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 __38__ *Pages*

Report No.: 68802

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.
W07465	F16-020	B354H6	J6E060418-1	M8LG71AE	9M8LG710	6131045
		B354H6	J6E060418-1	M8LG71AH	9M8LG710	6131047
		B354H6	J6E060418-1	M8LG71AL	9M8LG710	6131048
		B354H6	J6E060418-1	M8LG71AD	9M8LG710	6131049
		B354H6	J6E060418-1	M8LG71AK	9M8LG710	6131050
		B354H6	J6E060418-1	M8LG71AF	9M8LG710	6131051
		B354H6	J6E060418-1	M8LG71AC	9M8LG710	6131052
		B354H6	J6E060418-1	M8LG71AM	9M8LG710	6131053
		B354H6	J6E060418-1	M8LG71AG	9M8LG710	6131054
		B354H6	J6E060418-1	M8LG71AA	9M8LG710	6131055
		B354H6	J6E060418-1	M8LG72AJ	9M8LG720	6160037
		B35531	J6E060418-2	M8LG81AE	9M8LG810	6131045
		B35531	J6E060418-2	M8LG81AH	9M8LG810	6131047
		B35531	J6E060418-2	M8LG81AL	9M8LG810	6131048
		B35531	J6E060418-2	M8LG81AD	9M8LG810	6131049
		B35531	J6E060418-2	M8LG81AK	9M8LG810	6131050
		B35531	J6E060418-2	M8LG83AF	9M8LG830	6131051
		B35531	J6E060418-2	M8LG81AC	9M8LG810	6131052
		B35531	J6E060418-2	M8LG81AM	9M8LG810	6131053
		B35531	J6E060418-2	M8LG81AG	9M8LG810	6131054
		B35531	J6E060418-2	M8LG81AA	9M8LG810	6131055
		B35531	J6E060418-2	M8LG82AJ	9M8LG820	6160037
		B35597	J6E060418-3	M8LG91AE	9M8LG910	6131045
		B35597	J6E060418-3	M8LG91AH	9M8LG910	6131047
		B35597	J6E060418-3	M8LG91AL	9M8LG910	6131048
		B35597	J6E060418-3	M8LG91AD	9M8LG910	6131049

Report No.: 68802

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.
W07465	F16-020	B35597	J6E060418-3	M8LG91AK	9M8LG910	6131050
		B35597	J6E060418-3	M8LG91AF	9M8LG910	6131051
		B35597	J6E060418-3	M8LG91AC	9M8LG910	6131052
		B35597	J6E060418-3	M8LG91AM	9M8LG910	6131053
		B35597	J6E060418-3	M8LG91AG	9M8LG910	6131054
		B35597	J6E060418-3	M8LG91AA	9M8LG910	6131055
		B35597	J6E060418-3	M8LG92AJ	9M8LG920	6160037

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

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

June 22, 2016

Attention: Scot Fitzgerald

SAF Number	:	F16-020
Date SDG Closed	:	May 5, 2016
Number of Samples	:	Three (3)
Sample Type	:	Soil
SDG Number	:	W07465
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

On May 5, 2016, three soil samples were received at TestAmerica (TARL). Upon receipt, the sample was assigned laboratory ID numbers to correspond with the CH2M specific IDs.

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Americium 241 by method RL-ALP-003
Neptunium-237 by method RL-ALP-013
Plutonium-238, -239/240 by method RL-ALP-002
Uranium 234, 235 and 238 by method RL-ALP-015
Gas Proportional Counting
Strontium-90 by method RL-GPC-010

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Iodine-129 by method RL-GAM-002
Liquid Scintillation Counting
Carbon-14 by method RL-LSC-008
Nickel-63 by method RL-LCS-017
Technetium-99 by TEVA method RL-LSC-014
Tritium by method RL-LSC-005

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.

The analytical results are reported on a dry weight basis.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Americium 241 by method RL-ALP-003:
No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Neptunium-237 by method RL-ALP-013:
No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Plutonium-238, -239/240 by method RL-ALP-002:
The blank result for Pu-238 is above the MDC but less than the CRDL. No other analytical or quality issues were noted. Except as noted, the sample results and associated batch QC results are within contractual requirements.

Uranium 234, 235 and 238 by method RL-ALP-015:
No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RL-GPC-010:
No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

CH2M Hill Plateau Remediation Company
June 22, 2016

Gamma Spectroscopy

Gamma Spec by method RL-GAM-001:
No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Iodine-129 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.

Nickel-63 by method RL-LCS-017:
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.

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:

Whitney M. Ritari

Digitally signed by Whitney Ritari
Date: 2016.06.22 13:07:57 -07'00'

Whitney Ritari
Project Manager

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR16-359
REV NUM	0
DATE INITIATED	5/18/2016

SAMPLE EVENT INFORMATION

SAF NUM(S)	F16-020
OPERABLE UNIT(S)	200-DV-1
PROJECT(S)	200-DV-1
SAMPLE EVENT TITLE(S)	200-DV-1 OU Waste Sites
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	3
SAMPLE NUMBERS	B354H6, B35531, B35597
SAMPLE MATRIX	SOIL
COLLECTION DATE	5/4/2016 - 5/5/2016
SDG NUM	W07465, WC1050

ISSUE BACKGROUND

CLASS	Chain of Custody Issue (Field)
TYPE	Broken Chain of Custody
DESCRIPTION	COC F16-020-693 SAMPLE B354H6 NO SAMPLE DEPTH UNITS, COLLECTOR RELINQUISHED SAMPLE 1 DAY AFTER SAMPLE DATE WITHOUT GOING TO STORAGE. COC F16-020-696 SAMPLE B35531 NO SAMPLE DEPTH UNITS COC F16-020-698 SAMPLE B35597 NO SAMPLE DEPTH UNITS, CROSS OUT NOT INITIALED AND DATED

DISPOSITION

DESCRIPTION	DOCUMENT AND CLOSE
JUSTIFICATION	DOCUMENT AND CLOSE SUBMITTED BY: Gayelyn Gibson DATE: 05/09/2016 ACCEPTED BY: Kirsten Killand DATE: 05/18/2016

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

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

Uncertainty Estimation

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

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

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
CSU (#s) ***u_c Combined Standard Uncert.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined standard uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-020-693	PAGE 1 OF 1
COLLECTOR Antonio Jaimes	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8H AIR QUALITY ☐	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9552, Core 4, B34183	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Phase 3 Sampling		SAF NO. F16-020		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 53.7 - 55.7	COA 302632	METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	Company Vehicle AJ 5-04-16	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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. NA

SPECIAL HANDLING AND/OR STORAGE
N/A

PRESERVATION	Cool <=6C	None
HOLDING TIME	30 Days	6 Months
TYPE OF CONTAINER	G/P	G/P
NO. OF CONTAINER(S)	1	1
VOLUME	60mL	500mL
SAMPLE ANALYSIS	7196_CR6: COMMON;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B354H6	SOIL	5-04-16	1630	X	X

J6E060418
W07465
Due 5-20-16
#3000
M8LG7

300-3000 CO

J6E060418

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Antonio Jaimes/	5-5-16 / 1545	Jack J. Bock TRACK	5-5-16 / 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
Sample From HEIS #: B34183 Actual Aliquot Collection Depth: 53.7 - 55.7
(1) GAMMA_GS: COMMON; AMCMISO_EIE_PLATE_AEA: COMMON; PUISO_PLATE_AEA: COMMON {Plutonium-238, Plutonium-239/240}; UISO_PLATE_AEA: COMMON {Uranium-233/234, Uranium-235, Uranium-238}; C14_LSC: COMMON; I129_SEP_LEPS_GS: COMMON; NI63_LSC: COMMON; NP237_LLE_PLATE_AEA: COMMON; SRTOT_SEP_PRECIP_GPC: COMMON {Total beta radiostrontium}; TC99_ETVDSK_LSC: COMMON; TRITIUM_DIST_LSC: COMMON;

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

PRINTED ON 5/4/2016 FSR ID = FSR32128 TRVL NUM = TRVL-16-136 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-020-696	PAGE 1 OF 1
COLLECTOR Antonio Jaimes	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8H AIR QUALITY ☐	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9552, Core 7, B34189	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Phase 3 Sampling		SAF NO. F16-020		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 69.6 - 70.6	COA 302632	METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	Company Vehicle AJ 5-04-16	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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. NA

