Other

12. Sample pH appropriate for analysis requested Yes [B] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO3 added and pH after addition on table)

13. Were any anomalies identified in sample receipt? Yes [] No [B]

14. Description of anomalies (include sample numbers): NA [B]

15. Sample Location, Sample Collector Listed on COC? * Yes [B] No []
*For documentation only. No corrective action needed.

16. Additional Information: W/A

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 2-19-15

Client Notification needed? Yes [] No [B] Date:
By:
Person contacted:

[B] No action necessary; process as is
Project Manager [Signature] Date 2-20-15

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# S15-003-254	
Collector J.R. Aguilar/CHPRC		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1			
SAF No. S15-003		Sampling Origin Hanford Site	Purchase Order/Charge Code 300071				
Project Title SURV, MARCH 2015		Logbook No. HNF-N-506 74 / 50-S1	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 SURV		Priority: 30 Days	PRIORITY	Offsite Property No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS		Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B30FH9	N	W	2-19-15	1233	1x500-mL GIP	KPA_UTOT: COMMON <i>W SWSO</i>	HNO3 to pH <2

J5B190428
W07071



Relinquished By J.R. Aguilar/CHPRC	Print	Sign	Date/Time	Received By <i>J. Bock</i>	Print	Sign	Date/Time
			FEB 19 2015 1300		J. Bock, TARL		FEB 19 2015 1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)			
				Date/Time			

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

March 23, 2015



Sample Check-in List

Date/Time Received: 2-19-15 / 1300 Container GM Screen Result: (Airlock) 0 cpm Initials [B] Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: PLW SDG #: W07071 SAF #: S15-003 NA []

Lot Number: JSB190428

Chain of Custody # S15-003-254

Shipping Container ID or Air Bill Number: hand de Qu NA [SKS]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response. No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [B]
2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [B]
3. Cooler temperature: 12.2 C Ice NA []
4. Vermiculite/packing materials is NA [B] Wet [] Dry []

- Item 5 through 16 for samples. Initial appropriate response.
5. Chain of Custody record present? Yes [B] No []
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1 x 500 mL

- 8. Sample holding times exceeded? NA [] Yes [] No [B]
9. Samples have: tape hazard labels [B] custody seals [B] appropriate sample labels
10. Matrix: A (FLT, Wipe, Solid, Soil) [B] I (Water) S (Air, Niosh 7400) T (Biological, Ni-63)

11. Samples: [B] are in good condition are leaking are broken have air bubbles (Only for samples requiring no head space) Other

- 12. Sample pH appropriate for analysis requested Yes [B] No [] NA []
13. Were any anomalies identified in sample receipt? Yes [] No [B]
14. Description of anomalies (include sample numbers): NA [B]

- 15. Sample Location, Sample Collector Listed on COC? * Yes [B] No []
16. Additional Information: w/B

[] Client/Courier denied temperature check. [B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian: Signature: Date: 2-19-15

Client Notification needed? Yes [] No [SKS] Date: By: Person contacted:

No action necessary; process as is Project Manager: Sandra Legu Date: 2-20-15

Sample Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

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

Report No. : 65070

SDG No: W07071

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5051044	SRISO_SEP_PRECIP_GPC								
	B303H6								
	M55701AH	STRONTIUM	2.63E-03 +- 2.4E-01	U	pCi/L	83%	5.36E-01	2.00E+00	
	B30726								
	M56XD1AD	STRONTIUM	8.97E-02 +- 2.7E-01	U	pCi/L	84%	5.72E-01	2.00E+00	
	B30F74								
	M551K1AF	STRONTIUM	2.67E-01 +- 2.8E-01	U	pCi/L	86%	5.58E-01	2.00E+00	
	B30F74 DUP								
	M551K1AJ	STRONTIUM	-1.42E-01 +- 2.3E-01	U	pCi/L	79%	5.36E-01	2.00E+00	654.8
	B30F82								
	M551L1AF	STRONTIUM	-7.71E-02 +- 2.5E-01	U	pCi/L	83%	5.55E-01	2.00E+00	
5051041	PUISO_PLATE_AEA								
	B303H6								
	M55701AG	Pu-238	4.41E-02 +- 1.1E-01	U	pCi/L	92%	2.78E-01	1.00E+00	
		PU239/40	-6.30E-03 +- 7.9E-02	U	pCi/L	92%	1.80E-01	1.00E+00	
	B303H6 DUP								
	M55701AL	Pu-238	2.71E-02 +- 7.2E-02	U	pCi/L	100%	1.78E-01	1.00E+00	47.7
		PU239/40	-5.71E-03 +- 7.2E-02	U	pCi/L	100%	1.63E-01	1.00E+00	-9.8
	B30H79								
	M56XG2AE	Pu-238	-3.16E-03 +- 7.9E-02	U	pCi/L	100%	1.59E-01	1.00E+00	
		PU239/40	-9.47E-03 +- 8.0E-02	U	pCi/L	100%	1.97E-01	1.00E+00	
	B30H88								
	M56XH1AE	Pu-238	-3.08E-02 +- 7.2E-02	U	pCi/L	98%	2.47E-01	1.00E+00	
		PU239/40	-2.79E-03 +- 7.0E-02	U	pCi/L	98%	1.41E-01	1.00E+00	
	B30HB2								
	M56XJ1AE	Pu-238	-1.53E-02 +- 7.8E-02	U	pCi/L	94%	2.16E-01	1.00E+00	
		PU239/40	-1.83E-02 +- 7.8E-02	U	pCi/L	94%	2.26E-01	1.00E+00	
5051040	AMCMISO_EIE_PLT_AEA								
	B30H79								
	M56XG1AC	AMERICIUM 241	1.46E-01 +- 1.6E-01	U	pCi/L	103%	2.62E-01	1.00E+00	
	B30H79 DUP								
	M56XG1AJ	AMERICIUM 241	1.20E-01 +- 1.4E-01	U	pCi/L	108%	2.29E-01	1.00E+00	19.5
	B30H88								
	M56XH1AC	AMERICIUM 241	3.80E-01 +- 2.4E-01		pCi/L	106%	2.33E-01	1.00E+00	
	B30HB2								
	M56XJ1AC	AMERICIUM 241	5.68E-02 +- 1.0E-01	U	pCi/L	111%	2.00E-01	1.00E+00	
5051045	I129LL_SEP_LEPS_GS								
	B303H6								
	M55701AF	I129	-5.23E-02 +- 1.1E-01	U	pCi/L	92%	1.81E-01	1.00E+00	

TestAmerica Inc RPD - Relative Percent Difference.
 rptTALRchSaSummary2 V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

Sample Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

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

Report No. : 65070

SDG No: W07071

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5051045 I129LL_SEP_LEPS_GS									
B30726									
	M56XD1AC	I129	2.95E+00 +- 4.5E-01		pCi/L	95%	2.18E-01	1.00E+00	
B30729									
	M551J1AC	I129	4.22E-01 +- 2.2E-01		pCi/L	92%	1.82E-01	1.00E+00	
B30729 DUP									
	M551J1AD	I129	4.57E-01 +- 2.1E-01		pCi/L	91%	1.64E-01	1.00E+00	8.0
B30F74									
	M551K1AE	I129	4.24E-01 +- 2.2E-01		pCi/L	68%	2.59E-01	1.00E+00	
B30F82									
	M551L1AE	I129	2.62E+00 +- 4.7E-01		pCi/L	90%	1.92E-01	1.00E+00	
B30H64									
	M56XE1AC	I129	1.12E-03 +- 1.1E-01	U	pCi/L	91%	1.94E-01	1.00E+00	
B30H74									
	M56XF1AC	I129	1.04E-02 +- 8.6E-02	U	pCi/L	91%	1.60E-01	1.00E+00	
B30H79									
	M56XG1AD	I129	2.61E-03 +- 1.1E-01	U	pCi/L	96%	1.86E-01	1.00E+00	
B30H88									
	M56XH1AD	I129	2.30E-02 +- 8.0E-02	U	pCi/L	92%	1.52E-01	1.00E+00	
B30HB2									
	M56XJ1AD	I129	-5.14E-03 +- 1.4E-01	U	pCi/L	74%	2.52E-01	1.00E+00	
B30HB7									
	M56XK1AC	I129	3.49E-02 +- 8.2E-02	U	pCi/L	96%	1.57E-01	1.00E+00	
5062022 9310_ALPHABETA_GPC									
B303H6									
	M55702AC	Alpha	5.47E-01 +- 1.5E+00	U	pCi/L	100%	2.71E+00	3.00E+00	
B30F74									
	M551K2AC	Alpha	3.38E+00 +- 2.5E+00	U	pCi/L	100%	3.78E+00	3.00E+00	
B30F74 DUP									
	M551K2AG	Alpha	4.48E+00 +- 2.8E+00		pCi/L	100%	3.82E+00	3.00E+00	28.1
B30F82									
	M551L2AC	Alpha	1.44E+01 +- 4.7E+00		pCi/L	100%	3.18E+00	3.00E+00	
5062023 9310_ALPHABETA_GPC									
B303H6									
	M55702AD	Beta	8.36E+00 +- 1.8E+00		pCi/L	100%	2.04E+00	4.00E+00	
B30F74									
	M551K2AD	Beta	1.89E+01 +- 3.0E+00		pCi/L	100%	2.21E+00	4.00E+00	
B30F74 DUP									
	M551K2AH	Beta	2.05E+01 +- 3.2E+00		pCi/L	100%	2.45E+00	4.00E+00	8.3
B30F82									

