July 29, 2016

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 82 ***Pages***

Report No.: 69076

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.
W07485	I16-023	B34Y50	J6E260416-1	M8N1E1AA	9M8N1E10	6165039
		B34YB4	J6E260416-2	M8N1G1AA	9M8N1G10	6165040
		B34YM9	J6E260416-3	M8N1N1AA	9M8N1N10	6165040
		B35025	J6E310412-1	M8PJL1AA	9M8PJL10	6165030
		B350H0	J6E260416-4	M8N1Q1AC	9M8N1Q10	6165028
		B350H0	J6E260416-4	M8N1Q1AD	9M8N1Q10	6165030
		B350H0	J6E260416-4	M8N1Q1AF	9M8N1Q10	6165036
		B350H0	J6E260416-4	M8N1Q1AE	9M8N1Q10	6165039
		B350H0	J6E260416-4	M8N1Q1AA	9M8N1Q10	6165040
		B350L3	J6E260416-5	M8N1X1AC	9M8N1X10	6165039
		B350L3	J6E260416-5	M8N1X1AA	9M8N1X10	6165040
		B350M4	J6E260416-6	M8N151AC	9M8N1510	6165039
		B350M4	J6E260416-6	M8N151AA	9M8N1510	6165040
	S16-005	B35144	J6E310411-1	M8PJG1AA	9M8PJG10	6165032
		B35144	J6E310411-1	M8PJG1AC	9M8PJG10	6165035
		B35144	J6E310411-1	M8PJG1AD	9M8PJG10	6165039
		B351B4	J6E310411-2	M8PJH1AA	9M8PJH10	6165040
		B351C3	J6E310415-1	M8PJ71AC	9M8PJ710	6165039
		B351C3	J6E310415-1	M8PJ71AA	9M8PJ710	6165040
		B351C8	J6E310411-3	M8PJJ1AA	9M8PJJ10	6165039
	I16-025	B358B1	J6F060405-1	M8P741AA	9M8P7410	6165040
	S16-006	B35BP8	J6F060408-2	M8P8V1AC	9M8P8V10	6165035
		B35BP8	J6F060408-2	M8P8V1AD	9M8P8V10	6165039
		B35BP8	J6F060408-2	M8P8V1AA	9M8P8V10	6165040
		B35C70	J6F060408-3	M8P8W1AC	9M8P8W10	6165035
		B35C70	J6F060408-3	M8P8W1AD	9M8P8W10	6165039

Report No.: 69076

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SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
W07485	S16-006	B35C70	J6F060408-3	M8P8W1AA	9M8P8W10	6165040
		B35CR2	J6F060408-4	M8P8X1AC	9M8P8X10	6165033
		B35CR2	J6F060408-4	M8P8X1AD	9M8P8X10	6165036
		B35CR2	J6F060408-4	M8P8X1AA	9M8P8X10	6165040
		B35CV6	J6F060408-1	M8P8T1AC	9M8P8T10	6165036
		B35CV6	J6F060408-1	M8P8T1AA	9M8P8T10	6165040
		B35CW8	J6F060408-7	M8P821AG	9M8P8210	6165031
		B35CW8	J6F060408-7	M8P821AD	9M8P8210	6165033
		B35CW8	J6F060408-7	M8P821AC	9M8P8210	6165034
		B35CW8	J6F060408-7	M8P821AF	9M8P8210	6165036
		B35CW8	J6F060408-7	M8P821AE	9M8P8210	6165039
		B35CW8	J6F060408-7	M8P821AA	9M8P8210	6165040
		B35CW9	J6F060408-6	M8P811AG	9M8P8110	6165031
		B35CW9	J6F060408-6	M8P811AD	9M8P8110	6165033
		B35CW9	J6F060408-6	M8P811AC	9M8P8110	6165034
		B35CW9	J6F060408-6	M8P811AF	9M8P8110	6165036
		B35CW9	J6F060408-6	M8P811AE	9M8P8110	6165039
		B35CW9	J6F060408-6	M8P811AA	9M8P8110	6165040
		B35D09	J6F080405-1	M8QJF1AC	9M8QJF10	6165036
		B35D09	J6F080405-1	M8QJF1AA	9M8QJF10	6165040
		B35D49	J6F060408-5	M8P801AD	9M8P8010	6165033
		B35D49	J6F060408-5	M8P801AC	9M8P8010	6165034
		B35D49	J6F060408-5	M8P801AE	9M8P8010	6165036
		B35D49	J6F060408-5	M8P801AA	9M8P8010	6165040

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

July 29, 2016

Attention: Scot Fitzgerald

SAF Number	:	I16-023, I16-025, S16-005, S16-006
Date SDG Closed	:	June 7, 2016
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W07485
Data Deliverable	:	30-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 25, 2016 and June 7, 2016, twenty 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.

The requested analyses were:

Alpha Spectroscopy
Uranium 234, 235 and 238 by method RL-ALP-009
Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Strontium-90 by method RL-GPC-010
Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Iodine-129 (LL) by method RL-GAM-002

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Liquid Scintillation Counting
Carbon-14 by method RL-LSC-008
Selenium-79 by method RL-LSC-012
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.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Uranium 234, 235 and 238 by method RL-ALP-009:
The RPD for U-234 is outside acceptance criteria and one result is greater than five times the MDA. Both the sample result and the duplicate are less than the CRDL. No other 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:
Sample B35144 MDA exceeds the CRDL due to reduced aliquots based on weight screen results. No other analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The blank result is greater than the MDA but less than the CRDL. The analytical batch was recounted to confirm the results. No other analytical or quality issues were noted. Except as noted, the sample results and associated batch QC results are within contractual requirements.