SPECIAL HANDLING AND/OR STORAGE
N/A

PRESERVATION	Cool <=6C	None
HOLDING TIME	30 Days	6 Months
TYPE OF CONTAINER	G/P	G/P
NO. OF CONTAINER(S)	1	1
VOLUME	60mL	500mL
SAMPLE ANALYSIS	7196_CR6: COMMON;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B35531	SOIL	5-05-16	1130	X	X

J6E060418
W07465
$3000
M8L68

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Antonio Jaimes	5-5-16/1545	Brock J. Brock TALR	5-5-16/1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
Sample From HEIS #: B34189 Actual Aliquot Collection Depth: 69.6 - 70.6
(1) GAMMA_GS: COMMON; AMCMISO_EIE_PLATE_AEA: COMMON; PUISO_PLATE_AEA: COMMON {Plutonium-238, Plutonium-239/240}; UISO_PLATE_AEA: COMMON {Uranium-233/234, Uranium-235, Uranium-238}; C14_LSC: COMMON; I129_SEP_LEPS_GS: COMMON; NI63_LSC: COMMON; NP237_LLE_PLATE_AEA: COMMON; SRTOT_SEP_PRECIP_GPC: COMMON {Total beta radiostrontium}; TC99_ETVDSK_LSC: COMMON; TRITIUM_DIST_LSC: COMMON;

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

PRINTED ON 5/4/2016 FSR ID = FSR32129 TRVL NUM = TRVL-16-136 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-020-698	PAGE 1 OF 1
COLLECTOR Antonio Jaimes	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 8H AIR QUALITY ☐	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9552, Core 10, B34195	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Phase 3 Sampling		SAF NO. F16-020		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. N/A	ACTUAL SAMPLE DEPTH 83.7 - 86.2	COA 302632	METHOD OF SHIPMENT ~~GOVERNMENT VEHICLE~~	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. company vehicle N/A		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*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. NA

SPECIAL HANDLING AND/OR STORAGE
N/A

PRESERVATION	Cool <=6C	None
HOLDING TIME	30 Days	6 Months
TYPE OF CONTAINER	G/P	G/P
NO. OF CONTAINER(S)	1	1
VOLUME	60mL	500mL
SAMPLE ANALYSIS	7196_CR6: COMMON;	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B35597	SOIL	5-05-16	1200	X	X

J6E060418
W07465
3000
M8L69

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Antonio Jaimes	5-5-16 / 1545	Jack J. Todak TAKR	5-5-16 / 1545
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
Sample From HEIS #: B 34195 Actual Aliquot Collection Depth: 83.7-86.2
(1) GAMMA_GS: COMMON; AMCMISO_EIE_PLATE_AEA: COMMON; PUISO_PLATE_AEA: COMMON {Plutonium-238, Plutonium-239/240}; UISO_PLATE_AEA: COMMON {Uranium-233/234, Uranium-235, Uranium-238}; C14_LSC: COMMON; I129_SEP_LEPS_GS: COMMON; NI63_LSC: COMMON; NP237_LLE_PLATE_AEA: COMMON; SRTOT_SEP_PRECIP_GPC: COMMON {Total beta radiostrontium}; TC99_ETVDSK_LSC: COMMON; TRITIUM_DIST_LSC: COMMON;

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

PRINTED ON 5/4/2016 FSR ID = FSR32132 TRVL NUM = TRVL-16-136 A-6003-618 (REV 2)

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Sample Check-in List

Date/Time Received: 5-5-16 / 1545 Container GM Screen Result: (Airlock) 0 cpm Initials [ ]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [ ]

Client: FLH SDG #: W07465 ~~5134816~~ 5-6-16 SAF #: F16-020 NA [ ]

Lot Number: J6E060415; #3000

Chain of Custody # F16-020-693; 696; 698

Shipping Container ID or Air Bill Number : _____ 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: 19.1 °C not on 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): 3
7. Containers received: 3x 60mL AG; 3x 500mL P
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 HNO_3 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: N/A

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

Sample Check-in List completed by Sample Custodian:
Signature: _____ Date: 5-5-16

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

[ ] No action necessary; process as is

Project Manager Stan Cupp Date 5/6/16

Sample Results Summary

TestAmerica Inc TARL

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

Date: 21-Jun-16

Report No. : 68802 **SDG No:** W07465

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6131053 TC99_ETVDSK_LSC									
B354H6									
	M8LG71AM	tc-99	1.15E+00 +- 3.0E-01		pCi/g	100%	5.76E-01	5.00E+00	
B35531									
	M8LG81AM	tc-99	3.02E+00 +- 3.5E-01		pCi/g	100%	5.62E-01	5.00E+00	
B35597									
	M8LG91AM	tc-99	8.73E+01 +- 2.4E+00		pCi/g	100%	5.70E-01	5.00E+00	
B35597 DUP									
	M8LG91AR	tc-99	8.55E+01 +- 2.4E+00		pCi/g	100%	5.85E-01	5.00E+00	2.1
6131051 PUISO_IE_PRECIP_AEA									
B354H6									
	M8LG71AF	PU-238	8.05E-03 +- 3.1E-02	U	pCi/g	94%	7.79E-02	1.00E+00	
		PU239/40	-2.47E-03 +- 3.1E-02	U	pCi/g	94%	6.27E-02	1.00E+00	
B354H6 DUP									
	M8LG71AQ	PU-238	2.33E-02 +- 4.9E-02	U	pCi/g	85%	9.24E-02	1.00E+00	97.3
		PU239/40	3.22E-02 +- 4.9E-02	U	pCi/g	85%	6.63E-02	1.00E+00	233.3
B35531									
	M8LG83AF	PU-238	9.53E-02 +- 9.7E-02		pCi/g	60%	8.05E-02	1.00E+00	
		PU239/40	7.04E-02 +- 8.4E-02	U	pCi/g	60%	8.04E-02	1.00E+00	
B35597									
	M8LG91AF	PU-238	2.91E-02 +- 4.6E-02	U	pCi/g	98%	7.56E-02	1.00E+00	
		PU239/40	3.86E-02 +- 4.6E-02	U	pCi/g	98%	4.84E-02	1.00E+00	
6131045 AMCMISO_EIE_PREC_AEA									
B354H6									
	M8LG71AE	AMERICIUM 241	-7.03E-04 +- 3.5E-02	U	pCi/g	81%	5.94E-02	1.00E+00	
B354H6 DUP									
	M8LG71AN	AMERICIUM 241	1.36E-02 +- 3.0E-02	U	pCi/g	100%	5.41E-02	1.00E+00	221.8
B35531									
	M8LG81AE	AMERICIUM 241	0.00E+00 +- 3.3E-02	U	pCi/g	86%	5.59E-02	1.00E+00	
B35597									
	M8LG91AE	AMERICIUM 241	2.26E-02 +- 3.9E-02	U	pCi/g	100%	6.52E-02	1.00E+00	
6131055 UISO_IE_PLATE_AEA									
B354H6									
	M8LG71AA	U-234	3.97E-01 +- 1.6E-01		pCi/g	100%	4.97E-02	1.00E+00	
		U-235	2.41E-02 +- 3.7E-02	U	pCi/g	100%	4.97E-02	1.00E+00	
		U-238	4.21E-01 +- 1.6E-01		pCi/g	100%	5.40E-02	1.00E+00	
B35531									
	M8LG81AA	U-234	2.13E-01 +- 1.1E-01		pCi/g	98%	4.84E-02	1.00E+00	
		U-235	1.15E-02 +- 2.4E-02	U	pCi/g	98%	4.04E-02	1.00E+00	

TestAmerica Inc

rptTALRchSaSummary2 V5.5.1 A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