TestAmerica Inc RPD - Relative Percent Difference.
 rptTALRchSaSummary2 V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

Sample Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

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

Report No. : 65070

SDG No: W07071

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5062023	9310_ALPHABETA_GPC								
	B30F82								
	M551L2AD	Beta	1.09E+02 +- 1.4E+01		pCi/L	100%	2.02E+00	4.00E+00	
5051046	C14_LSC								
	B303H6								
	M55701AE	C-14	-2.27E-01 +- 2.0E+00	U	pCi/L	100%	3.82E+00	2.00E+02	
	B303H6 DUP								
	M55701AM	C-14	6.53E-01 +- 2.0E+00	U	pCi/L	100%	3.85E+00	2.00E+02	412.9
5051047	TC99_ETVDSK_LSC								
	B303H6								
	M55701AJ	Tc-99	7.30E-01 +- 4.4E+00	U	pCi/L	100%	9.82E+00	1.50E+01	
	B30707								
	M552J1AA	Tc-99	3.95E+02 +- 1.5E+01		pCi/L	100%	9.73E+00	1.50E+01	
	B30707 DUP								
	M552J1AE	Tc-99	4.30E+02 +- 1.6E+01		pCi/L	100%	9.99E+00	1.50E+01	8.6
	B30726								
	M56XD1AE	Tc-99	2.28E+02 +- 1.1E+01		pCi/L	100%	9.89E+00	1.50E+01	
	B30H64								
	M56XE1AD	Tc-99	-1.12E+00 +- 4.3E+00	U	pCi/L	100%	9.79E+00	1.50E+01	
	B30H74								
	M56XF1AD	Tc-99	7.85E+01 +- 6.7E+00		pCi/L	100%	9.71E+00	1.50E+01	
	B30H79								
	M56XG1AF	Tc-99	2.06E+02 +- 1.0E+01		pCi/L	100%	9.68E+00	1.50E+01	
	B30H88								
	M56XH1AF	Tc-99	1.52E+02 +- 8.6E+00		pCi/L	100%	9.69E+00	1.50E+01	
	B30HB2								
	M56XJ1AF	Tc-99	2.42E+02 +- 1.1E+01		pCi/L	100%	9.77E+00	1.50E+01	
	B30HB7								
	M56XK1AD	Tc-99	5.64E+01 +- 6.0E+00		pCi/L	100%	9.62E+00	1.50E+01	
5051048	906.0_H3_LSC								
	B303H6								
	M55701AA	H-3	8.70E+01 +- 1.3E+02	U	pCi/L	100%	2.85E+02	4.00E+02	
	B30726								
	M56XD1AA	H-3	1.26E+04 +- 5.4E+02		pCi/L	100%	2.85E+02	4.00E+02	
	B30729								
	M551J1AA	H-3	7.57E+04 +- 2.4E+03		pCi/L	100%	2.87E+02	4.00E+02	
	B30729 DUP								
	M551J1AE	H-3	7.62E+04 +- 2.4E+03		pCi/L	100%	2.89E+02	4.00E+02	0.6
	B30F74								
	M551K1AA	H-3	3.02E+04 +- 1.1E+03		pCi/L	100%	2.87E+02	4.00E+02	

TestAmerica Inc RPD - Relative Percent Difference.
 rptTALRchSaSummary2 V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

Sample Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

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

Report No. : 65070

SDG No: W07071

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5051048	906.0_H3_LSC								
	B30F82								
	M551L1AA	H-3	5.29E+04 +- 1.7E+03		pCi/L	100%	2.89E+02	4.00E+02	
	B30H64								
	M56XE1AA	H-3	1.11E+02 +- 1.3E+02	U	pCi/L	100%	2.83E+02	4.00E+02	
	B30H74								
	M56XF1AA	H-3	5.44E+02 +- 1.5E+02		pCi/L	100%	2.89E+02	4.00E+02	
	B30H79								
	M56XG1AH	H-3	7.90E+02 +- 1.9E+02		pCi/L	100%	3.32E+02	4.00E+02	
	B30H88								
	M56XH1AH	H-3	6.46E+02 +- 1.6E+02		pCi/L	100%	2.90E+02	4.00E+02	
	B30HB2								
	M56XJ1AH	H-3	8.14E+02 +- 1.6E+02		pCi/L	100%	2.91E+02	4.00E+02	
	B30HB7								
	M56XK1AA	H-3	2.52E+02 +- 1.4E+02	U	pCi/L	100%	2.89E+02	4.00E+02	
5051049	UTOT_KPA								
	B303H6								
	M55701AK	TOTAL-URANIUM	2.18E+00 +- 2.2E-01		ug/L		7.79E-02	1.44E-01	
	B305M5								
	M57WW1A	TOTAL-URANIUM	1.75E-01 +- 1.8E-02		ug/L		6.89E-02	1.44E-01	
	B305M9								
	M57M91AA	TOTAL-URANIUM	2.81E+01 +- 3.3E+00		ug/L		7.33E-02	1.44E-01	
	B305P1								
	M57NC1AA	TOTAL-URANIUM	5.77E-02 +- 6.0E-03	U	ug/L		7.79E-02	1.44E-01	
	B305P5								
	M57WX1AA	TOTAL-URANIUM	6.05E+00 +- 6.2E-01		ug/L		7.15E-02	1.44E-01	
	B30707								
	M552J1AC	TOTAL-URANIUM	6.62E+02 +- 7.9E+01		ug/L		7.33E-02	1.44E-01	
	B30726								
	M56XD1AF	TOTAL-URANIUM	6.42E+00 +- 6.6E-01		ug/L		7.46E-02	1.44E-01	
	B30F82								
	M551L1AG	TOTAL-URANIUM	4.31E+01 +- 5.1E+00		ug/L		6.89E-02	1.44E-01	
	B30F82 DUP								
	M551L1AJ	TOTAL-URANIUM	4.28E+01 +- 5.1E+00		ug/L		7.30E-02	1.44E-01	0.7
	B30FH9								
	M57W01AA	TOTAL-URANIUM	1.81E+01 +- 2.2E+00		ug/L		7.94E-02	1.44E-01	
	B30FJ5								
	M57WN1AA	TOTAL-URANIUM	1.10E+02 +- 1.3E+01		ug/L		7.54E-02	1.44E-01	
	B30H64								
	M56XE1AE	TOTAL-URANIUM	9.42E-01 +- 9.7E-02		ug/L		7.20E-02	1.44E-01	

TestAmerica Inc RPD - Relative Percent Difference.
 rptTALRchSaSummary2 V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