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.

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 (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.

Selenium-79 by method RL-LSC-012:
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 N. Ritari

Digitally signed by Whitney Ritari
Date: 2016.07.29 22:08:50 -07'00'

Whitney Ritari
Project Manager

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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|MDL	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	C.O.C. # I16-023-172 Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 85 / 62	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority: 30 Days	PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B34Y50	N	W	5-25-16	1208	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2

M8N1E

J6E260416
W07485

J6E260416

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.R. Aguilar/CHPRC			MAY 25 2016 1315	Kevin Patterson CHPRC			MAY 25 2016 1315
Kevin Patterson CHPRC			MAY 25 2016 1415	J. Bock, TARL			MAY 25 2016 1415

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	

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

PRINTED ON 3/21/2016 FSR ID = FSR28062 A-6004-842 (REV 2)

July 29, 2016

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-190 Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 85 / 62	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days **PRIORITY**	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B34YB4	N	W	5-25-16	1232	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None

M8N1G

JGE260416
W07485

July 29, 2016

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.R. Aguilar/CHPRC			MAY 25 2016 1315	Kevin Patterson CHPRC			MAY 25 2016 1315
Relinquished By			Date/Time	Received By			Date/Time
Kevin Patterson CHPRC			MAY 25 2016 1415		J. Bock, TARL		MAY 25 2016 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

PRINTED ON 3/21/2016 FSR ID = FSR7237 A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-215 Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 85 /61	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B34YM9	N	W	5-25-16	1008	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None

M8N1N

J6E260416
W07485

July 29, 2016

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.R. Aguilar/CHPRC			MAY 25 2016 1155	Lesly Wall /CHPRC		Lesly Wall	MAY 25 2016 1155
Relinquished By	Lesly Wall /CHPRC	Lesly Wall	MAY 25 2016 1415	Received By	J. Bock, TARL		MAY 25 2016 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-285 Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 85 /62	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority: 30 Days	PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B350H0	N	W	5-25-16	1054	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B350H0	N	W	↓	↓	2x1-L G/P	C14_LSC: COMMON	6 Months	None
B350H0	N	W	↓	↓	3x1-L G/P	GAMMA_GS: COMMON; GAMMA_GS: GW 01	6 Months	HNO3 to pH <2
B350H0	N	W	↓	↓	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2
B350H0	N	W	5-25-16	1054	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

M8N1Q

JL6E260416
W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.R. Aguilar/CHPRC			MAY 25 2016 1155	Lesly Wall /CHPRC	Lesly Wall		MAY 25 2016 1155
Relinquished By	Lesly Wall /CHPRC	Lesly Wall	MAY 25 2016 1415	Received By	J. Bock, TARL		MAY 25 2016 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-293 Page 1 of 1

Collector	Karen Campbell CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 83176	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority: 30 Days	PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B350L3	N	W	5-25-16	1115	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B350L3	N	W	5-26-16	1115	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2

M8N1X

JLOE 2604416
W07485

July 29, 2016

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Karen Campbell CHPRC	Karen Campbell		MAY 25 2016 1150	L.D. Wall CHPRC	L.D. Wall		MAY 25 2016 1150
L.D. Wall CHPRC	L.D. Wall		MAY 25 2016 1415	J. Bock	J. Bock	FEDEX	MAY 25 2016 1415

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

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

PRINTED ON 3/21/2016 FSR ID = FSR28120 A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-297 Page 1 of 1

Collector	Karen Campbell CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 83 / 76	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B350M4	N	W	5-25-16	1047	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B350M4	N	W	5-25-16	1047	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2

M8N75

JL6E260416
W07485

July 29, 2016

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Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Karen Campbell CHPRC	Karen Campbell		MAY 25 2016 1150	L.D. Wall CHPRC	L.D. Wall		MAY 25 2016 1150
L.D. Wall CHPRC	L.D. Wall		MAY 25 2016 1415	J. Bock, TARL	J. Bock		MAY 25 2016 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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	

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

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PRINTED ON 3/21/2016 FSR ID = FSR8098 A-6004-842 (REV 2)

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Sample Check-in List

Date/Time Received: 5-25-16 / 1415 Container GM Screen Result: (Airlock) 0 cpm Initials[ ]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials[ ]

Client: PGW SDG #: W07485 SAF #: I16-023 NA [ ]

Lot Number: J16E260416

Chain of Custody # I16-023-172;190;215;285;293;297

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: 12.4 °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): 6
7. Containers received: 1 X 500mLP; 22 X LP
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: 1415 5/25/16 SS 5/27/16

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

[ ] No action necessary; process as is

Project Manager Stan Cupp Date 5/27/16

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-005-203 Page 1 of 1

Collector	Karen Campbell CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-005	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, MAY 2016	Logbook No.	HNF-N-506 83/77	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	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 ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35144	N	W	5-26-16	0827	1x1-L P	9310_ALPHABETA_GPC: COMMON	6 Months	HNO3 to pH <2
B35144	N	W	5-26-16	0827	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON MSP JG	6 Months	HNO3 to pH <2

J6E310411
W07485

J6E310411

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Karen Campbell CHPRC	Karen Campbell	MAY 26 2016 1100	Frank Hall CHPRC		MAY 26 2016 1100
Frank Hall CHPRC		MAY 26 2016 1400	J. Bock, TARL	J. Bock	MAY 26 2016 1400