Sample Results Summary

TestAmerica Inc TARL

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

Date: 21-Jun-16

Report No. : 68802 **SDG No:** W07465

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6131055 UISO_IE_PLATE_AEA									
B35531									
	M8LG81AA	U-238	1.42E-01 +- 8.6E-02		pCi/g	98%	4.63E-02	1.00E+00	
B35531 DUP									
	M8LG81AU	U-234	3.09E-01 +- 1.4E-01		pCi/g	95%	7.71E-02	1.00E+00	36.8
		U-235	3.66E-02 +- 4.9E-02	U	pCi/g	95%	6.56E-02	1.00E+00	104.6
		U-238	2.52E-01 +- 1.3E-01		pCi/g	95%	8.03E-02	1.00E+00	55.9
B35597									
	M8LG91AA	U-234	2.51E-01 +- 1.4E-01		pCi/g	73%	7.66E-02	1.00E+00	
		U-235	1.16E-02 +- 3.7E-02	U	pCi/g	73%	8.60E-02	1.00E+00	
		U-238	4.28E-01 +- 2.0E-01		pCi/g	73%	9.16E-02	1.00E+00	
6131047 GAMMA_GS									
B354H6									
	M8LG71AH	CO-60	9.24E-03 +- 1.4E-02	U	pCi/g		2.72E-02	1.00E-01	
		CS-137	3.33E-01 +- 5.4E-02		pCi/g		2.67E-02	1.00E-01	
		EU-152	3.55E-03 +- 3.0E-02	U	pCi/g		5.14E-02	1.00E-01	
		EU-154	3.04E-02 +- 5.5E-02	U	pCi/g		9.94E-02	1.00E-01	
		EU-155	1.71E-02 +- 2.4E-02	U	pCi/g		4.24E-02	1.00E-01	
B35531									
	M8LG81AH	CO-60	-8.86E-03 +- 1.5E-02	U	pCi/g		2.61E-02	1.00E-01	
		CS-137	7.94E-01 +- 1.1E-01		pCi/g		2.43E-02	1.00E-01	
		EU-152	-8.36E-04 +- 2.9E-02	U	pCi/g		5.05E-02	1.00E-01	
		EU-154	2.48E-02 +- 4.9E-02	U	pCi/g		8.92E-02	1.00E-01	
		EU-155	-1.48E-03 +- 2.4E-02	U	pCi/g		3.90E-02	1.00E-01	
B35597									
	M8LG91AH	CO-60	4.72E-02 +- 2.4E-02	U	pCi/g		3.76E-02	1.00E-01	
		CS-137	6.32E-01 +- 8.3E-02		pCi/g		2.33E-02	1.00E-01	
		EU-152	-5.08E-03 +- 3.0E-02	U	pCi/g		5.18E-02	1.00E-01	
		EU-154	-2.08E-02 +- 4.3E-02	U	pCi/g		7.36E-02	1.00E-01	
		EU-155	1.69E-02 +- 2.7E-02	U	pCi/g		4.70E-02	1.00E-01	
B35597 DUP									
	M8LG91AN	CO-60	5.87E-02 +- 2.6E-02		pCi/g		2.51E-02	1.00E-01	
		CS-137	6.43E-01 +- 9.2E-02		pCi/g		2.58E-02	1.00E-01	
		EU-152	1.57E-02 +- 3.3E-02	U	pCi/g		5.79E-02	1.00E-01	
		EU-154	5.13E-03 +- 5.0E-02	U	pCi/g		8.81E-02	1.00E-01	
		EU-155	2.55E-02 +- 3.5E-02	U	pCi/g		5.19E-02	1.00E-01	
6131048 I129_SEP_LEPS_GS									
B354H6									
	M8LG71AL	I129	-2.65E-02 +- 4.2E-02	U	pCi/g		6.99E-02	1.00E+00	

TestAmerica Inc

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RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

Sample Results Summary

TestAmerica Inc TARL

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

Date: 21-Jun-16

Report No. : 68802 **SDG No:** W07465

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6131048 I129_SEP_LEPS_GS									
B354H6 DUP									
	M8LG71AP	I129	-2.48E-02 +- 3.6E-02	U	pCi/g		6.04E-02	1.00E+00	-6.3
B35531									
	M8LG81AL	I129	2.53E-02 +- 4.0E-02	U	pCi/g		7.08E-02	1.00E+00	
B35597									
	M8LG91AL	I129	6.71E-02 +- 5.3E-02	U	pCi/g		9.18E-02	1.00E+00	
6131050 NP237_LLE_PLATE_AEA									
B354H6									
	M8LG71AK	NP-237	-1.23E-03 +- 3.1E-02	U	pCi/g	79%	5.63E-02	1.00E+00	
B35531									
	M8LG81AK	NP-237	1.75E-02 +- 3.5E-02	U	pCi/g	88%	5.93E-02	1.00E+00	
B35597									
	M8LG91AK	NP-237	-7.05E-04 +- 3.5E-02	U	pCi/g	84%	5.95E-02	1.00E+00	
B35597 DUP									
	M8LG91AP	NP-237	1.02E-02 +- 2.6E-02	U	pCi/g	95%	5.36E-02	1.00E+00	229.8
6131052 SRTOT_SEP_PRECIP_GPC									
B354H6									
	M8LG71AC	STRONTIUM	4.01E-02 +- 7.8E-02	U	pCi/g	84%	1.29E-01	2.00E+00	
B35531									
	M8LG81AC	STRONTIUM	-8.41E-02 +- 8.2E-02	U	pCi/g	83%	1.44E-01	2.00E+00	
B35531 DUP									
	M8LG81AT	STRONTIUM	4.17E-02 +- 8.5E-02	U	pCi/g	78%	1.41E-01	2.00E+00	-592.7
B35597									
	M8LG91AC	STRONTIUM	6.14E-02 +- 1.2E-01	U	pCi/g	78%	2.03E-01	2.00E+00	
6131049 NI63_LSC									
B354H6									
	M8LG71AD	Ni-63	6.22E+00 +- 3.3E+00		pCi/g	92%	5.07E+00	3.00E+01	
B35531									
	M8LG81AD	Ni-63	7.77E+00 +- 3.5E+00		pCi/g	96%	5.17E+00	1.00E+01	
B35531 DUP									
	M8LG81AR	Ni-63	7.99E+00 +- 3.5E+00		pCi/g	94%	5.16E+00	1.00E+01	2.7
B35597									
	M8LG91AD	Ni-63	9.36E+00 +- 3.4E+00		pCi/g	96%	4.92E+00	1.00E+01	
6131054 TRITIUM_DIST_LSC									
B354H6									
	M8LG71AG	H-3	3.40E-01 +- 3.0E-01	U	pCi/g	100%	6.35E-01	3.00E+01	
B35531									
	M8LG81AG	H-3	3.68E+00 +- 5.2E-01		pCi/g	100%	6.74E-01	3.00E+01	
B35531 DUP									

TestAmerica Inc

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RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

Sample Results Summary

TestAmerica Inc TARL

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

Date: 21-Jun-16

Report No. : 68802

SDG No: W07465

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6131054 TRITIUM_DIST_LSC									
B35531 DUP									
	M8LG81AV	H-3	3.11E+00 +- 4.8E-01		pCi/g	100%	6.63E-01	3.00E+01	17.0
B35597									
	M8LG91AG	H-3	1.23E+01 +- 9.0E-01		pCi/g	100%	6.62E-01	3.00E+01	
6160037 C14_CHEM_LSC									
B354H6									
	M8LG72AJ	C-14	9.45E+00 +- 6.5E-01		pCi/g	100%	1.84E-01	5.00E+00	
B35531									
	M8LG82AJ	C-14	1.61E+00 +- 1.6E-01		pCi/g	100%	1.78E-01	5.00E+00	
B35531 DUP									
	M8LG82AP	C-14	1.38E+00 +- 1.5E-01		pCi/g	100%	1.82E-01	5.00E+00	15.5
B35597									
	M8LG92AJ	C-14	1.28E+01 +- 8.5E-01		pCi/g	100%	1.84E-01	5.00E+00	

No. of Results: 72

QC Results Summary
TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Date: 21-Jun-16