Sample Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

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

Report No. : 65070

SDG No: W07071

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5051049	UTOT_KPA								
	B30H74								
	M56XF1AE	TOTAL-URANIUM	1.61E+00 +- 1.7E-01		ug/L		7.35E-02	1.44E-01	
	B30H79								
	M56XG1AG	TOTAL-URANIUM	6.86E-01 +- 7.0E-02		ug/L		7.15E-02	1.44E-01	
	B30H88								
	M56XH1AG	TOTAL-URANIUM	8.03E-01 +- 8.2E-02		ug/L		7.54E-02	1.44E-01	
	B30HB2								
	M56XJ1AG	TOTAL-URANIUM	2.85E+00 +- 2.9E-01		ug/L		7.15E-02	1.44E-01	
	B30HB7								
	M56XK1AE	TOTAL-URANIUM	9.50E-01 +- 9.7E-02		ug/L		6.85E-02	1.44E-01	
No. of Results:		80							

TestAmerica Inc RPD - Relative Percent Difference.

rptTALRchSaSum
mary2 V5.3.6.8
A2002

QC Results Summary

Date: 23-Mar-15

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 65070

SDG No.: W07071

Batch	Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
SRISO_SEP_PRECIP_GPC									
5051044	BLANK QC,								
	M576H1AA	STRONTIUM	-4.67E-02 +- 2.2E-01	U	pCi/L	90%			4.92E-01
5051044	LCS,								
	M576H1AC	STRONTIUM	6.35E+00 +- 1.6E+00		pCi/L	84%	93%	-0.1	5.53E-01
PUISO_PLATE_AEA									
5051041	BLANK QC,								
	M576E1AA	Pu-238	4.51E-03 +- 7.8E-02	U	pCi/L	100%			2.66E-01
		PU239/40	-3.01E-03 +- 7.5E-02	U	pCi/L	100%			1.51E-01
5051041	LCS,								
	M576E2AC	PU239/40	5.43E+00 +- 1.2E+00		pCi/L	100%	121%	0.2	2.79E-01
AMCMISO_EIE_PLT_AEA									
5051040	BLANK QC,								
	M576D1AA	AMERICIUM 241	6.32E-02 +- 1.0E-01	U	pCi/L	112%			1.79E-01
5051040	LCS,								
	M576D1AC	AMERICIUM 241	2.57E+01 +- 4.4E+00		pCi/L	107%	107%	0.1	2.13E-01
I129LL_SEP_LEPS_GS									
5051045	BLANK QC,								
	M576J1AA	I129	9.17E-03 +- 1.1E-01	U	pCi/L	97%			1.92E-01
5051045	LCS,								
	M576J1AC	I129	1.04E+01 +- 1.2E+00		pCi/L	82%	99%	0.0	2.70E-01
9310_ALPHABETA_GPC									
5062022	BLANK QC,								
	M592K1AA	Alpha	-5.05E-02 +- 4.5E-01	U	pCi/L	100%			8.67E-01
5062022	LCS,								
	M592K1AC	Alpha	2.19E+01 +- 5.7E+00		pCi/L	100%	96%	0.0	7.13E-01
9310_ALPHABETA_GPC									
5062023	BLANK QC,								
	M592L1AA	Beta	7.58E-01 +- 9.9E-01	U	pCi/L	100%			1.77E+00
5062023	LCS,								
	M592L1AC	Beta	2.40E+01 +- 3.5E+00		pCi/L	100%	105%	0.1	1.94E+00
C14_LSC									
5051046	BLANK QC,								
	M576K1AA	C-14	-1.09E+00 +- 2.0E+00	U	pCi/L	100%			3.84E+00
5051046	LCS,								
	M576K1AC	C-14	1.42E+02 +- 8.9E+00		pCi/L	100%	99%	0.0	3.84E+00
TC99_ETVDSK_LSC									
5051047	MATRIX SPIKE, B30707								
	M552J1AD	Tc-99	3.42E+03 +- 9.2E+01		pCi/L	100%	96%	0.0	9.92E+00
5051047	BLANK QC,								
	M576M1AA	Tc-99	-1.62E+00 +- 4.3E+00	U	pCi/L	100%			9.85E+00
5051047	LCS,								
	M576M1AC	Tc-99	4.50E+02 +- 1.6E+01		pCi/L	100%	86%	-0.1	9.56E+00
906.0_H3_LSC									

TestAmerica Inc Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSummary V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

QC Results Summary
TestAmerica Inc TARL

Date: 23-Mar-15

Ordered by Method, Batch No, QC Type,.

Report No. : 65070

SDG No.: W07071

Batch	Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
5051048	BLANK QC, M576N1AA	H-3	1.18E+02 +- 1.3E+02	U	pCi/L	100%			2.98E+02
5051048	LCS, M576N1AC	H-3	2.48E+03 +- 2.3E+02		pCi/L	100%	93%	-0.1	2.96E+02
UTOT_KPA									
5051049	MATRIX SPIKE, B30F82 M551L1AH	TOTAL-URANIUM	3.59E+01 +- 1.1E+01		ug/L		103%	0.0	8.09E-02
5051049	BLANK QC, M576P1AA	TOTAL-URANIUM	6.13E-02 +- 6.4E-03	U	ug/L				8.19E-02
5051049	LCS, M576P1AC	TOTAL-URANIUM	3.11E+01 +- 3.7E+00		ug/L		99%	0.0	7.30E-02
	M576P1AD	TOTAL-URANIUM	3.61E+00 +- 3.7E-01		ug/L		100%	0.0	8.06E-02
No. of Results: 24									

TestAmerica Inc Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchQcSummary V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110430-1
 Client Sample ID: B303H6
 SDG: W07071
 Report No.: 65070
 COC No.: 115-012-092
 Collection Date: 2/11/2015 9:36:00 AM
 Received Date: 2/11/2015 2:00:00 PM
 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051041 PUIISO_PLATE_AEA Work Order: M55701AG Report DB ID: 9M557010												
Pu-238	4.41E-02	U	1.1E-01	1.1E-01	2.78E-01	pCi/L	92%	0.16	3/11/15 11:59 a	0.2036	L	ALP414
PU239/40	-6.30E-03	U	7.9E-02	7.9E-02	1.80E-01	pCi/L	92%	-0.04	3/11/15 11:59 a	0.2036	L	ALP414
Batch: 5051044 SRISO_SEP_PRECIP_GPC Work Order: M55701AH Report DB ID: 9M557010												
STRONTIUM	2.63E-03	U	2.4E-01	2.4E-01	5.36E-01	pCi/L	83%	0	2/26/15 07:49 a	1.0047	L	GPC31D
Batch: 5051045 I129LL_SEP_LEPS_GS Work Order: M55701AF Report DB ID: 9M557010												
I129	-5.23E-02	U	1.1E-01	1.1E-01	1.81E-01	pCi/L	92%	-0.29	3/9/15 02:09 p	3.7291	L	LEP4\$1
Batch: 5051046 C14_LSC Work Order: M55701AE Report DB ID: 9M557010												
C-14	-2.27E-01	U	1.6E+00	2.0E+00	3.82E+00	pCi/L	100%	-0.06	3/19/15 04:24 a	0.25	L	LSC4
Batch: 5051047 TC99_ETVDSK_LSC Work Order: M55701AJ Report DB ID: 9M557010												
Tc-99	7.30E-01	U	4.1E+00	4.4E+00	9.82E+00	pCi/L	100%	0.07	2/27/15 08:06 p	0.1263	L	LSC8
Batch: 5051048 906.0_H3_LSC Work Order: M55701AA Report DB ID: 9M557010												
H-3	8.70E+01	U	1.2E+02	1.3E+02	2.85E+02	pCi/L	100%	0.31	3/5/15 01:48 p	0.00603	L	LSC8
Batch: 5051049 UTOT_KPA Work Order: M55701AK Report DB ID: 9M557010												

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt\$TLRch\$Sample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mdar/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110430-1
 Client Sample ID: B303H6
 SDG: W07071
 Report No.: 65070
 COC No.: 115-012-092
 Matrix: WATER
 Collection Date: 2/11/2015 9:36:00 AM
 Received Date: 2/11/2015 2:00:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
TOTAL-URANIUM	2.18E+00			2.2E-01	7.79E-02	ug/L	1.44E-01	(27.9)	3/12/15 11:52 a		26.9	KPAW3
							2.76E-02	(19.5)			ML	
Batch: 5062022	9310_ALPHABETA_GPC				Work Order: M55702AC			Report DB ID: 9M557020				
Alpha	5.47E-01	U	1.5E+00	1.5E+00	2.71E+00	pCi/L	100%	0.2	3/5/15 02:40 p		0.0911	GPC23A
							1.23E+00	3.00E+00			L	
Batch: 5062023	9310_ALPHABETA_GPC				Work Order: M55702AD			Report DB ID: 9M557020				
Beta	8.36E+00		1.5E+00	1.8E+00	2.04E+00	pCi/L	100%	(4.1)	3/5/15 03:30 p		0.2024	GPC26D
							9.82E-01	4.00E+00			L	