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

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

PRINTED ON 3/21/2016 FSR ID = FSR10383 A-6004-842 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-005-223 Page 1 of 1

Collector	Karen Campbell CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-005	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, MAY 2016	Logbook No.	HNF-N-506 83 / 77	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	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 ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B351B4	N	W	5-26-16	0816	1x1-L P	906.0_TRITIUM_LSC: COMMON m8PJH	6 Months	None

J6E310411
W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Karen Campbell CHPRC	Karen Campbell		MAY 2 6 2016 1100	Frank Hall CHPRC			MAY 2 6 2016 1100
Relinquished By	Frank Hall CHPRC		MAY 2 6 2016 1400	Received By	J. Bock, TARL		MAY 2 6 2016 1400
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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	

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

PRINTED ON 3/21/2016 FSR ID = FSR27988 A-6004-842 (REV 2)

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-005-228 Page 1 of 1

Collector	D.L. Floyd/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-005	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, MAY 2016	Logbook No.	HNF-N-506 85 / 63	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 ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B351C8	N	W	5/26/16	1129	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON M8PJJ	6 Months	HNO3 to pH <2

J6E310411
WO7485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D.L. Floyd/CHPRC			MAY 2 6 2016 1140	Frank Hall CHPRC			MAY 2 6 2016 1140
Frank Hall CHPRC			MAY 2 6 2016 1400	J. Bock, TARL			MAY 2 6 2016 1400

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

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

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July 29, 2016

Sample Check-in List

Date/Time Received: 5-26-16 | 1400 Container GM Screen Result: (Airlock) 0 cpm Initial [ ]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [ ]

Client: PGW SDG #: W07485 SAF #: S16-005 NA [ ]

Lot Number: J16E310411

Chain of Custody # S16-005-203; 223; 228

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: 4.6 °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): 3
7. Containers received: 8x4p
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: 5-26-16

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

No action necessary; process as is

Project Manager _____ Date 6/1/16

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-023-249 Page 1 of 1

Collector	Karen Campbell CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-023	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, MAY 2016	Logbook No.	HNF-N-506 83 / 76	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days PRIORITY	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35025	N	W	5-25-16	1333	3x1-L G/P	GAMMA_GS: COMMON; GAMMA_GS: GW 01 M8PJL	6 Months	HNO3 to pH <2

J6E310412
W07485

J6E310412

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Karen Campbell CHPRC	Karen Campbell		MAY 25 2016 1420	SSU-1			MAY 25 2016 1420
SSU#1			MAY 26 2016 0700	C.M. Aguilar/CHPRC			MAY 26 2016 0700
C.M. Aguilar/CHPRC			MAY 26 2016 1015	L. Anderson, TARL			MAY 26 2016 1015
Relinquished By			Date/Time	Received By			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

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

PRINTED ON 3/21/2016 FSR ID = FSR7269 A-6004-842 (REV 2)

July 29, 2016

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July 29, 2016

Sample Check-in List

Date/Time Received: 5/26/16 1015 Container GM Screen Result: (Airlock) 0 cpm Initials [LA]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [LA]

Client: PGW SDG #: W07485 SAF #: 216-023 NA [ ]

Lot Number: J6E310412

Chain of Custody # 216-023-249

Shipping Container ID or Air Bill Number : _____ NA [LA]

Samples received inside shipping container/cooler/box Yes [LA] 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 [LA]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [LA]
3. Cooler temperature: 5.4 °C ICE NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [LA] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [LA] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 1 3x4p
   B 5-31-16
8. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
9. Samples have: ____tape ____hazard labels LA custody seals LA appropriate sample labels
10. Matrix: ____A (FLT, Wipe, Solid, Soil) LA I (Water) ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
    LA 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 [LA] 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 [LA]
14. Description of anomalies (include sample numbers): NA [LA] _____
15. Sample Location, Sample Collector Listed on COC? * Yes [LA] No [ ]
    *For documentation only. No corrective action needed.
16. Additional Information: N/A

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

Sample Check-in List completed by Sample Custodian:
Signature: J. Anderson Date: 5/26/16

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

[LA] No action necessary; process as is

Project Manager Stan Cupp Date 6/1/16

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-005-226 Page 1 of 1

Collector	D.L. Floyd/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-005	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, MAY 2016	Logbook No.	HNF-N-506 85 / 65	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 ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B351C3	N		MAY 27 2016	0813	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B351C3	N	W	↓	↓	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON MSPJ7	6 Months	HNO3 to pH <2

J6E310415
W07485

J6E310415

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D.L. Floyd/CHPRC			MAY 27 2016 1110	Lesly Wall /CHPRC	Lesly Wall		MAY 27 2016 1110
Relinquished By	Lesly Wall /CHPRC	Lesly Wall	MAY 27 2016 1520	Received By	L. Anderson, TARL	L. Anderson	MAY 27 2016 1520
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

PRINTED ON 3/21/2016 FSR ID = FSR28006 A-6004-842 (REV 2)

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TestAmerica
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Sample Check-in List

Date/Time Received: 5/27/16 1520 Container GM Screen Result: (Airlock) 0 cpm Initials[LA]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials[LA]

Client: PGW SDG #: W07485 SAF #: S16-005 NA [ ]

Lot Number: JL6E310415

Chain of Custody # S16-005-226

Shipping Container ID or Air Bill Number : _____ NA [LA]