Report No. : 68802 **SDG No.:** W07465

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
TC99_ETVDSK_LSC								
6131053 MATRIX SPIKE, B35597								
M8LG91AQ	tc-99	1.80E+02 +- 7.0E+00		pCi/g	100%	80%	-0.2	5.77E-01
6131053 BLANK QC,								
M8LRP1AA	tc-99	3.03E-01 +- 2.7E-01	U	pCi/g	100%			5.70E-01
PUISO_IE_PRECIP_AEA								
6131051 BLANK QC,								
M8LRM3AA	PU-238	0.00E+00 +- 9.0E-02	U	pCi/g	30%			1.53E-01
	PU239/40	-3.61E-03 +- 9.0E-02	U	pCi/g	30%			1.65E-01
6131051 LCS,								
M8LRM3AC	PU239/40	5.07E+00 +- 1.2E+00		pCi/g	72%	111%	0.1	7.45E-02
AMCMISO_EIE_PREC_AEA								
6131045 BLANK QC,								
M8LRF1AA	AMERICIUM 241	3.39E-02 +- 5.5E-02	U	pCi/g	74%			8.39E-02
6131045 LCS,								
M8LRF1AC	AMERICIUM 241	4.15E+00 +- 8.9E-01		pCi/g	105%	88%	-0.1	6.72E-02
UISO_IE_PLATE_AEA								
6131055 BLANK QC,								
M8LRR1AA	U-234	-2.06E-03 +- 2.6E-02	U	pCi/g	103%			5.06E-02
	U-235	-2.06E-03 +- 2.6E-02	U	pCi/g	103%			5.06E-02
	U-238	-6.19E-03 +- 2.6E-02	U	pCi/g	103%			6.28E-02
6131055 LCS,								
M8LRR1AC	U-234	2.71E+00 +- 6.2E-01		pCi/g	91%	84%	-0.2	5.61E-02
	U-238	3.00E+00 +- 6.7E-01		pCi/g	91%	89%	-0.1	5.07E-02
GAMMA_GS								
6131047 BLANK QC,								
M8LRH1AA	CO-60	-7.63E-03 +- 1.1E-02	U	pCi/g				1.88E-02
	CS-137	1.03E-02 +- 1.2E-02	U	pCi/g				2.19E-02
	EU-152	-6.65E-02 +- 3.9E-02	U	pCi/g				5.89E-02
	EU-154	-3.33E-02 +- 3.6E-02	U	pCi/g				5.69E-02
	EU-155	-3.32E-02 +- 3.3E-02	U	pCi/g				5.28E-02
6131047 LCS,								
M8LRH1AC	CS-137	8.83E-01 +- 1.1E-01		pCi/g		92%	-0.1	2.52E-02
	RA-226	1.00E+00 +- 1.3E-01		pCi/g		88%	-0.1	3.66E-02
	RA-228	5.35E-01 +- 1.1E-01		pCi/g		106%	0.1	6.98E-02
I129_SEP_LEPS_GS								
6131048 BLANK QC,								
M8LRJ1AA	I129	1.85E-03 +- 3.8E-02	U	pCi/g				7.04E-02
6131048 LCS,								
M8LRJ1AC	I129	2.16E+01 +- 2.7E+00		pCi/g		109%	0.1	1.77E-01
NP237_LLE_PLATE_AEA								
6131050 BLANK QC,								

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

QC Results Summary
TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Date: 21-Jun-16

Report No. : 68802 **SDG No.:** W07465

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
M8LRL1AA	NP-237	-1.20E-03 +- 3.0E-02	U	pCi/g	83%			5.47E-02
6131050 LCS,								
M8LRL1AC	NP-237	1.46E+00 +- 4.9E-01		pCi/g	81%	83%	-0.2	4.94E-02
SRTOT_SEP_PRECIP_GPC								
6131052 BLANK QC,								
M8LRN1AA	STRONTIUM	1.63E-01 +- 1.3E-01	U	pCi/g	74%			1.95E-01
6131052 LCS,								
M8LRN2AC	STRONTIUM	3.82E+00 +- 9.0E-01		pCi/g	80%	114%	0.1	1.34E-01
NI63_LSC								
6131049 BLANK QC,								
M8LRK1AA	Ni-63	1.95E+00 +- 3.1E+00	U	pCi/g	92%			5.12E+00
6131049 LCS,								
M8LRK1AC	Ni-63	2.17E+02 +- 1.8E+01		pCi/g	91%	87%	-0.1	5.18E+00
TRITIUM_DIST_LSC								
6131054 MATRIX SPIKE, B354H6								
M8LG71AR	H-3	8.38E+00 +- 8.2E-01		pCi/g	100%	88%	-0.1	6.90E-01
6131054 BLANK QC,								
M8LRQ1AA	H-3	-4.80E-02 +- 1.3E-01	U	pCi/g	100%			3.07E-01
6131054 LCS,								
M8LRQ1AC	H-3	1.20E+00 +- 2.0E-01		pCi/g	100%	104%	0.0	2.87E-01
C14_CHEM_LSC								
6160037 MATRIX SPIKE, B35531								
M8LG82AN	C-14	7.16E+00 +- 6.3E-01		pCi/g	100%	99%	0.0	1.95E-01
6160037 BLANK QC,								
M8LRG2AA	C-14	-3.95E-01 +- 9.8E-02	U	pCi/g	100%			1.99E-01
6160037 LCS,								
M8LRG2AC	C-14	6.48E+00 +- 4.5E-01		pCi/g	100%	98%	0.0	1.79E-01

No. of Results: 34

TestAmerica Inc
rptSTLRchQcSummary V5.5.1 A2002

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

FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/4/2016 4:30:00 PM
Lot-Sample No.:	**J6E060418-1**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B354H6**	**COC No. :**	F16-020-693	**Matrix:**	SOIL

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: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LG71AE		**Report DB ID:**	9M8LG710				
AMERICIUM 241	**-7.03E-04**	U	3.5E-02	3.5E-02	5.94E-02	pCi/g	81%	*-0.01*	6/3/16 05:08 p		0.99	ALP441
						1.26E-02	1.00E+00	*-0.04*			g	
Batch: 6131047	GAMMA_GS			**Work Order:**	M8LG71AH		**Report DB ID:**	9M8LG710				
CO-60	**9.24E-03**	U	1.4E-02	1.4E-02	2.72E-02	pCi/g		*0.34*	5/24/16 02:23 p		361.4	GER16$1
							1.00E-01	*(1.3)*			g	
CS-137	**3.33E-01**		5.4E-02	5.4E-02	2.67E-02	pCi/g		*(12.5)*	5/24/16 02:23 p		361.4	GER16$1
						1.33E-02	1.00E-01	*(12.3)*			g	
EU-152	**3.55E-03**	U	3.0E-02	3.0E-02	5.14E-02	pCi/g		*0.07*	5/24/16 02:23 p		361.4	GER16$1
							1.00E-01	*0.24*			g	
EU-154	**3.04E-02**	U	5.5E-02	5.5E-02	9.94E-02	pCi/g		*0.31*	5/24/16 02:23 p		361.4	GER16$1
							1.00E-01	*(1.1)*			g	
EU-155	**1.71E-02**	U	2.4E-02	2.4E-02	4.24E-02	pCi/g		*0.4*	5/24/16 02:23 p		361.4	GER16$1
							1.00E-01	*(1.4)*			g	
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LG71AL		**Report DB ID:**	9M8LG710				
I129	**-2.65E-02**	U	4.2E-02	4.2E-02	6.99E-02	pCi/g		*-0.38*	5/18/16 06:19 p		90.8	LEP4$1
						3.50E-02	1.00E+00	*-(1.3)*			g	
Batch: 6131049	NI63_LSC			**Work Order:**	M8LG71AD		**Report DB ID:**	9M8LG710				
Ni-63	**6.22E+00**		2.5E+00	3.3E+00	5.07E+00	pCi/g	92%	*(1.2)*	6/10/16 09:39 p		0.52	LSC10
						2.44E+00	3.00E+01	*(3.8)*			g	
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LG71AK		**Report DB ID:**	9M8LG710				

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V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/4/2016 4:30:00 PM
Lot-Sample No.:	**J6E060418-1**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B354H6**	**COC No. :**	F16-020-693	**Matrix:**	SOIL

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
NP-237	**-1.23E-03**	U	3.1E-02	3.1E-02	5.63E-02	pCi/g	79%	*-0.02*	6/10/16 01:02 a		1.03	ALP111
						1.29E-02	1.00E+00	*-0.08*			g	
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LG71AF		**Report DB ID:**	9M8LG710				
PU-238	**8.05E-03**	U	3.1E-02	3.1E-02	7.79E-02	pCi/g	94%	*0.1*	6/3/16 05:12 p		0.99	ALP429
						2.32E-02	1.00E+00	*0.51*			g	
PU239/40	**-2.47E-03**	U	3.1E-02	3.1E-02	6.27E-02	pCi/g	94%	*-0.04*	6/3/16 05:12 p		0.99	ALP429
						1.58E-02	1.00E+00	*-0.16*			g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LG71AC		**Report DB ID:**	9M8LG710				
STRONTIUM	**4.01E-02**	U	7.7E-02	7.8E-02	1.29E-01	pCi/g	84%	*0.31*	6/10/16 03:26 p		2.0	GPC31B
						6.17E-02	2.00E+00	*(1.)*			g	
Batch: 6131053	TC99_ETVDSK_LSC			**Work Order:**	M8LG71AM		**Report DB ID:**	9M8LG710				
tc-99	**1.15E+00**		2.8E-01	3.0E-01	5.76E-01	pCi/g	100%	*(2.)*	6/2/16 07:38 p		2.01	LSC10
						2.76E-01	5.00E+00	*(7.6)*			g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LG71AG		**Report DB ID:**	9M8LG710				
H-3	**3.40E-01**	U	2.8E-01	3.0E-01	6.35E-01	pCi/g	100%	*0.54*	6/9/16 03:43 p		11.0	LSC9
						2.90E-01	3.00E+01	*(2.2)*			g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LG71AA		**Report DB ID:**	9M8LG710				
U-234	**3.97E-01**		1.4E-01	1.6E-01	4.97E-02	pCi/g	100%	*(8.)*	6/9/16 09:20 p		1.01	ALP211
						1.21E-02	1.00E+00	*(5.)*			g	
U-235	**2.41E-02**	U	3.6E-02	3.7E-02	4.97E-02	pCi/g	100%	*0.49*	6/9/16 09:20 p		1.01	ALP211
						1.21E-02	1.00E+00	*(1.3)*			g	