No. of Results: 10
 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpfSTL.RchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B190427-1
 Client Sample ID: B305M5
 SDG: W07071
 Report No.: 65070
 COC No.: W15-002-071
 Matrix: WATER
 Collection Date: 2/18/2015 1:06:00 PM
 Received Date: 2/19/2015 10:55:00 AM

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	1.75E-01			1.8E-02	6.89E-02 ug/L	2.44E-02	1.44E-01	(2.5)	3/12/15 12:24 p		30.4 ML	KPAW3
								(19.4)				

Work Order: M57WW1AA
 Report DB ID: 9M57WW10
 1.8E-02 6.89E-02 ug/L 2.44E-02 1.44E-01 (2.5) (19.4)

No. of Results: 1 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STLRchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc|Mda|Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 AZ002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B180423-1
 Client Sample ID: B305M9
 SDG: W07071
 Report No.: 65070
 COC No.: W15-002-072
 Matrix: WATER
 Collection Date: 2/18/2015 10:15:00 AM
 Received Date: 2/18/2015 1:30:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	2.81E+01			3.3E+00	7.33E-02 ug/L				3/12/15 12:14 p		28.6	KPAW3
						2.59E-02	1.44E-01	(382.9)			ML	
								(16.8)				

Work Order: M57M91AA Report DB ID: 9M57M910

No. of Results: 1 Comments:

TestAmerica Inc MDCIMDA.Lc - Defection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpfSTLRchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B180423-2
 Client Sample ID: B305P1
 SDG: W07071
 Report No.: 65070
 COC No.: W15-002-073
 Collection Date: 2/18/2015 9:19:00 AM
 Received Date: 2/18/2015 1:30:00 PM
 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	5.77E-02	U		6.0E-03	7.79E-02 ug/L			0.74	3/12/15 12:16 p		26.9	KPAW3
						2.76E-02	1.44E-01	(19.2)			ML	

Work Order: M57NC1AA Report DB ID: 9M57NC10

No. of Results: 1 Comments:

TestAmerica Inc MDC|MDA.Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTL.RchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110413-1
 Client Sample ID: B30707
 SDG: W07071
 Report No.: 65070
 COC No.: I15-015-016
 Matrix: WATER
 Collection Date: 2/10/2015 2:40:00 PM
 Received Date: 2/11/2015 8:45:00 AM

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL _c Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL _c Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051047	TC99_ETVDSK_LSC											
Tc-99	3.95E+02		1.1E+01	1.5E+01	9.73E+00	pCi/L	100%	(40.6)	2/27/15 05:00 p		0.1281	LSC8
						4.67E+00	1.50E+01	(54.3)			L	
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	6.62E+02			7.9E+01	7.33E-02	ug/L		(9032.5)	3/12/15 11:50 a		28.6	KPAW3
						2.59E-02	1.44E-01	(16.8)			ML	

No. of Results: 2 Comments:

TestAmerica Inc MDCIMDA,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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Collection Date: 2/12/2015 12:34:00 PM
 Lot-Sample No.: J5B140401-1 Report No.: 65070 Received Date: 2/12/2015 2:25:00 PM
 Client Sample ID: B30726 COC No.: 115-015-025 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL) Rst/TotUcert	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051044 SRISO_SEP_PRECIP_GPC Work Order: M56XD1AD Report DB ID: 9M56XD10												
STRONTIUM	8.97E-02	U	2.7E-01	2.7E-01	5.72E-01	pCi/L	84%	0.16	2/26/15 07:49 a	1.014	L	GPC32A
Batch: 5051045 I129LL_SEP_LEPS_GS Work Order: M56XD1AC Report DB ID: 9M56XD10												
I129	2.95E+00		4.5E-01	4.5E-01	2.18E-01	pCi/L	95%	(13.5)	3/9/15 02:09 p	3.736	L	LEP5\$1
Batch: 5051047 TC99_ETVDSK_LSC Work Order: M56XD1AE Report DB ID: 9M56XD10												
Tc-99	2.28E+02		9.1E+00	1.1E+01	9.89E+00	pCi/L	100%	(23.1)	2/27/15 09:08 p	0.1252	L	LSC8
Batch: 5051048 906.0_H3_LSC Work Order: M56XD1AA Report DB ID: 9M56XD10												
H-3	1.26E+04		3.8E+02	5.4E+02	2.85E+02	pCi/L	100%	(44.4)	3/5/15 03:10 p	0.00503	L	LSC8
Batch: 5051049 UTOT_KPA Work Order: M56XD1AF Report DB ID: 9M56XD10												
TOTAL-URANIUM	6.42E+00		6.6E-01	6.6E-01	7.46E-02	ug/L	(86.1)		3/12/15 11:54 a	28.1	ML	KPAW3

No. of Results: 5 Comments:

TestAmerica Inc MDCIMDA,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, Mdc/Mdar/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 AZ002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Collection Date: 2/10/2015 1:21:00 PM
 Lot-Sample No.: J5B110405-1 Report No.: 65070 Received Date: 2/10/2015 2:40:00 PM
 Client Sample ID: B30729 COC No.: 115-015-026 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDI,(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051045	1129LL_SEP_LEPS_GS											
1129	4.22E-01		2.2E-01	2.2E-01	1.82E-01	pCi/L	92%	(2.3)	3/9/15 06:46 a		3.7722	LEP4\$1
						8.42E-02	1.00E+00	(3.8)			L	
Batch: 5051048	906.0_H3_LSC											
H-3	7.57E+04		9.0E+02	2.4E+03	2.87E+02	pCi/L	100%	(264.3)	3/5/15 08:20 a		0.00503	LSC8
						1.36E+02	4.00E+02	(63.2)			L	

No. of Results: 2 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTL RchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110406-1
 Client Sample ID: B30F74
 SDG: W07071
 Report No.: 65070
 COC No.: S15-003-237
 Matrix: WATER
 Collection Date: 2/10/2015 12:07:00 PM
 Received Date: 2/10/2015 2:40:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL) Rst/TotUcert	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051044 SRISO_SEP_PRECIP_GPC Work Order: M551K1AF Report DB ID: 9M551K10												
STRONTIUM	2.67E-01	U	2.8E-01	2.8E-01	5.58E-01	pCi/L	86%	0.48	2/26/15 07:49 a	0.9986	L	GPC31A
Batch: 5051045 I129LL_SEP_LEPS_GS Work Order: M551K1AE Report DB ID: 9M551K10												
I129	4.24E-01		2.2E-01	2.2E-01	2.59E-01	pCi/L	68%	(1.6)	3/9/15 10:40 a	3.8576	L	LEP4\$1
Batch: 5051048 906.0_H3_LSC Work Order: M551K1AA Report DB ID: 9M551K10												
H-3	3.02E+04		5.7E+02	1.1E+03	2.87E+02	pCi/L	100%	(105.4)	3/5/15 11:04 a	0.00503	L	LSC8
Batch: 5062022 9310_ALPHABETA_GPC Work Order: M551K2AC Report DB ID: 9M551K20												
Alpha	3.38E+00	U	2.4E+00	2.5E+00	3.78E+00	pCi/L	100%	0.89	3/5/15 02:40 p	0.0626	L	GPC22B
Batch: 5062023 9310_ALPHABETA_GPC Work Order: M551K2AD Report DB ID: 9M551K20												
Beta	1.89E+01		1.9E+00	3.0E+00	2.21E+00	pCi/L	100%	(8.6)	3/5/15 03:30 p	0.182	L	GPC26A