Samples received inside shipping container/cooler/box Yes [LA] 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 [LA]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [LA]
3. Cooler temperature: 10.9 °C ICE NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [LA] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [LA] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 1
7. Containers received: 4 x 4P
8. Sample holding times exceeded? NA [ ] Yes [ ] No [LA]
9. Samples have: ____tape ____hazard labels LA custody seals LA appropriate sample labels
10. Matrix: ____A (FLT, Wipe, Solid, Soil) LA I (Water) ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
    LA 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 [LA] 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 [LA]
14. Description of anomalies (include sample numbers): NA [LA]
15. Sample Location, Sample Collector Listed on COC? * Yes [LA] No [ ]
    *For documentation only. No corrective action needed.
16. Additional Information: N/A

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

Sample Check-in List completed by Sample Custodian:
Signature: J Anderson Date: 5/27/16

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

[SB] No action necessary; process as is

Project Manager Stan Cupp Date 6/1/16

LS-023 Rev. 17, 05/13

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I16-025-021 Page 1 of 1

Collector	K.C. Patterson/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-025	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, JUNE 2016	Logbook No.	HNF-N-506 83/79	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days **PRIORITY**	Offsite Property No.	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

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

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

N/A
Special Handling:N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B358B1	N	W	JUN 03 2016	1035	1x1-L P	906.0_TRITIUM_LSC: COMMON m8P74	6 Months	None

J6F060405
W07485

July 29, 2016

J6F060405

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.C. Patterson/CHPRC			JUN 03 2016 1205	Troy Bacon CHPRC	Troy L Bacon		JUN 03 2016 1205
Relinquished By	Troy Bacon CHPRC	Troy L Bacon	JUN 03 2016 1305	Received By	J. Bock, TARL		JUN 03 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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		

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

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

July 29, 2016

Sample Check-in List

Date/Time Received: 6-3-16 / 1505 Container GM Screen Result: (Airlock) 0 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: PGW SDG #: WO74485 SAF #: I16-025 NA [ ]

Lot Number: J16F060405

Chain of Custody # I16-025-021

Shipping Container ID or Air Bill Number : _____ 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: 11.3 °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 4P
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 HNO_3 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: Julie Bach Date: 6-3-16

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

[B] No action necessary; process as is

Project Manager Sam Cupp Date 6/6/16

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-517 Page 1 of 1

Collector	Scott King CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 85 / 72	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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35CV6	N	W	JUN 0 3 2016	1052	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35CV6	N	W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: COMMON M8P8T	6 Months	HCl to pH <2

J6F060408
WO7485

J6F060408

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Scott King CHPRC	Scott King	JUN 0 3 2016 1115		Troy Bacon CHPRC	Troy L. Bacon	JUN 0 3 2016 1115
Relinquished By	Troy Bacon CHPRC	Troy L. Bacon	Date/Time JUN 0 3 2016 1505	Received By	J. Bock, TARL	Bock	Date/Time JUN 0 3 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-439 Page 1 of 1

Collector	K.C. Patterson/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 83 / 80	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35BP8	N	W	JUN 03 2016	1225	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35BP8	N	W	↓	↓	1x1-L P	9310_ALPHABETA_GPC: Gross Beta	6 Months	HNO3 to pH <2
B35BP8	N	W	↓	↓	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON m88SV	6 Months	HNO3 to pH <2

J16F060408
W01485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.C. Patterson/CHPRC			JUN 03 2016 1300	Lesly Wall /CHPRC		Lesly Wall	JUN 03 2016 1300
Relinquished By	Lesly Wall /CHPRC	Lesly Wall	Date/Time JUN 03 2016 1505	Received By	J. Bock, TARL	Bock	Date/Time JUN 03 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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	

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-470 Page 1 of 1

Collector	K.C. Patterson/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 83 / 80	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35C70	N	W	JUN 03 2016	1111	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35C70	N	W	↓	↓	1x1-L P	9310_ALPHABETA_GPC: Gross Beta	6 Months	HNO3 to pH <2
B35C70	N	W	↓	↓	3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON m8P8W	6 Months	HNO3 to pH <2

J6f060405
407485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.C. Patterson/CHPRC			JUN 03 2016 1205	Troy Bacon CHPRC		Troy L. Bacon	JUN 03 2016 1205
Troy Bacon CHPRC		Troy L. Bacon	JUN 03 2016 1205	J. Bock, TARL		Bock	JUN 03 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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		

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-509 Page 1 of 1

Collector	Scott King CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 85 / 72	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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35CR2	N	W	JUN 0 3 2016	1000	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35CR2	N	W	↓	↓	2x1-L G/P	SE79_SEP_IE_LSC: COMMON	6 Months	HNO3 to pH <2
B35CR2	N	W	JUN 0 3 2016	1000	1x500-mL P	TC99_ETVDSK_LSC: COMMON m8P8X	6 Months	HCl to pH <2

J6f060408
W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Scott King CHPRC		JUN 0 3 2016 1010	Frank Hall /CHPRC			JUN 0 3 2016 1010
Relinquished By	Frank Hall /CHPRC		JUN 0 3 2016 1505	Received By	J. Bock, TARL		JUN 0 3 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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		

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

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-549 Page 1 of 1

Collector	Scott King CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 85/72	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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35D49	N	W	JUN 0 3 2016	1309	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35D49	N	W	↓	↓	2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B35D49	N	W	↓	↓	2x1-L G/P	SE79_SEP_IE_LSC: COMMON	6 Months	HNO3 to pH <2
B35D49	N	W	JUN 0 3 2016	1309	1x500-mL P	TC99_ETVDSK_LSC: COMMON MSP80	6 Months	HCl to pH <2