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MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/4/2016 4:30:00 PM
Lot-Sample No.:	**J6E060418-1**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B354H6**	**COC No. :**	F16-020-693	**Matrix:**	SOIL

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
U-238	**4.21E-01**		1.5E-01	1.6E-01	5.40E-02	pCi/g	100%	*(7.8)*	6/9/16 09:20 p		1.01	ALP211
						1.41E-02	1.00E+00	*(5.1)*			g	
								Ratio U-234/238 = 0.9				
Batch: 6160037	C14_CHEM_LSC			**Work Order:**	M8LG72AJ		**Report DB ID:**	9M8LG720				
C-14	**9.45E+00**		1.9E-01	6.5E-01	1.84E-01	pCi/g	100%	*(51.2)*	6/9/16 02:21 a		5.2	LSC9
						9.00E-02	5.00E+00	*(29.3)*			g	

No. of Results: 18 **Comments:**

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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc
Lot-Sample No.: J6E060418-2
Client Sample ID: B35531

SDG: W07465
Report No. : 68802
COC No. : F16-020-696

Collection Date: 5/5/2016 11:30:00 AM
Received Date: 5/5/2016 3:45:00 PM
Matrix: SOIL

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: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LG81AE		**Report DB ID:**	9M8LG810				
AMERICIUM 241	**0.00E+00**	U	0.0E+00	3.3E-02	5.59E-02	pCi/g	86%	*0.*	6/3/16 05:09 p		0.99	ALP445
						1.19E-02	1.00E+00	*0.*			g	
Batch: 6131047	GAMMA_GS			**Work Order:**	M8LG81AH		**Report DB ID:**	9M8LG810				
CO-60	**-8.86E-03**	U	1.5E-02	1.5E-02	2.61E-02	pCi/g		*-0.34*	5/24/16 02:24 p		349.0	GER17$1
							1.00E-01	*-(1.1)*			g	
CS-137	**7.94E-01**		1.1E-01	1.1E-01	2.43E-02	pCi/g		*(32.6)*	5/24/16 02:24 p		349.0	GER17$1
						1.22E-02	1.00E-01	*(14.6)*			g	
EU-152	**-8.36E-04**	U	2.9E-02	2.9E-02	5.05E-02	pCi/g		*-0.02*	5/24/16 02:24 p		349.0	GER17$1
							1.00E-01	*-0.06*			g	
EU-154	**2.48E-02**	U	4.9E-02	4.9E-02	8.92E-02	pCi/g		*0.28*	5/24/16 02:24 p		349.0	GER17$1
							1.00E-01	*(1.)*			g	
EU-155	**-1.48E-03**	U	2.4E-02	2.4E-02	3.90E-02	pCi/g		*-0.04*	5/24/16 02:24 p		349.0	GER17$1
							1.00E-01	*-0.12*			g	
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LG81AL		**Report DB ID:**	9M8LG810				
I129	**2.53E-02**	U	4.0E-02	4.0E-02	7.08E-02	pCi/g		*0.36*	5/18/16 06:21 p		87.7	LEP5$1
						3.55E-02	1.00E+00	*(1.3)*			g	
Batch: 6131049	NI63_LSC			**Work Order:**	M8LG81AD		**Report DB ID:**	9M8LG810				
Ni-63	**7.77E+00**		2.6E+00	3.5E+00	5.17E+00	pCi/g	96%	*(1.5)*	6/10/16 10:01 p		0.49	LSC10
						2.49E+00	1.00E+01	*(4.5)*			g	
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LG81AK		**Report DB ID:**	9M8LG810				

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V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 11:30:00 AM
Lot-Sample No.:	**J6E060418-2**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35531**	**COC No. :**	F16-020-696	**Matrix:**	SOIL

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
NP-237	**1.75E-02**	U	3.5E-02	3.5E-02	5.93E-02	pCi/g	88%	*0.3*	6/10/16 01:03 a		1.03	ALP112
						1.26E-02	1.00E+00	*0.99*			g	
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LG83AF		**Report DB ID:**	9M8LG830				
PU-238	**9.53E-02**		9.5E-02	9.7E-02	8.05E-02	pCi/g	60%	*(1.2)*	6/14/16 06:17 p		0.99	ALP445
						1.71E-02	1.00E+00	*(2.)*			g	
PU239/40	**7.04E-02**	U	8.2E-02	8.4E-02	8.04E-02	pCi/g	60%	*0.88*	6/14/16 06:17 p		0.99	ALP445
						1.70E-02	1.00E+00	*(1.7)*			g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LG81AC		**Report DB ID:**	9M8LG810				
STRONTIUM	**-8.41E-02**	U	7.9E-02	8.2E-02	1.44E-01	pCi/g	83%	*-0.58*	6/10/16 03:26 p		1.98	GPC31C
						6.90E-02	2.00E+00	*-(2.1)*			g	
Batch: 6131053	TC99_ETVDSK_LSC			**Work Order:**	M8LG81AM		**Report DB ID:**	9M8LG810				
tc-99	**3.02E+00**		3.3E-01	3.5E-01	5.62E-01	pCi/g	100%	*(5.4)*	6/2/16 08:43 p		2.06	LSC10
						2.69E-01	5.00E+00	*(17.)*			g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LG81AG		**Report DB ID:**	9M8LG810				
H-3	**3.68E+00**		4.8E-01	5.2E-01	6.74E-01	pCi/g	100%	*(5.5)*	6/9/16 04:26 p		10.3	LSC9
						3.08E-01	3.00E+01	*(14.3)*			g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LG81AA		**Report DB ID:**	9M8LG810				
U-234	**2.13E-01**		1.0E-01	1.1E-01	4.84E-02	pCi/g	98%	*(4.4)*	6/9/16 09:21 p		1.13	ALP212
						1.22E-02	1.00E+00	*(3.9)*			g	
U-235	**1.15E-02**	U	2.4E-02	2.4E-02	4.04E-02	pCi/g	98%	*0.28*	6/9/16 09:21 p		1.13	ALP212
						8.56E-03	1.00E+00	*0.96*			g	

TestAmerica Inc
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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 11:30:00 AM
Lot-Sample No.:	**J6E060418-2**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35531**	**COC No. :**	F16-020-696	**Matrix:**	SOIL

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
U-238	**1.42E-01**		8.3E-02	8.6E-02	4.63E-02	pCi/g	98%	*(3.1)*	6/9/16 09:21 p		1.13	ALP212
						1.12E-02	1.00E+00	*(3.3)*			g	
								Ratio U-234/238 = 1.5				
Batch: 6160037	C14_CHEM_LSC			**Work Order:**	M8LG82AJ		**Report DB ID:**	9M8LG820				
C-14	**1.61E+00**		1.0E-01	1.6E-01	1.78E-01	pCi/g	100%	*(9.1)*	6/9/16 04:24 a		5.4	LSC9
						8.67E-02	5.00E+00	*(19.6)*			g	

No. of Results: 18 **Comments:**

TestAmerica Inc
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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 12:00:00 PM
Lot-Sample No.:	**J6E060418-3**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35597**	**COC No. :**	F16-020-698	**Matrix:**	SOIL