No. of Results: 5 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STLRchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110406-2
 Client Sample ID: B30F82
 SDG: W07071
 Report No.: 65070
 COC No.: S15-003-239
 Matrix: WATER
 Collection Date: 2/10/2015 10:26:00 AM
 Received Date: 2/10/2015 2:40:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL) Rst/TotUcert	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051044	SRISO_SEP_PRECIP_GPC											
STRONTIUM	-7.71E-02	U	2.5E-01	2.5E-01	M551L1AF	pCi/L	83%	-0.14	2/26/15 07:49 a	1.0058	L	GPC31C
Work Order:	M551L1AE											
Batch: 5051045	I129L_SEP_LEPS_GS											
129	2.62E+00		4.7E-01	4.7E-01	M551L1AA	pCi/L	90%	(13.6)	3/9/15 10:40 a	3.8296	L	LEP5\$1
Work Order:	M551L1AA											
Batch: 5051048	906.0_H3_LSC											
H-3	5.29E+04		7.5E+02	1.7E+03	M551L1AG	pCi/L	100%	(183.1)	3/5/15 12:26 p	0.00501	L	LSC8
Work Order:	M551L1AG											
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	4.31E+01		5.1E+00	5.1E+00	M551L1AD	ug/L		(625.6)	3/12/15 11:40 a	30.4	ML	KPAW3
Work Order:	M551L1AD											
Batch: 5062022	9310_ALPHABETA_GPC											
Alpha	1.44E+01		3.0E+00	4.7E+00	M551L2AC	pCi/L	100%	(4.5)	3/5/15 02:40 p	0.0758	L	GPC22D
Work Order:	M551L2AC											
Batch: 5062023	9310_ALPHABETA_GPC											
Beta	1.09E+02		3.7E+00	1.4E+01	M551L2AD	pCi/L	100%	(53.9)	3/5/15 03:30 p	0.2045	L	GPC26C
Work Order:	M551L2AD											

No. of Results: 6 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STLRchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B190428-1
 Client Sample ID: B30FH9

SDG: W07071
 Report No.: 65070
 COC No.: S15-003-254

Collection Date: 2/19/2015 12:33:00 PM
 Received Date: 2/19/2015 1:00:00 PM
 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA							Report DB ID: 9M57W010				
TOTAL-URANIUM	1.81E+01			2.2E+00	7.94E-02 ug/L	2.81E-02	1.44E-01	(227.9)	3/12/15 12:30 p	26.4	ML	KPAW3
								(16.7)				

No. of Results: 1 Comments:

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STLRchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B190426-1
 Client Sample ID: B30FJ5
 SDG: W07071
 Report No.: 65070
 COC No.: S15-003-255
 Collection Date: 2/19/2015 9:54:00 AM
 Received Date: 2/19/2015 10:55:00 AM
 Matrix: WATER
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA											
	TOTAL-URANIUM			1.3E+01	7.54E-02 ug/L	2.67E-02	9M57WN10	(1465.2)	3/12/15 12:22 p		27.8	KPAW3
						1.44E-01		(16.7)			ML	

No. of Results: 1
 Comments:

TestAmerica Inc MDC|MDA, Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STL|Rch|Sample U Qual - Analyzed for but not detected above limiting criteria, Mdc|Mda|Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I

SAMPLE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B140402-1
 Client Sample ID: B30H64

SDG: W07071
 Report No.: 65070
 COC No.: 115-019-032

Collection Date: 2/12/2015 10:36:00 AM
 Received Date: 2/12/2015 2:25:00 PM
 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051045	Work Order: M56XE1AC Report DB ID: 9M56XE10											
I129	1.12E-03	U	1.1E-01	1.1E-01	1.94E-01	pCi/L	91%	0.01	3/9/15 05:43 p		3.754	LEP4\$1
							1.00E+00	0.02			L	
Batch: 5051047	Work Order: M56XE1AD Report DB ID: 9M56XE10											
Tc-99	-1.12E+00	U	4.0E+00	4.3E+00	9.79E+00	pCi/L	100%	-0.11	2/27/15 10:10 p		0.1278	LSC8
							1.50E+01	-0.53			L	
Batch: 5051048	Work Order: M56XE1AA Report DB ID: 9M56XE10											
H-3	1.11E+02	U	1.2E+02	1.3E+02	2.83E+02	pCi/L	100%	0.39	3/5/15 04:32 p		0.00504	LSC8
							4.00E+02	(1.7)			L	
Batch: 5051049	Work Order: M56XE1AE Report DB ID: 9M56XE10											
TOTAL-URANIUM	9.42E-01			9.7E-02	7.20E-02	ug/L		(13.1)	3/12/15 11:57 a		29.1	KPAW3
							1.44E-01	(19.5)			ML	

No. of Results: 4 Comments:

TestAmerica Inc MDCIMDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTLRcfSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I

SAMPLE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Collection Date: 2/12/2015 11:27:00 AM
 Lot-Sample No.: J5B140402-2 Report No.: 65070 Received Date: 2/12/2015 2:25:00 PM
 Client Sample ID: B30H74 COC No.: 115-019-037 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051045	1129LL_SEP_LEPS_GS											
5051045	1.04E-02	U	8.6E-02	8.6E-02	M56XF1AC	pCi/L	91%	0.06	3/9/15 05:45 p		3.7334	LEP5\$1
							1.00E+00	0.24			L	
Batch: 5051047	TC99_ETVDSK_LSC											
5051047	7.85E+01		6.2E+00	6.7E+00	M56XF1AD	pCi/L	100%	(8.1)	2/27/15 11:12 p		0.1283	LSC8
							1.50E+01	(23.5)			L	
Batch: 5051048	906.0_H3_LSC											
5051048	5.44E+02		1.4E+02	1.5E+02	M56XF1AA	pCi/L	100%	(1.9)	3/5/15 05:54 p		0.00503	LSC8
							4.00E+02	(7.2)			L	
Batch: 5051049	UTOT_KPA											
5051049	1.61E+00		1.7E-01	1.7E-01	M56XF1AE	ug/L	(21.9)	(19.5)	3/12/15 11:59 a		28.5	KPAW3
							1.44E-01				ML	

No. of Results: 4 Comments:

TestAmerica Inc MDC|MDA,L,c - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt|STLRch|Sample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Collection Date: 2/12/2015 10:04:00 AM
 Lot-Sample No.: J5B140402-3 Report No.: 65070 Received Date: 2/12/2015 2:25:00 PM
 Client Sample ID: B30H79 COC No.: 115-019-039 Matrix: WATER
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051040 AMCMISO_EIE_PLT_AEA Work Order: M56XG1AC Report DB ID: 9M56XG10												
AMERICIUM 241	1.46E-01	U	1.6E-01	1.6E-01	2.62E-01	pCi/L	103%	0.56	3/11/15 12:01 p		0.2	ALP428
							7.45E-02	(1.8)			L	
Batch: 5051041 PUIISO_PLATE_AEA Work Order: M56XG2AE Report DB ID: 9M56XG20												
Pu-238	-3.16E-03	U	7.9E-02	7.9E-02	1.59E-01	pCi/L	100%	-0.02	3/12/15 11:22 a		0.2038	ALP40
							3.69E-02	-0.08			L	
PU239/40	-9.47E-03	U	8.0E-02	8.0E-02	1.97E-01	pCi/L	100%	-0.05	3/12/15 11:22 a		0.2038	ALP40
							4.95E-02	-0.24			L	
Batch: 5051045 1129LL_SEP_LEPS_GS Work Order: M56XG1AD Report DB ID: 9M56XG10												
1129	2.61E-03	U	1.1E-01	1.1E-01	1.86E-01	pCi/L	96%	0.01	3/9/15 11:39 p		3.7773	LEP4\$1
							8.96E-02	0.05			L	
Batch: 5051047 TC99_ETVDSK_LSC Work Order: M56XG1AF Report DB ID: 9M56XG10												
Tc-99	2.06E+02		8.6E+00	1.0E+01	9.68E+00	pCi/L	100%	(21.3)	2/28/15 12:14 a		0.1285	LSC8
							4.65E+00	(41.3)			L	
Batch: 5051048 906.0_H3_LSC Work Order: M56XG1AH Report DB ID: 9M56XG10												
H-3	7.90E+02		1.7E+02	1.9E+02	3.32E+02	pCi/L	100%	(2.4)	3/5/15 07:16 p		0.00503	LSC8
							1.58E+02	(8.5)			L	
Batch: 5051049 UTOT_KPA Work Order: M56XG1AG Report DB ID: 9M56XG10												
TOTAL-URANIUM	6.86E-01		7.0E-02	7.0E-02	7.15E-02	ug/L	(9.6)		3/12/15 12:01 p		29.3	KPAW3
							2.53E-02	(19.5)			ML	