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W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Scott King CHPRC	Scott King	JUN 0 3 2016 1320		Troy Bacon CHPRC	Troy L. Bacon	JUN 0 3 2016 1320
Relinquished By	Troy Bacon CHPRC	Troy L. Bacon	Date/Time JUN 0 3 2016 1505	Received By	J. Bock, TARL	J. Bock	Date/Time JUN 0 3 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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		

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

PRINTED ON 5/2/2016 FSR ID = FSR31700 A-6004-842 (REV 2)

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S16-006-523**

Collector	W.M. WISE/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	S16-006	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	SURV, JUNE 2016	**Logbook No.**	HNF-N-506 86/15	**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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35CW9	N	W	JUN 0 3 2016	0949	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35CW9	N	W			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B35CW9	N	W			2x1-L G/P	SE79_SEP_IE_LSC: COMMON	6 Months	HNO3 to pH <2
B35CW9	N	W			3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2
B35CW9	N	W			1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2
B35CW9	N	W	JUN 0 3 2016	0949	1x1-L G/P	UISO_PLATE_AEA: COMMON M8981	6 Months	HNO3 to pH <2

J6F060408

W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
W.M. WISE/CHPRC			JUN 0 3 2016 1020	Lesly Wall /CHPRC			JUN 0 3 2016 1020
Lesly Wall /CHPRC			JUN 0 3 2016 1020		J. Bock, TARL		JUN 0 3 2016 1020

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	

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

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S16-006-521**

Collector	W.M. WISE/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	S16-006	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	SURV, JUNE 2016	**Logbook No.**	HNF-N-506 86/15	**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 ☑ No ☐

N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35CW8	N	W	JUN 0 3 2016	0949	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35CW8	N	W			2x4-L G/P	I129LL_SEP_LEPS_GS_LL: COMMON	6 Months	None
B35CW8	N	W			2x1-L G/P	SE79_SEP_IE_LSC: COMMON	6 Months	HNO3 to pH <2
B35CW8	N	W			3x1-L G/P	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <2
B35CW8	N	W			1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2
B35CW8	N	W	JUN 0 3 2016	0949	1x1-L G/P	UISO_PLATE_AEA: COMMON MSP82	6 Months	HNO3 to pH <2

Jefoledyor

W07485

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
W.M. WISE/CHPRC			JUN 0 3 2016 1020	Lesly Wall /CHPRC			JUN 0 3 2016 1020
Relinquished By	Lesly Wall /CHPRC		Date/Time JUN 0 3 2016 1505	Received By	J. Bock, TARL		Date/Time JUN 0 3 2016 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

July 29, 2016

Sample Check-in List

Date/Time Received: 6-3-16 / 1505 Container GM Screen Result: (Airlock) 0 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 0 cpm Initials [B]

Client: PGW SDG #: W07485 SAF #: 516-006 NA [ ]

Lot Number: J6F060408

Chain of Custody # 516-006-517; 439; 470; 509; 549; 523; 521

Shipping Container ID or Air Bill Number : _____ 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: 11.3 °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): 7
7. Containers received: 5x500mLp; 31xLp; 6x4Lp
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 HNO_3 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: Julie Bock Date: 6-3-16

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

[B] No action necessary; process as is

Project Manager Stan Cupp Date 6/6/16

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # S16-006-534 Page 1 of 1

Collector	K.C. Patterson/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	S16-006	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	SURV, JUNE 2016	Logbook No.	HNF-N-506 83/83	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 ☑ No ☐
N/A

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35D09	N	W	JUN 07 2016	1032	1x1-L P	906.0_TRITIUM_LSC: COMMON	6 Months	None
B35D09	N	W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: COMMON	6 Months	HCl to pH <2

M8QJF

J6f080405
W07485

J6F080405

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.C. Patterson/CHPRC			JUN 07 2016 1110	Lesly Wall /CHPRC		Lesly Wall	JUN 07 2016 1110
Relinquished By	Lesly Wall /CHPRC	Lesly Wall	JUN 07 2016 1450	Received By	J. Bock, TARL	Bock	JUN 07 2016 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			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

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

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

July 29, 2016

Sample Check-in List

Date/Time Received: 6-7-16 | 1450 Container GM Screen Result: (Airlock) 0 cpm Initials[B]
Sample GM Screen Result (Sample Receiving) _____ cpm Initials[ ]

Client: PGW SDG #: W07485 SAF #: S16-006 NA [ ]

Lot Number: J16F080405

Chain of Custody # S16-006-534

Shipping Container ID or Air Bill Number : _____ 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: 9.2 °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: 1x500mLP; 1xLP
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 HNO_3 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: 6-7-16