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: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LG91AE		**Report DB ID:**	9M8LG910				
AMERICIUM 241	**2.26E-02**	U	3.9E-02	3.9E-02	6.52E-02	pCi/g	100%	*0.35*	6/3/16 05:09 p		1.05	ALP436
						1.86E-02	1.00E+00	*(1.1)*			g	
Batch: 6131047	GAMMA_GS			**Work Order:**	M8LG91AH		**Report DB ID:**	9M8LG910				
CO-60	**4.72E-02**	U	2.4E-02	2.4E-02	3.76E-02	pCi/g		*(1.3)*	5/24/16 02:26 p		347.4	GER18$1
							1.00E-01	*(3.9)*			g	
CS-137	**6.32E-01**		8.3E-02	8.3E-02	2.33E-02	pCi/g		*(27.2)*	5/24/16 02:26 p		347.4	GER18$1
						1.16E-02	1.00E-01	*(15.3)*			g	
EU-152	**-5.08E-03**	U	3.0E-02	3.0E-02	5.18E-02	pCi/g		*-0.1*	5/24/16 02:26 p		347.4	GER18$1
							1.00E-01	*-0.34*			g	
EU-154	**-2.08E-02**	U	4.3E-02	4.3E-02	7.36E-02	pCi/g		*-0.28*	5/24/16 02:26 p		347.4	GER18$1
							1.00E-01	*-0.97*			g	
EU-155	**1.69E-02**	U	2.7E-02	2.7E-02	4.70E-02	pCi/g		*0.36*	5/24/16 02:26 p		347.4	GER18$1
							1.00E-01	*(1.3)*			g	
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LG91AL		**Report DB ID:**	9M8LG910				
I129	**6.71E-02**	U	5.3E-02	5.3E-02	9.18E-02	pCi/g		*0.73*	5/18/16 11:05 p		76.2	LEP4$1
						4.60E-02	1.00E+00	*(2.5)*			g	
Batch: 6131049	NI63_LSC			**Work Order:**	M8LG91AD		**Report DB ID:**	9M8LG910				
Ni-63	**9.36E+00**		2.6E+00	3.4E+00	4.92E+00	pCi/g	96%	*(1.9)*	6/10/16 10:44 p		0.51	LSC10
						2.37E+00	1.00E+01	*(5.5)*			g	
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LG91AK		**Report DB ID:**	9M8LG910				

TestAmerica Inc
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V5.5.1 A2002

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FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 12:00:00 PM
Lot-Sample No.:	**J6E060418-3**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35597**	**COC No. :**	F16-020-698	**Matrix:**	SOIL

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
NP-237	**-7.05E-04**	U	3.5E-02	3.5E-02	5.95E-02	pCi/g	84%	*-0.01*	6/10/16 01:03 a		1.03	ALP113
						1.26E-02	1.00E+00	*-0.04*			g	
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LG91AF		**Report DB ID:**	9M8LG910				
PU-238	**2.91E-02**	U	4.6E-02	4.6E-02	7.56E-02	pCi/g	98%	*0.39*	6/3/16 05:14 p		1.05	ALP432
						2.43E-02	1.00E+00	*(1.3)*			g	
PU239/40	**3.86E-02**	U	4.6E-02	4.6E-02	4.84E-02	pCi/g	98%	*0.8*	6/3/16 05:14 p		1.05	ALP432
						1.11E-02	1.00E+00	*(1.7)*			g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LG91AC		**Report DB ID:**	9M8LG910				
STRONTIUM	**6.14E-02**	U	1.2E-01	1.2E-01	2.03E-01	pCi/g	78%	*0.3*	6/10/16 02:36 p		1.99	GPC32A
						9.50E-02	2.00E+00	*(1.)*			g	
Batch: 6131053	TC99_ETVDSK_LSC			**Work Order:**	M8LG91AM		**Report DB ID:**	9M8LG910				
tc-99	**8.73E+01**		1.3E+00	2.4E+00	5.70E-01	pCi/g	100%	*(153.)*	6/2/16 09:48 p		2.04	LSC10
						2.73E-01	5.00E+00	*(73.3)*			g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LG91AG		**Report DB ID:**	9M8LG910				
H-3	**1.23E+01**		7.6E-01	9.0E-01	6.62E-01	pCi/g	100%	*(18.5)*	6/9/16 05:10 p		10.5	LSC9
						3.03E-01	3.00E+01	*(27.3)*			g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LG91AA		**Report DB ID:**	9M8LG910				
U-234	**2.51E-01**		1.4E-01	1.4E-01	7.66E-02	pCi/g	73%	*(3.3)*	6/9/16 09:22 p		1.0	ALP216
						2.00E-02	1.00E+00	*(3.5)*			g	
U-235	**1.16E-02**	U	3.7E-02	3.7E-02	8.60E-02	pCi/g	73%	*0.14*	6/9/16 09:22 p		1.0	ALP216
						2.45E-02	1.00E+00	*0.63*			g	

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

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

FORM I

SAMPLE RESULTS

Date: 21-Jun-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 12:00:00 PM
Lot-Sample No.:	**J6E060418-3**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35597**	**COC No. :**	F16-020-698	**Matrix:**	SOIL

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
U-238	**4.28E-01**		1.8E-01	2.0E-01	9.16E-02	pCi/g	73%	*(4.7)*	6/9/16 09:22 p		1.0	ALP216
						2.73E-02	1.00E+00	*(4.4)*			g	
								Ratio U-234/238 = 0.6				
Batch: 6160037	C14_CHEM_LSC			**Work Order:**	M8LG92AJ		**Report DB ID:**	9M8LG920				
C-14	**1.28E+01**		2.2E-01	8.5E-01	1.84E-01	pCi/g	100%	*(69.6)*	6/9/16 10:30 a		5.3	LSC9
						8.98E-02	5.00E+00	*(30.)*			g	

No. of Results: 18 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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: 21-Jun-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/4/2016 4:30:00 PM
Lot-Sample No.:	**J6E060418-1**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B354H6 DUP**	**COC No. :**	F16-020-693	**Matrix:**	SOIL

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: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LG71AN	**Report DB ID:**	M8LG71NR		**Orig Sa DB ID:** 9M8LG710			
AMERICIUM 241	1.36E-02	U	3.0E-02	3.0E-02	5.41E-02	pCi/g	100%	0.25	6/3/16 05:08 p		0.98	ALP442
	-7.03E-04	U	**RPD**	**221.8**		1.00E+00		0.92			g	
									Alpha Spec Result Sum = 1.4E-02			
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LG71AP	**Report DB ID:**	M8LG71PR		**Orig Sa DB ID:** 9M8LG710			
I129	-2.48E-02	U	3.6E-02	3.6E-02	6.04E-02	pCi/g		-0.41	5/18/16 11:04 p		90.8	LEP5$1
	-2.65E-02	U	**RPD**	**-6.3**		1.00E+00		-(1.4)			g	
									Alpha Spec Result Sum = 1.4E-02			
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LG71AQ	**Report DB ID:**	M8LG71QR		**Orig Sa DB ID:** 9M8LG710			
PU-238	2.33E-02	U	4.9E-02	4.9E-02	9.24E-02	pCi/g	85%	0.25	6/3/16 05:12 p		0.98	ALP430
	8.05E-03	U	**RPD**	**97.3**		1.00E+00		0.95			g	
PU239/40	3.22E-02	U	4.9E-02	4.9E-02	6.63E-02	pCi/g	85%	0.49	6/3/16 05:12 p		0.98	ALP430
	-2.47E-03	U	**RPD**	**233.3**		1.00E+00		(1.3)			g	
									Alpha Spec Result Sum = 6.9E-02			

No. of Results: 4 **Comments:**

TestAmerica Inc
rptSTLRchDupV5.5.1 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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: 21-Jun-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 11:30:00 AM
Lot-Sample No.:	**J6E060418-2**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35531 DUP**	**COC No. :**	F16-020-696	**Matrix:**	SOIL

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: 6131049	NI63_LSC			**Work Order:**	M8LG81AR	**Report DB ID:**	M8LG81RR		**Orig Sa DB ID:** 9M8LG810			
Ni-63	7.99E+00		2.6E+00	3.5E+00	5.16E+00	pCi/g	94%	(1.5)	6/10/16 10:22 p		0.5	LSC10
	7.77E+00		**RPD**	**2.7**		1.00E+01		(4.6)			g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LG81AT	**Report DB ID:**	M8LG81TR		**Orig Sa DB ID:** 9M8LG810			
STRONTIUM	4.17E-02	U	8.4E-02	8.5E-02	1.41E-01	pCi/g	78%	0.3	6/10/16 03:26 p		1.99	GPC31D
	-8.41E-02	U	**RPD**	**-592.7**		2.00E+00		0.98			g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LG81AV	**Report DB ID:**	M8LG81VR		**Orig Sa DB ID:** 9M8LG810			
H-3	3.11E+00		4.5E-01	4.8E-01	6.63E-01	pCi/g	100%	(4.7)	6/9/16 04:48 p		10.5	LSC9
	3.68E+00		**RPD**	**17.0**		3.00E+01		(12.9)			g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LG81AU	**Report DB ID:**	M8LG81UR		**Orig Sa DB ID:** 9M8LG810			
U-234	3.09E-01		1.3E-01	1.4E-01	7.71E-02	pCi/g	95%	(4.)	6/9/16 09:21 p		0.98	ALP215
	2.13E-01		**RPD**	**36.8**		1.00E+00		(4.3)			g	
U-235	3.66E-02	U	4.8E-02	4.9E-02	6.56E-02	pCi/g	95%	0.56	6/9/16 09:21 p		0.98	ALP215
	1.15E-02	U	**RPD**	**104.6**		1.00E+00		(1.5)			g	
U-238	2.52E-01		1.2E-01	1.3E-01	8.03E-02	pCi/g	95%	(3.1)	6/9/16 09:21 p		0.98	ALP215
	1.42E-01		**RPD**	**55.9**		1.00E+00		(3.9)			g	
						Ratio U-234/238 = 1.2			***Alpha Spec Result Sum = 6.0E-01***			
Batch: 6160037	C14_CHEM_LSC			**Work Order:**	M8LG82AP	**Report DB ID:**	M8LG82PR		**Orig Sa DB ID:** 9M8LG820			
C-14	1.38E+00		1.0E-01	1.5E-01	1.82E-01	pCi/g	100%	(7.6)	6/9/16 08:28 a		5.4	LSC9
	1.61E+00		**RPD**	**15.5**		5.00E+00		(18.)			g	