No. of Results: 7 Comments:

TestAmerica Inc MDCIMDA.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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM I
SAMPLE RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B140402-4
 Client Sample ID: B30H88
 SDG: W07071
 Report No.: 65070
 COC No.: 115-019-043
 Matrix: WATER
 Collection Date: 2/12/2015 11:52:00 AM
 Received Date: 2/12/2015 2:25:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051040 AMCMISO_EIE_PLT_AEA												
AMERICIUM 241	3.80E-01		2.4E-01	2.4E-01	2.33E-01	pCi/L	106%	(1.6)	3/11/15 12:01 p	0.2012	L	ALP432
Work Order: M56XH1AC Report DB ID: 9M56XH10												
6.53E-02 1.00E+00 (3.7)												
Batch: 5051041 PUIISO_PLATE_AEA												
Pu-238	-3.08E-02	U	7.2E-02	7.2E-02	2.47E-01	pCi/L	98%	-0.12	3/11/15 12:00 p	0.204	L	ALP421
Work Order: M56XH1AE Report DB ID: 9M56XH10												
6.97E-02 1.00E+00 -0.85												
Pu239/40	-2.79E-03	U	7.0E-02	7.0E-02	1.41E-01	pCi/L	98%	-0.02	3/11/15 12:00 p	0.204	L	ALP421
Work Order: M56XH1AD Report DB ID: 9M56XH10												
3.27E-02 1.00E+00 -0.08												
Batch: 5051045 I129L_SEP_LEPS_GS												
I129	2.30E-02	U	8.0E-02	8.0E-02	1.52E-01	pCi/L	92%	0.15	3/9/15 11:40 p	3.8449	L	LEP5\$1
Work Order: M56XH1AF Report DB ID: 9M56XH10												
7.05E-02 1.00E+00 0.58												
Batch: 5051047 TC99_ETVDSK_LSC												
Tc-99	1.52E+02		7.7E+00	8.6E+00	9.69E+00	pCi/L	100%	(15.7)	2/28/15 01:16 a	0.1284	L	LSC8
Work Order: M56XH1AH Report DB ID: 9M56XH10												
4.65E+00 1.50E+01 (35.3)												
Batch: 5051048 906.0_H3_LSC												
H-3	6.46E+02		1.4E+02	1.6E+02	2.90E+02	pCi/L	100%	(2.2)	3/5/15 08:38 p	0.00503	L	LSC8
Work Order: M56XH1AG Report DB ID: 9M56XH10												
1.38E+02 4.00E+02 (8.3)												
Batch: 5051049 UTOT_KPA												
TOTAL-URANIUM	8.03E-01		8.2E-02	8.2E-02	7.54E-02	ug/L	(10.7)	(19.5)	3/12/15 12:08 p	27.8	ML	KPAW3
Work Order: M56XH1AG Report DB ID: 9M56XH10												
2.67E-02 1.44E-01 (19.5)												

No. of Results: 7 Comments:

TestAmerica Inc MDCIMDA,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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 AZ002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Collection Date: 2/12/2015 9:03:00 AM
 Lot-Sample No.: J5B140402-5 Report No.: 65070 Received Date: 2/12/2015 2:25:00 PM
 Client Sample ID: B30HB2 COC No.: 115-019-049 Matrix: WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051040 AMERICIUM 241												
	AMCMISO_EIE_PLT_AEA	U	1.0E-01	1.0E-01	M56XJ1AC	pCi/L	111%	0.28	3/11/15 12:02 p	0.2008	L	ALP434
						5.27E-02	1.00E+00	(1.1)				
Batch: 5051041												
	PUISO_PLATE_AEA	U	7.8E-02	7.8E-02	M56XJ1AE	pCi/L	94%	-0.07	3/11/15 12:00 p	0.2035	L	ALP423
						5.67E-02	1.00E+00	-0.39				
	PU239/40	U	7.8E-02	7.8E-02	M56XJ1AD	pCi/L	94%	-0.08	3/11/15 12:00 p	0.2035	L	ALP423
						6.05E-02	1.00E+00	-0.47				
Batch: 5051045												
	I129	U	1.4E-01	1.4E-01	M56XJ1AD	pCi/L	74%	-0.02	3/10/15 07:35 a	3.7444	L	LEP4\$1
						9.37E-02	1.00E+00	-0.07				
Batch: 5051047												
	TC99_ETVDSK_LSC		9.2E+00	1.1E+01	M56XJ1AF	pCi/L	100%	(24.7)	2/28/15 02:18 a	0.127	L	LSC8
						4.69E+00	1.50E+01	(44.3)				
Batch: 5051048												
	H-3		1.5E+02	1.6E+02	M56XJ1AH	pCi/L	100%	(2.8)	3/5/15 10:00 p	0.00501	L	LSC8
						1.38E+02	4.00E+02	(10.)				
Batch: 5051049												
	TOTAL-URANIUM		2.9E-01	2.9E-01	M56XJ1AG	ug/L	(39.9)	(19.5)	3/12/15 12:10 p	29.3	ML	KPAW3
						2.53E-02	1.44E-01	(19.5)				

No. of Results: 7 Comments:

TestAmerica Inc MDCJ(MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTL RchSample U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM I
SAMPLE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B140402-6
 Client Sample ID: B30HB7
 SDG: W07071
 Report No.: 65070
 COC No.: 115-019-051
 Matrix: WATER
 Collection Date: 2/12/2015 8:51:00 AM
 Received Date: 2/12/2015 2:25:00 PM
 Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051045 1129LL_SEP_LEPS_GS												
5051045	3.49E-02	U	8.2E-02	8.2E-02	1.57E-01	pCi/L	96%	0.22	3/10/15 07:35 a		3.7215	LEP5\$1
Work Order: M56XK1AC Report DB ID: 9M56XK10												
7.60E-02 1.00E+00 0.85												
Batch: 5051047 TC99_ETVDSK_LSC												
Tc-99	5.64E+01		5.6E+00	6.0E+00	9.62E+00	pCi/L	100%	(5.9)	2/28/15 03:20 a		0.1297	LSC8
Work Order: M56XK1AD Report DB ID: 9M56XK10												
4.62E+00 1.50E+01 (18.8)												
Batch: 5051048 906.0_H3_LSC												
H-3	2.52E+02	U	1.3E+02	1.4E+02	2.89E+02	pCi/L	100%	0.87	3/6/15 12:44 a		0.00503	LSC8
Work Order: M56XK1AA Report DB ID: 9M56XK10												
1.37E+02 4.00E+02 (3.6)												
Batch: 5051049 UTOT_KPA												
TOTAL-URANIUM	9.50E-01			9.7E-02	6.85E-02	ug/L		(13.9)	3/12/15 12:12 p		30.6	KPAW/3
Work Order: M56XK1AE Report DB ID: 9M56XK10												
2.42E-02 1.44E-01 (19.5)												

No. of Results: 4 Comments:

TestAmerica Inc MDCIMDA,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, Mdc/Mdar/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 AZ002

FORM II

Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110430-1
 Client Sample ID: B303H6 DUP
 SDG: W07071
 Report No.: 65070
 COC No.: 115-012-092
 Collection Date: 2/11/2015 9:36:00 AM
 Received Date: 2/11/2015 2:00:00 PM
 Matrix: WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051041	Work Order: M55701AL Report DB ID: M55701LR Orig Sa DB ID: 9M557010											
Pu-238	2.71E-02	U	7.2E-02	7.2E-02	1.78E-01	pCi/L	100%	0.15	3/11/15 11:59 a	0.2054	L	ALP419
	4.41E-02	U	RPD	47.7		1.00E+00		0.75				
Pu239/40	-5.71E-03	U	7.2E-02	7.2E-02	1.63E-01	pCi/L	100%	-0.04	3/11/15 11:59 a	0.2054	L	ALP419
	-6.30E-03	U	RPD	-9.8		1.00E+00		-0.16				

Alpha Spec Result Sum = 2.1E-02

Batch: 5051046	Work Order: M55701AM Report DB ID: M55701MR Orig Sa DB ID: 9M557010											
C-14	6.53E-01	U	1.6E+00	2.0E+00	3.85E+00	pCi/L	100%	0.17	3/19/15 06:28 a	0.25	L	LSC4
	-2.27E-01	U	RPD	412.9		2.00E+02		0.64				