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

[B] No action necessary; process as is

Project Manager [signature] Date 6/8/16

Sample Results Summary

Date: 29-Jul-16

TestAmerica Inc TARL

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

Report No. : 69076 **SDG No:** W07485

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6165039 SRISO_SEP_PRECIP_GPC									
B34Y50									
	M8N1E1AA	STRONTIUM	5.16E+00 +- 1.7E+00		pCi/L	74%	1.34E+00	2.00E+00	
B350H0									
	M8N1Q1AE	STRONTIUM	-1.17E-01 +- 7.0E-01	U	pCi/L	82%	1.28E+00	2.00E+00	
B350L3									
	M8N1X1AC	STRONTIUM	-1.97E-02 +- 6.7E-01	U	pCi/L	83%	1.22E+00	2.00E+00	
B350M4									
	M8N151AC	STRONTIUM	1.34E+00 +- 8.6E-01		pCi/L	78%	1.18E+00	2.00E+00	
B35144									
	M8PJG1AD	STRONTIUM	6.58E-01 +- 7.7E-01	U	pCi/L	73%	1.23E+00	2.00E+00	
B351C3									
	M8PJ71AC	STRONTIUM	3.10E-01 +- 7.3E-01	U	pCi/L	83%	1.24E+00	2.00E+00	
B351C8									
	M8PJJ1AA	STRONTIUM	1.89E+00 +- 9.0E-01		pCi/L	84%	1.05E+00	2.00E+00	
B358L4 DUP									
	M8P8J1AE	STRONTIUM	4.90E+02 +- 1.1E+02		pCi/L	85%	1.18E+00	2.00E+00	3.4
B35BP8									
	M8P8V1AD	STRONTIUM	1.36E+03 +- 3.1E+02		pCi/L	88%	1.02E+00	2.00E+00	
B35C70									
	M8P8W1AD	STRONTIUM	2.14E+03 +- 4.9E+02		pCi/L	88%	1.16E+00	2.00E+00	
B35CW8									
	M8P821AE	STRONTIUM	8.00E-01 +- 7.6E-01	U	pCi/L	84%	1.17E+00	2.00E+00	
B35CW9									
	M8P811AE	STRONTIUM	3.90E-01 +- 6.4E-01	U	pCi/L	84%	1.07E+00	2.00E+00	
6165031 UISO_PLATE_AEA									
B35CW8									
	M8P821AG	U-234	6.42E-01 +- 3.4E-01		pCi/L	82%	1.47E-01	1.00E+00	
		U-235	8.02E-02 +- 1.1E-01	U	pCi/L	82%	1.47E-01	1.00E+00	
		U-238	9.16E-01 +- 4.1E-01		pCi/L	82%	1.64E-01	1.00E+00	
B35CW9									
	M8P811AG	U-234	3.76E-01 +- 2.6E-01		pCi/L	80%	1.54E-01	1.00E+00	
		U-235	8.36E-02 +- 1.2E-01	U	pCi/L	80%	1.54E-01	1.00E+00	
		U-238	3.34E-01 +- 2.4E-01		pCi/L	80%	1.54E-01	1.00E+00	
B35CW9 DUP									
	M8P811AH	U-234	9.97E-01 +- 4.2E-01		pCi/L	83%	1.41E-01	1.00E+00	90.4
		U-235	0.00E+00 +- 7.7E-02	U	pCi/L	83%	1.41E-01	1.00E+00	200.0
		U-238	4.60E-01 +- 2.8E-01		pCi/L	83%	1.41E-01	1.00E+00	31.7
6165030 GAMMA_GS									

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

Date: 29-Jul-16

TestAmerica Inc TARL

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

Report No. : 69076 **SDG No:** W07485

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)		Qual	Units	Tracer Yield	MDL	CRDL	RPD
6165030 GAMMA_GS										
B35025										
	M8PJL1AA	CO-60	-7.20E-01	+- 1.8E+00	U	pCi/L		3.16E+00	2.50E+01	
		CS-134	1.84E+00	+- 1.6E+00	U	pCi/L		3.22E+00	8.00E+01	
		CS-137	7.67E-02	+- 1.4E+00	U	pCi/L		2.48E+00	1.50E+01	
		EU-152	1.92E+00	+- 4.0E+00	U	pCi/L		7.21E+00	5.00E+01	
		EU-154	-2.98E+00	+- 5.2E+00	U	pCi/L		8.99E+00	5.00E+01	
		EU-155	2.44E+00	+- 3.0E+00	U	pCi/L		5.82E+00	5.00E+01	
		K-40	1.63E+01	+- 3.7E+01	U	pCi/L		1.95E+01		
		SB-125	1.07E-01	+- 3.7E+00	U	pCi/L		6.39E+00	5.00E+01	
B350H0										
	M8N1Q1AD	CO-60	4.74E-01	+- 2.1E+00	U	pCi/L		3.92E+00	2.50E+01	
		CS-134	1.28E+00	+- 2.1E+00	U	pCi/L		4.03E+00	8.00E+01	
		CS-137	9.44E-02	+- 1.9E+00	U	pCi/L		3.39E+00	1.50E+01	
		EU-152	-2.51E+00	+- 5.2E+00	U	pCi/L		8.89E+00	5.00E+01	
		EU-154	5.69E+00	+- 6.1E+00	U	pCi/L		1.22E+01	5.00E+01	
		EU-155	5.28E+00	+- 4.8E+00	U	pCi/L		8.93E+00	5.00E+01	
		K-40	-6.46E+01	+- 5.5E+01	U	pCi/L		1.11E+02		
		SB-125	-3.58E+00	+- 4.9E+00	U	pCi/L		8.14E+00	5.00E+01	
B35CP9 DUP										
	M8QEN1AP	CO-60	-4.17E-01	+- 2.0E+00	U	pCi/L		3.62E+00	2.50E+01	444.9
		CS-134	6.25E-01	+- 1.5E+00	U	pCi/L		2.89E+00	8.00E+01	159.2
		CS-137	4.78E-01	+- 1.5E+00	U	pCi/L		2.81E+00	1.50E+01	137.2
		EU-152	3.42E-01	+- 3.7E+00	U	pCi/L		6.55E+00	5.00E+01	23.8
		EU-154	-2.36E+00	+- 4.5E+00	U	pCi/L		7.73E+00	5.00E+01	-23.4
		EU-155	3.57E+00	+- 3.3E+00	U	pCi/L		6.09E+00	5.00E+01	-2202.2
		K-40	-2.16E+01	+- 3.4E+01	U	pCi/L		6.77E+01		-81.6
		SB-125	1.10E+00	+- 3.7E+00	U	pCi/L		6.63E+00	5.00E+01	101.3
6165034 I129LL_SEP_LEPS_GS										
B35CW8										
	M8P821AC	I129	1.62E-01	+- 2.7E-01	U	pCi/L	92%	5.21E-01	1.00E+00	
B35CW9										
	M8P811AC	I129	6.11E-01	+- 4.6E-01	U	pCi/L	79%	9.46E-01	1.00E+00	
B35D49										
	M8P801AC	I129	1.83E-01	+- 2.8E-01	U	pCi/L	95%	5.80E-01	1.00E+00	
B35D49 DUP										
	M8P801AF	I129	1.95E-01	+- 2.3E-01	U	pCi/L	96%	4.52E-01	1.00E+00	6.5
6165032 9310_ALPHABETA_GPC										
B35144										