TestAmerica Inc **RPD - Relative Percent Difference.**

rptSTLRchDupV5.5.1 A2002 **MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.**

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: 21-Jun-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 11:30:00 AM
Lot-Sample No.:	**J6E060418-2**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35531 DUP**	**COC No. :**	F16-020-696	**Matrix:**	SOIL

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

No. of Results: 7 **Comments:**

TestAmerica Inc **RPD** - Relative Percent Difference.

rptSTLRchDupV5.5.1 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 21-Jun-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07465	**Collection Date:**	5/5/2016 12:00:00 PM
Lot-Sample No.:	**J6E060418-3**	**Report No. :**	68802	**Received Date:**	5/5/2016 3:45:00 PM
Client Sample ID:	**B35597 DUP**	**COC No. :**	F16-020-698	**Matrix:**	SOIL

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: 6131047	GAMMA_GS			**Work Order:**	M8LG91AN	**Report DB ID:**		M8LG91NR	**Orig Sa DB ID:**			
CO-60	5.87E-02		2.6E-02	2.6E-02	2.51E-02	pCi/g		(2.3)	5/25/16 08:27 a		347.4	GER19$1
			RPD			1.00E-01		(4.5)			g	
CS-137	6.43E-01		9.2E-02	9.2E-02	2.58E-02	pCi/g		(24.9)	5/25/16 08:27 a		347.4	GER19$1
			RPD			1.00E-01		(13.9)			g	
EU-152	1.57E-02	U	3.3E-02	3.3E-02	5.79E-02	pCi/g		0.27	5/25/16 08:27 a		347.4	GER19$1
			RPD			1.00E-01		0.94			g	
EU-154	5.13E-03	U	5.0E-02	5.0E-02	8.81E-02	pCi/g		0.06	5/25/16 08:27 a		347.4	GER19$1
			RPD			1.00E-01		0.2			g	
EU-155	2.55E-02	U	3.5E-02	3.5E-02	5.19E-02	pCi/g		0.49	5/25/16 08:27 a		347.4	GER19$1
			RPD			1.00E-01		(1.5)			g	
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LG91AP	**Report DB ID:**		M8LG91PR	**Orig Sa DB ID:** 9M8LG910			
NP-237	1.02E-02	U	2.6E-02	2.6E-02	5.36E-02	pCi/g	95%	0.19	6/10/16 01:04 a		1.02	ALP114
	-7.05E-04	U	**RPD**	**229.8**		1.00E+00		0.79			g	
									Alpha Spec Result Sum = 1.0E-02			
Batch: 6131053	TC99_ETVDSK_LSC			**Work Order:**	M8LG91AR	**Report DB ID:**		M8LG91RR	**Orig Sa DB ID:** 9M8LG910			
tc-99	8.55E+01		1.3E+00	2.4E+00	5.85E-01	pCi/g	100%	(146.)	6/2/16 11:57 p		1.99	LSC10
	8.73E+01		**RPD**	**2.1**		5.00E+00		(72.6)			g	
									Alpha Spec Result Sum = 1.0E-02			

No. of Results: 7 **Comments:**

TestAmerica Inc **RPD - Relative Percent Difference.**

rptSTLRchDupV5.5.1 A2002 **MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.**

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: 21-Jun-16

Lab Name: TestAmerica Inc **SDG:** W07465

Matrix: SOIL **Report No. :** 68802

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
Batch: 6131053	TC99_ETVDSK_LSC			**Work Order:**	M8LRP1AA		**Report DB ID:**	M8LRP1AB				
tc-99	3.03E-01	U	2.4E-01	2.7E-01	5.70E-01	pCi/g	100%	0.53	6/3/16 01:02 a		2.03	LSC10
					2.73E-01	5.00E+00		(2.2)			g	
Batch: 6160037	C14_CHEM_LSC			**Work Order:**	M8LRG2AA		**Report DB ID:**	M8LRG2AB				
C-14	-3.95E-01	U	7.5E-02	9.8E-02	1.99E-01	pCi/g	100%	-(2.)	6/9/16 12:32 p		5.0	LSC9
					9.73E-02	5.00E+00		-(8.1)			g	
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LRM3AA		**Report DB ID:**	M8LRM3AB				
PU-238	0.00E+00	U	0.0E+00	9.0E-02	1.53E-01	pCi/g	30%	0.	6/14/16 09:12 p		1.03	ALP445
					3.23E-02	1.00E+00		0.			g	
PU239/40	-3.61E-03	U	9.0E-02	9.0E-02	1.65E-01	pCi/g	30%	-0.02	6/14/16 09:12 p		1.03	ALP445
					3.79E-02	1.00E+00		-0.08			g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LRR1AA		**Report DB ID:**	M8LRR1AB				
U-234	-2.06E-03	U	2.6E-02	2.6E-02	5.06E-02	pCi/g	103%	-0.04	6/9/16 09:22 p		1.03	ALP217
					1.32E-02	1.00E+00		-0.16			g	
U-235	-2.06E-03	U	2.6E-02	2.6E-02	5.06E-02	pCi/g	103%	-0.04	6/9/16 09:22 p		1.03	ALP217
					1.32E-02	1.00E+00		-0.16			g	
U-238	-6.19E-03	U	2.6E-02	2.6E-02	6.28E-02	pCi/g	103%	-0.1	6/9/16 09:22 p		1.03	ALP217
					1.94E-02	1.00E+00		-0.48			g	
								Ratio U-234/238 = 0.3				
Batch: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LRF1AA		**Report DB ID:**	M8LRF1AB				
AMERICIUM 241	3.39E-02	U	5.5E-02	5.5E-02	8.39E-02	pCi/g	74%	0.4	6/3/16 05:10 p		1.03	ALP419
					2.25E-02	1.50E+01		(1.2)			g	
Batch: 6131049	NI63_LSC			**Work Order:**	M8LRK1AA		**Report DB ID:**	M8LRK1AB				

TestAmerica Inc
rptSTLRchBlank
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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: 21-Jun-16

Lab Name: TestAmerica Inc
Matrix: SOIL

SDG: W07465
Report No. : 68802

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
Ni-63	1.95E+00	U	2.2E+00	3.1E+00	5.12E+00	pCi/g	92%	0.38	6/10/16 11:05 p		0.51	LSC10
					2.47E+00	3.00E+01		(1.3)			g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LRQ1AA		**Report DB ID:**	M8LRQ1AB				
H-3	-4.80E-02	U	1.2E-01	1.3E-01	3.07E-01	pCi/g	100%	-0.16	6/9/16 05:31 p		23.7	LSC9
					1.40E-01	4.00E+02		-0.73			g	
Batch: 6131047	GAMMA_GS			**Work Order:**	M8LRH1AA		**Report DB ID:**	M8LRH1AB				
CO-60	-7.63E-03	U	1.1E-02	1.1E-02	1.88E-02	pCi/g		-0.41	5/24/16 02:19 p		348.0	GER10$1
						5.00E-02		-(1.4)			g	
CS-137	1.03E-02	U	1.2E-02	1.2E-02	2.19E-02	pCi/g		0.47	5/24/16 02:19 p		348.0	GER10$1
						1.00E-01		(1.7)			g	
EU-152	-6.65E-02	U	3.9E-02	3.9E-02	5.89E-02	pCi/g		-(1.1)	5/24/16 02:19 p		348.0	GER10$1
						1.00E-01		-(3.4)			g	
EU-154	-3.33E-02	U	3.6E-02	3.6E-02	5.69E-02	pCi/g		-0.59	5/24/16 02:19 p		348.0	GER10$1
						1.00E-01		-(1.9)			g	
EU-155	-3.32E-02	U	3.3E-02	3.3E-02	5.28E-02	pCi/g		-0.63	5/24/16 02:19 p		348.0	GER10$1
						1.00E-01		-(2.)			g	
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LRJ1AA		**Report DB ID:**	M8LRJ1AB				
I129	1.85E-03	U	3.8E-02	3.8E-02	7.04E-02	pCi/g		0.03	5/19/16 03:21 a		52.0	LEP4$1
					3.54E-02	1.00E+00		0.1			g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LRN1AA		**Report DB ID:**	M8LRN1AB				
STRONTIUM	1.63E-01	U	1.2E-01	1.3E-01	1.95E-01	pCi/g	74%	0.84	6/10/16 02:36 p		2.04	GPC32B
					9.07E-02	2.00E+00		(2.5)			g	