Alpha Spec Result Sum = 2.1E-02

No. of Results: 3 Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rptSTLRchDupV5. MDC\MDA,LC - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110413-1
 Client Sample ID: B30707 DUP
 SDG: W07071
 Report No.: 65070
 COC No.: 115-015-016
 Collection Date: 2/10/2015 2:40:00 PM
 Received Date: 2/11/2015 8:45:00 AM
 Matrix: WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051047	TC99_ETVDSK_LSC				Work Order: M552J1AE	Report DB ID: M552J1ER			Orig Sa DB ID: 9M552J10			
Tc-99	4.30E+02		1.2E+01	1.6E+01	9.99E+00 pCi/L	100%	(43.1)	2/27/15 07:04 p		0.1254	L	LSC8
	3.95E+02		RPD 8.6		1.50E+01	(55.5)						

No. of Results: 1 Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rpfSTLRchDupV5. MDC\MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002

FORM II

Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc **SDG:** W07071 **Collection Date:** 2/10/2015 1:21:00 PM
Lot-Sample No.: J5B110405-1 **Report No.:** 65070 **Received Date:** 2/10/2015 2:40:00 PM
Client Sample ID: B30729 DUP **COC No.:** 115-015-026 **Matrix:** WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051045	Work Order: M551J1AD Report DB ID: M551J1DR Orig Sa DB ID: 9M551J10											
1129	1129LL_SEP_LEPS_GS		2.1E-01	2.1E-01	1.64E-01	pCi/L	91%	(2.8)	3/9/15 06:47 a		3.8474	LEP5\$1
			RPD 8.0			1.00E+00	(4.4)				L	
Batch: 5051048	Work Order: M551J1AE Report DB ID: M551J1ER Orig Sa DB ID: 9M551J10											
H-3	906.0_H3_LSC		9.0E+02	2.4E+03	2.89E+02	pCi/L	100%	(263.4)	3/5/15 09:42 a		0.00502	LSC8
			RPD 0.6			4.00E+02	(63.2)				L	

No. of Results: 2 Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rptSTLRchDupV5. MDC\MDA,I,c - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002

FORM II

Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110406-1
 Client Sample ID: B30F74 DUP
 SDG: W07071
 Report No.: 65070
 COC No.: S15-003-237
 Collection Date: 2/10/2015 12:07:00 PM
 Received Date: 2/10/2015 2:40:00 PM
 Matrix: WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051044	Work Order: M551K1AJ Report DB ID: M551K1JR Orig Sa DB ID: 9M551K10											
STRONTIUM	-1.42E-01	U	2.3E-01	2.3E-01	5.36E-01	pCi/L	79%	-0.27	2/26/15 07:49 a		1.0043	GPC31B
	2.67E-01	U	RPD	654.8		2.00E+00		-(1.2)			L	
Batch: 5062022	Work Order: M551K2AG Report DB ID: M551K2GR Orig Sa DB ID: 9M551K20											
Alpha	4.48E+00	U	2.5E+00	2.8E+00	3.82E+00	pCi/L	100%	(1.2)	3/5/15 02:40 p		0.0622	GPC22C
	3.38E+00	U	RPD	28.1		3.00E+00		(3.3)			L	
Batch: 5062023	Work Order: M551K2AH Report DB ID: M551K2HR Orig Sa DB ID: 9M551K20											
Beta	2.05E+01	U	2.1E+00	3.2E+00	2.45E+00	pCi/L	100%	(8.4)	3/5/15 03:30 p		0.183	GPC26B
	1.89E+01	U	RPD	8.3		4.00E+00		(12.6)			L	

No. of Results: 3 Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rptSTLRchDupV5. MDC|MDA,L,c - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B110406-2
 Client Sample ID: B30F82 DUP
 SDG: W07071
 Report No.: 65070
 COC No.: S15-003-239
 Collection Date: 2/10/2015 10:26:00 AM
 Received Date: 2/10/2015 2:40:00 PM
 Matrix: WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051049	UTOT_KPA											
TOTAL-URANIUM	4.28E+01			5.1E+00	7.30E-02	ug/L		(586.4)	3/12/15 11:44 a	28.7	ML	KPAW3
	4.31E+01		RPD 0.7			1.44E-01		(16.8)	Orig Sa DB ID: 9M551L10			
									Report DB ID: M551L1AJ			
									Work Order: M551L1AJ			

No. of Results: 1 Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rptSTLRchDupV5. MDC\MDA,LC - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002

FORM II
Date: 23-Mar-15

DUPLICATE RESULTS

Lab Name: TestAmerica Inc
 Lot-Sample No.: J5B140402-3
 Client Sample ID: B30H79 DUP
 SDG: W07071
 Report No.: 65070
 COC No.: 115-019-039
 Matrix: WATER
 Collection Date: 2/12/2015 10:04:00 AM
 Received Date: 2/12/2015 2:25:00 PM

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051040	AMCMISO_EIE_PLT_AEA				Work Order: M56XG1AJ	Report DB ID: M56XG1JR			Orig Sa DB ID: 9M56XG10			
AMERICIUM 241	1.20E-01	U	1.4E-01	1.4E-01	2.29E-01 pCi/L	108%	0.52	3/11/15 12:01 p		0.2002	L	ALP430
	1.46E-01	U	RPD 19.5		1.00E+00	(1.7)						

Alpha Spec Result Sum = 1.2E-01

No. of Results: 1
Comments:

TestAmerica Inc RPD - Relative Percent Difference.
 rptSTLRchDupV5. MDC\MDA, I.e - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 3.6.8 A2002 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II
BLANK RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc SDG: W07071
 Matrix: WATER Report No.: 65070

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUncert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5051046 C14_LSC Work Order: M576K1AA Report DB ID: M576K1AB												
C-14	-1.09E+00	U	1.6E+00	2.0E+00	3.84E+00	pCi/L	100%	-0.28	3/19/15 08:31 a		0.25	LSC4
					1.87E+00	2.00E+02		-(1.1)			L	
Batch: 5051041 PUIISO_PLATE_AEA Work Order: M576E1AA Report DB ID: M576E1AB												
Pu-238	4.51E-03	U	7.8E-02	7.8E-02	2.66E-01	pCi/L	100%	0.02	3/11/15 12:00 p		0.2023	ALP425
					7.50E-02	1.00E+00		0.12			L	
PU239/40	-3.01E-03	U	7.5E-02	7.5E-02	1.51E-01	pCi/L	100%	-0.02	3/11/15 12:00 p		0.2023	ALP425
					3.51E-02	1.00E+00		-0.08			L	
Batch: 5051040 AMCMISO_EIE_PLT_AEA Work Order: M576D1AA Report DB ID: M576D1AB												
AMERICIUM 241	6.32E-02	U	1.0E-01	1.0E-01	1.79E-01	pCi/L	112%	0.35	3/11/15 03:45 p		0.2039	ALP419
					4.51E-02	1.00E+00		(1.2)			L	
Batch: 5051048 906.0_H3_LSC Work Order: M576N1AA Report DB ID: M576N1AB												
H-3	1.18E+02	U	1.2E+02	1.3E+02	2.98E+02	pCi/L	100%	0.4	3/6/15 02:07 a		0.00502	LSC8
					1.42E+02	4.00E+02		(1.8)			L	
Batch: 5062022 9310_ALPHABETA_GPC Work Order: M592K1AA Report DB ID: M592K1AB												
Alpha	-5.05E-02	U	4.5E-01	4.5E-01	8.67E-01	pCi/L	100%	-0.06	3/5/15 02:40 p		0.2	GPC23B
					3.96E-01	3.00E+00		-0.22			L	
Batch: 5062023 9310_ALPHABETA_GPC Work Order: M592L1AA Report DB ID: M592L1AB												
Beta	7.58E-01	U	9.8E-01	9.9E-01	1.77E+00	pCi/L	100%	0.43	3/5/15 03:30 p		0.2	GPC27A
					8.51E-01	4.00E+00		(1.5)			L	
Batch: 5051045 I129LL_SEP_LEPS_GS Work Order: M576J1AA Report DB ID: M576J1AB												