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

Date: 29-Jul-16

TestAmerica Inc TARL

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

Report No. : 69076 **SDG No:** W07485

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6165032 9310_ALPHABETA_GPC									
B35144									
	M8PJG1AA	Alpha	2.14E-02 +- 2.1E+00	U	pCi/L	100%	3.72E+00	3.00E+00	
B358N1 DUP									
	M8PMF2AE	Alpha	-2.46E-01 +- 7.6E-01	U	pCi/L	100%	1.44E+00	3.00E+00	-119.3
6165035 9310_ALPHABETA_GPC									
B35144									
	M8PJG1AC	Beta	2.57E+01 +- 3.7E+00		pCi/L	100%	1.81E+00	4.00E+00	
B358N6 DUP									
	M8PWA1AF	Beta	1.41E+02 +- 1.8E+01		pCi/L	100%	1.72E+00	4.00E+00	3.2
B35BP8									
	M8P8V1AC	Beta	2.59E+03 +- 3.2E+02		pCi/L	100%	1.87E+00	4.00E+00	
B35C70									
	M8P8W1AC	Beta	3.48E+03 +- 4.5E+02		pCi/L	100%	2.05E+00	4.00E+00	
6165028 C14_LSC									
B350H0									
	M8N1Q1AC	C-14	2.53E+01 +- 9.0E+00		pCi/L	100%	1.62E+01	5.00E+01	
B35D25 DUP									
	M8QEP1AN	C-14	-1.81E+00 +- 8.1E+00	U	pCi/L	100%	1.63E+01	5.00E+01	371.7
6165033 SE79_SEP_IE_LSC									
B35CR2									
	M8P8X1AC	Se-79	3.21E+01 +- 4.7E+01		pCi/L	73%	1.26E+01	3.00E+01	
B35CR2 DUP									
	M8P8X1AE	Se-79	3.31E+01 +- 4.8E+01		pCi/L	91%	1.01E+01	5.00E+01	3.2
B35CW8									
	M8P821AD	Se-79	1.75E+01 +- 2.6E+01		pCi/L	88%	1.00E+01	3.00E+01	
B35CW9									
	M8P811AD	Se-79	1.63E+01 +- 2.6E+01		pCi/L	85%	1.06E+01	3.00E+01	
B35D49									
	M8P801AD	Se-79	-3.03E+00 +- 7.1E+00	U	pCi/L	87%	1.05E+01	3.00E+01	
6165036 TC99_ETVDSK_LSC									
B350H0									
	M8N1Q1AF	Tc-99	1.23E+00 +- 4.1E+00	U	pCi/L	100%	8.80E+00	5.00E+01	
B350H0 DUP									
	M8N1Q1AG	Tc-99	3.25E+00 +- 4.3E+00	U	pCi/L	100%	9.03E+00	5.00E+01	90.4
B35CR2									
	M8P8X1AD	Tc-99	1.00E+04 +- 2.2E+02		pCi/L	100%	9.14E+00	5.00E+01	
B35CV6									
	M8P8T1AC	Tc-99	1.41E+01 +- 4.6E+00		pCi/L	100%	8.88E+00	5.00E+01	
B35CW8									

RPD - Relative Percent Difference.