TestAmerica Inc
rptSTLRchBlank
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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: 21-Jun-16

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: W07465

Report No. : 68802

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
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LRL1AA		**Report DB ID:**	M8LRL1AB				
NP-237	-1.20E-03	U	3.0E-02	3.0E-02	5.47E-02	pCi/g	83%	-0.02	6/10/16 01:04 a		0.99	ALP115
					1.25E-02	1.00E+00		-0.08			g	

No. of Results: 18 **Comments:**

TestAmerica Inc
rptSTLRchBlank
V5.5.1 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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

LCS RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc **SDG:** W07465

Matrix: SOIL **Report No. :** 68802

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: 6160037	C14_CHEM_LSC			**Work Order:**	M8LRG2AC		**Report DB ID:**	M8LRG2CS					
C-14	6.48E+00		1.6E-01	4.5E-01	1.79E-01	pCi/g	100%	6.59E+00	1.32E-01	98%	6/9/16 02:35 p	5.5	LSC9
							Rec Limits:	80	120	0.0		g	
Batch: 6131051	PUISO_IE_PRECIP_AEA			**Work Order:**	M8LRM3AC		**Report DB ID:**	M8LRM3CS					
PU239/40	5.07E+00		6.4E-01	1.2E+00	7.45E-02	pCi/g	72%	4.57E+00	5.36E-02	111%	6/14/16 09:56 p	0.99	ALP442
							Rec Limits:	80	120	0.1		g	
Batch: 6131055	UISO_IE_PLATE_AEA			**Work Order:**	M8LRR1AC		**Report DB ID:**	M8LRR1CS					
U-234	2.71E+00		3.9E-01	6.2E-01	5.61E-02	pCi/g	91%	3.22E+00	1.70E-02	84%	6/9/16 09:23 p	1.01	ALP218
							Rec Limits:	80	120	-0.2		g	
U-238	3.00E+00		4.1E-01	6.7E-01	5.07E-02	pCi/g	91%	3.37E+00	1.78E-02	89%	6/9/16 09:23 p	1.01	ALP218
							Rec Limits:	80	120	-0.1		g	
Batch: 6131045	AMCMISO_EIE_PREC_AEA			**Work Order:**	M8LRF1AC		**Report DB ID:**	M8LRF1CS					
AMERICIUM 241	4.15E+00		4.9E-01	8.9E-01	6.72E-02	pCi/g	105%	4.72E+00	4.77E-02	88%	6/3/16 05:10 p	0.99	ALP420
							Rec Limits:	80	120	-0.1		g	
Batch: 6131049	NI63_LSC			**Work Order:**	M8LRK1AC		**Report DB ID:**	M8LRK1CS					
Ni-63	2.17E+02		8.1E+00	1.8E+01	5.18E+00	pCi/g	91%	2.50E+02	4.10E-01	87%	6/10/16 11:27 p	0.51	LSC10
							Rec Limits:	80	120	-0.1		g	
Batch: 6131054	TRITIUM_DIST_LSC			**Work Order:**	M8LRQ1AC		**Report DB ID:**	M8LRQ1CS					
H-3	1.20E+00		1.9E-01	2.0E-01	2.87E-01	pCi/g	100%	1.15E+00	3.46E-02	104%	6/9/16 05:53 p	23.8	LSC9
							Rec Limits:	80	120	0.0		g	
Batch: 6131047	GAMMA_GS			**Work Order:**	M8LRH1AC		**Report DB ID:**	M8LRH1CS					
CS-137	8.83E-01		1.1E-01	1.1E-01	2.52E-02	pCi/g		9.64E-01	9.94E-03	92%	5/24/16 02:21 p	350.1	GER11$1
							Rec Limits:	80	120	-0.1		g	

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

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FORM II

LCS RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc

SDG: W07465

Matrix: SOIL

Report No. : 68802

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
RA-226	1.00E+00		1.3E-01	1.3E-01	3.66E-02	pCi/g		1.14E+00	1.17E-02	88%	5/24/16 02:21 p	350.1	GER11$1
							Rec Limits:	80	120	-0.1		g	
RA-228	5.35E-01		1.1E-01	1.1E-01	6.98E-02	pCi/g		5.06E-01	5.23E-03	106%	5/24/16 02:21 p	350.1	GER11$1
							Rec Limits:	80	120	0.1		g	
Batch: 6131048	I129_SEP_LEPS_GS			**Work Order:**	M8LRJ1AC		**Report DB ID:**	M8LRJ1CS					
I129	2.16E+01		2.7E+00	2.7E+00	1.77E-01	pCi/g		1.98E+01	1.87E-01	109%	5/19/16 03:23 a	64.95	LEP5$1
							Rec Limits:	80	120	0.1		g	
Batch: 6131052	SRTOT_SEP_PRECIP_GPC			**Work Order:**	M8LRN2AC		**Report DB ID:**	M8LRN2CS					
STRONTIUM	3.82E+00		2.4E-01	9.0E-01	1.34E-01	pCi/g	80%	3.33E+00	2.37E-02	114%	6/13/16 10:11 p	2.03	GPC31B
							Rec Limits:	80	120	0.1		g	
Batch: 6131050	NP237_LLE_PLATE_AEA			**Work Order:**	M8LRL1AC		**Report DB ID:**	M8LRL1CS					
NP-237	1.46E+00		2.9E-01	4.9E-01	4.94E-02	pCi/g	81%	1.75E+00	8.08E-02	83%	6/10/16 01:05 a	1.03	ALP117
							Rec Limits:	80	120	-0.2		g	

No. of Results: 13 **Comments:**

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

rptSTLRchLcs
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FORM II

MATRIX SPIKE RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc **SDG:** W07465

Lot-Sample No.: J6E060418-1, B354H6 **Report No. :** 68802 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDC|MDA	Rpt Unit	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 6131054	**Work Order:** M8LG71AR			**Report DB ID:** M8LG71RW			**Orig Sa DB ID:** 9M8LG710					
H-3	8.38E+00		6.8E-01	8.2E-01	6.90E-01	pCi/g	100%	88.35%	9.48E+00	6/9/16 04:05 p	10.2	TRITIUM_DIST_LSC
	3.40E-01								2.84E-01		g	LSC9

Number of Results: 1

Comments:

TestAmerica Inc **RER** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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

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FORM II

MATRIX SPIKE RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc **SDG:** W07465

Lot-Sample No.: J6E060418-2, B35531 **Report No. :** 68802 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDC|MDA	Rpt Unit	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 6160037	**Work Order:** M8LG82AN			**Report DB ID:** M8LG82NW			**Orig Sa DB ID:** 9M8LG820					
C-14	7.16E+00		1.9E-01	6.3E-01	1.95E-01	pCi/g	100%	98.73%	7.25E+00	6/9/16 06:26 a	5.0	C14_CHEM_LSC
	1.61E+00								1.45E-01		g	LSC9

Number of Results: 1

Comments:

TestAmerica Inc **RER** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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

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FORM II

MATRIX SPIKE RESULTS

Date: 21-Jun-16

Lab Name: TestAmerica Inc **SDG:** W07465

Lot-Sample No.: J6E060418-3, B35597 **Report No. :** 68802 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDC|MDA	Rpt Unit	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 6131053	**Work Order:** M8LG91AQ			**Report DB ID:** M8LG91QW			**Orig Sa DB ID:** 9M8LG910					
tc-99	1.80E+02		2.2E+00	7.0E+00	5.77E-01	pCi/g	100%	80.02%	2.25E+02	6/2/16 10:52 p	2.01	TC99_ETVDSK_LSC
	8.73E+01								1.29E+00		g	LSC10

Number of Results: 1

Comments:

TestAmerica Inc **RER** - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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

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