TestAmerica Inc MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rptSTL_RchBlank U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

FORM II
BLANK RESULTS

Date: 23-Mar-15

Lab Name: TestAmerica Inc SDG: W07071 Report No.: 65070
 Matrix: WATER

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
1429	9.17E-03	U	1.1E-01	1.1E-01	1.92E-01 9.34E-02	pCi/L 1.00E+00	97%	0.05 0.17	3/10/15 10:59 a		3.7762 L	LEP4\$1
Batch: 5051044 SRISO_SEP_PRECIP_GPC Work Order: M576H1AA Report DB ID: M576H1AB												
STRONTIUM	-4.67E-02	U	2.2E-01	2.2E-01	4.92E-01 2.33E-01	pCi/L 2.00E+00	90%	-0.09 -0.42	2/26/15 07:49 a		1.0007 L	GPC32B
Batch: 5051049 UTOT_KPA Work Order: M576P1AA Report DB ID: M576P1AB												
TOTAL-URANIUM	6.13E-02	U		6.4E-03	8.19E-02 2.90E-02	ug/L 1.40E-01		0.75 (19.1)	3/12/15 12:37 p		25.6 ML	KPAW3
Batch: 5051047 TC99_ETVDSK_LSC Work Order: M576M1AA Report DB ID: M576M1AB												
Tc-99	-1.62E+00	U	4.0E+00	4.3E+00	9.85E+00 4.73E+00	pCi/L 1.50E+01	100%	-0.16 -0.75	2/28/15 05:24 a		0.1262 L	LSC8

No. of Results: 11 Comments:

TestAmerica Inc MDCjMDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
 rpt\$TLRchBlank U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM II
LCS RESULTS

Lab Name: TestAmerica Inc SDG: W07071
Matrix: WATER Report No.: 65070

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 5051046 C14_LSC Work Order: M576K1AC Report DB ID: M576K1CS													
C-14	1.42E+02		3.6E+00	8.9E+00	3.84E+00	pCi/L	100%	1.43E+02	2.9E+00	99%	3/19/15 10:35 a	0.25	LSC4
							Rec Limits:	70	130	0.0		L	
Batch: 5051041 PUIISO_PLATE_AEA Work Order: M576E2AC Report DB ID: M576E2CS													
P239/40	5.43E+00		8.7E-01	1.2E+00	2.79E-01	pCi/L	100%	4.51E+00	4.5E-02	121%	3/12/15 11:22 a	0.2005	ALP41
							Rec Limits:	70	130	0.2		L	
Batch: 5051040 AMCMISO_EIE_PLT_AEA Work Order: M576D1AC Report DB ID: M576D1CS													
AMERICIUM 241	2.57E+01		1.9E+00	4.4E+00	2.13E-01	pCi/L	107%	2.39E+01	2.4E-01	107%	3/11/15 03:45 p	0.2006	ALP420
							Rec Limits:	70	130	0.1		L	
Batch: 5051048 906.0_H3_LSC Work Order: M576N1AC Report DB ID: M576N1CS													
H-3	2.48E+03		2.0E+02	2.3E+02	2.96E+02	pCi/L	100%	2.66E+03	8.0E+01	93%	3/6/15 03:30 a	0.00501	LSC8
							Rec Limits:	70	130	-0.1		L	
Batch: 5062022 9310_ALPHABETA_GPC Work Order: M592K1AC Report DB ID: M592K1CS													
Alpha	2.19E+01		1.6E+00	5.7E+00	7.13E-01	pCi/L	100%	2.28E+01	2.3E-01	96%	3/5/15 02:40 p	0.2	GPC23C
							Rec Limits:	70	130	0.0		L	
Batch: 5062023 9310_ALPHABETA_GPC Work Order: M592L1AC Report DB ID: M592L1CS													
Beta	2.40E+01		1.9E+00	3.5E+00	1.94E+00	pCi/L	100%	2.28E+01	1.6E-01	105%	3/5/15 03:30 p	0.2	GPC27B
							Rec Limits:	70	130	0.1		L	
Batch: 5051045 1129LL_SEP_LEPS_GS Work Order: M576J1AC Report DB ID: M576J1CS													
I129	1.04E+01		1.2E+00	1.2E+00	2.70E-01	pCi/L	82%	1.05E+01	1.7E-01	99%	3/10/15 10:59 a	3.7365	LEPS\$1
							Rec Limits:	70	130	0.0		L	
Batch: 5051044 SRISO_SEP_PRECIP_GPC Work Order: M576H1AC Report DB ID: M576H1CS													

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

rptSTLRchLcs
V5.3.6.8 A2002

Date: 23-Mar-15

FORM II
LCS RESULTS

Lab Name: TestAmerica Inc SDG: W07071
 Matrix: WATER Report No.: 65070

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
STRONTIUM	6.35E+00		5.8E-01	1.6E+00	5.53E-01	pCi/L	84%	6.84E+00	4.9E-02	93%	2/26/15 07:49 a	1.0008	GPC32C
Rec Limits: 70 130 -0.1													
Batch: 5051049 UTOT_KPA Report DB ID: M576P1CS													
TOTAL-URANIUM	3.11E+01			3.7E+00	7.30E-02	ug/L		3.14E+01	1.7E-01	99%	3/12/15 12:39 p	28.7	KPAW3
Rec Limits: 70 130 0.0													
Batch: 5051049 UTOT_KPA Report DB ID: M576P1DS													
TOTAL-URANIUM	3.61E+00			3.7E-01	8.06E-02	ug/L		3.61E+00	2.0E-02	100%	3/12/15 12:41 p	26.0	KPAW3
Rec Limits: 70 130 0.0													
Batch: 5051047 TC99_ETVDSK_LSC Report DB ID: M576M1CS													
Tc-99	4.50E+02		1.2E+01	1.6E+01	9.56E+00	pCi/L	100%	5.21E+02	5.4E+00	86%	2/28/15 06:26 a	0.1299	LSC8
Rec Limits: 70 130 -0.1													

No. of Results: 11 Comments:

TestAmerica Inc Bias -(Result/Expected)-1 as defined by ANSI N13.30.
 rptSTLRchLcs
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM II
MATRIX SPIKE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Matrix: WATER
 Lot-Sample No.: J5B110406-2, B30F82 Report No.: 65070

Parameter	SpikeResult, Orig Rst	Count Error (2 s)	CSU (2 s)	MDC/MDA	Rpt Unit	Yield	Recovery	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 5051049	Work Order: M551L1AH	Report DB ID: M551L1HW	1.1E+01	8.09E-02	ug/L	Orig Sa DB ID: 9M551L10	102.97%	3.48E+01	3/12/15 11:42 a	25.9	UTOT_KPA
TOTAL-URANIUM	3.59E+01							1.8E-01		ML	KPAW3

Number of Results: 1

Comments:

TestAmerica Inc RER - Replicate Error Ratio = $(S-D)/[\sqrt{(sq(TPUs)+sq(TPUd))}]$ as defined by ICPT BOA.
 rptSTLRchMIs Bias - $(Result/Expected)-1$ as defined by ANSI N13.30.
 V5.3.6.8 A2002

Date: 23-Mar-15

FORM II
MATRIX SPIKE RESULTS

Lab Name: TestAmerica Inc SDG: W07071 Matrix: WATER
 Lot-Sample No.: J5B110413-1, B30707 Report No. : 65070

Parameter	SpikeResult, Orig Rst	Count Error (2 s)	CSU (2 s)	MDC MDA	Rpt Unit	Yield	Recovery	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 5051047	3.42E+03	M552J1AD	9.2E+01	M552J1DW	pCi/L	100%	95.91%	3.57E+03	2/27/15 06:02 p	0.1263	TC99_ETVDSK_LSC
Tc-99	3.95E+02	3.4E+01	9.2E+01	9.92E+00				2.0E+01		L	LSC8

Number of Results: 1

Comments:

TestAmerica Inc RER - Replicate Error Ratio = $(S-D)/[\text{sqrt}(\text{sq}(\text{TPUs})+\text{sq}(\text{TPUd}))]$ as defined by ICPT BOA.
 rptSTLRchMs Bias - (Result/Expected)-1 as defined by ANSI N13.30.
 V5.3.6.8 A2002