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Sample Results Summary

Date: 29-Jul-16

TestAmerica Inc TARL

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

Report No. : 69076 **SDG No:** W07485

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6165036 TC99_ETVDSK_LSC									
B35CW8									
	M8P821AF	Tc-99	5.65E+03 +- 1.3E+02		pCi/L	100%	8.97E+00	5.00E+01	
B35CW9									
	M8P811AF	Tc-99	5.62E+03 +- 1.2E+02		pCi/L	100%	9.08E+00	5.00E+01	
B35D09									
	M8QJF1AC	Tc-99	7.61E+00 +- 4.4E+00	U	pCi/L	100%	9.05E+00	5.00E+01	
B35D49									
	M8P801AE	Tc-99	1.70E+01 +- 4.6E+00		pCi/L	100%	8.87E+00	5.00E+01	
6165040 906.0_H3_LSC									
B34YB4									
	M8N1G1AA	H-3	-7.54E+01 +- 1.4E+02	U	pCi/L	100%	3.27E+02	7.00E+02	
B34YM9									
	M8N1N1AA	H-3	7.94E+03 +- 4.0E+02		pCi/L	100%	3.28E+02	7.00E+02	
B350H0									
	M8N1Q1AA	H-3	6.72E+03 +- 3.7E+02		pCi/L	100%	3.29E+02	7.00E+02	
B350L3									
	M8N1X1AA	H-3	1.56E+04 +- 6.2E+02		pCi/L	100%	3.25E+02	7.00E+02	
B350M4									
	M8N151AA	H-3	3.55E+03 +- 2.7E+02		pCi/L	100%	3.25E+02	7.00E+02	
B351B4									
	M8PJH1AA	H-3	7.66E+02 +- 1.8E+02		pCi/L	100%	3.27E+02	7.00E+02	
B351C3									
	M8PJ71AA	H-3	2.15E+03 +- 2.2E+02		pCi/L	100%	3.26E+02	7.00E+02	
B352K6 DUP									
	M8NQ01AD	H-3	3.39E+05 +- 9.3E+03		pCi/L	100%	3.20E+02	7.00E+02	0.8
B358B1									
	M8P741AA	H-3	2.29E+02 +- 1.5E+02	U	pCi/L	100%	3.22E+02	7.00E+02	
B35BP8									
	M8P8V1AA	H-3	9.89E+03 +- 4.6E+02		pCi/L	100%	3.27E+02	7.00E+02	
B35C70									
	M8P8W1AA	H-3	9.68E+03 +- 4.5E+02		pCi/L	100%	3.28E+02	7.00E+02	
B35CR2									
	M8P8X1AA	H-3	3.28E+03 +- 2.6E+02		pCi/L	100%	3.26E+02	7.00E+02	
B35CV6									
	M8P8T1AA	H-3	-8.26E+01 +- 1.4E+02	U	pCi/L	100%	3.27E+02	7.00E+02	
B35CW8									
	M8P821AA	H-3	6.37E+03 +- 3.6E+02		pCi/L	100%	3.26E+02	7.00E+02	
B35CW9									
	M8P811AA	H-3	6.41E+03 +- 3.6E+02		pCi/L	100%	3.30E+02	7.00E+02	

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

Date: 29-Jul-16

TestAmerica Inc TARL

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

Report No. : 69076 **SDG No:** W07485

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
6165040	**906.0_H3_LSC**								
B35D09									
	M8QJF1AA	H-3	-3.51E+01 +- 1.4E+02	U	pCi/L	100%	3.29E+02	7.00E+02	
B35D49									
	M8P801AA	H-3	-7.04E+01 +- 1.4E+02	U	pCi/L	100%	3.29E+02	7.00E+02	

No. of Results: 87

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.

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QC Results Summary

Date: 29-Jul-16

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 69076 **SDG No.:** W07485

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
SRISO_SEP_PRECIP_GPC								
6165039 BLANK QC,								
M8Q5L1AA	STRONTIUM	4.70E-01 +- 8.0E-01	U	pCi/L	79%			1.33E+00
6165039 LCS,								
M8Q5L1AC	STRONTIUM	1.42E+01 +- 3.6E+00		pCi/L	78%	107%	0.1	1.17E+00
UISO_PLATE_AEA								
6165031 BLANK QC,								
M8Q5C1AA	U-234	2.57E-02 +- 7.7E-02	U	pCi/L	86%			1.76E-01
	U-235	2.88E-02 +- 7.7E-02	U	pCi/L	86%			1.66E-01
	U-238	1.97E-02 +- 7.7E-02	U	pCi/L	86%			1.92E-01
6165031 LCS,								
M8Q5C1AC	U-234	1.59E+01 +- 2.9E+00		pCi/L	89%	100%	0.0	2.25E-01
	U-238	1.63E+01 +- 3.0E+00		pCi/L	89%	98%	0.0	2.25E-01
GAMMA_GS								
6165030 BLANK QC,								
M8Q5A1AA	CO-60	-8.29E-01 +- 1.5E+00	U	pCi/L				2.59E+00
	CS-134	-3.17E-01 +- 1.1E+00	U	pCi/L				2.02E+00
	CS-137	-7.55E-01 +- 1.1E+00	U	pCi/L				1.88E+00
	EU-152	8.24E-01 +- 2.5E+00	U	pCi/L				4.67E+00
	EU-154	-3.33E-01 +- 4.3E+00	U	pCi/L				8.01E+00
	EU-155	-5.09E-01 +- 1.9E+00	U	pCi/L				3.29E+00
	K-40	-2.26E+01 +- 2.9E+01	U	pCi/L				5.81E+01
	SB-125	1.94E+00 +- 3.2E+00	U	pCi/L				5.83E+00
6165030 LCS,								
M8Q5A1AC	CO-60	4.01E+01 +- 6.8E+00		pCi/L		107%	0.1	3.23E+00
	CS-137	5.23E+01 +- 8.8E+00		pCi/L		104%	0.0	3.26E+00
	EU-152	6.41E+01 +- 1.2E+01		pCi/L		83%	-0.2	6.81E+00
I129LL_SEP_LEPS_GS								
6165034 BLANK QC,								
M8Q5F1AA	I129	-1.62E-01 +- 3.6E-01	U	pCi/L	89%			6.25E-01
6165034 LCS,								
M8Q5F1AC	I129	1.76E+01 +- 2.4E+00		pCi/L	90%	92%	-0.1	7.83E-01
9310_ALPHABETA_GPC								
6165032 BLANK QC,								
M8Q5D1AA	Alpha	5.29E-02 +- 5.0E-01	U	pCi/L	100%			8.91E-01
6165032 LCS,								
M8Q5D1AC	Alpha	2.09E+01 +- 5.5E+00		pCi/L	100%	95%	-0.1	7.49E-01
9310_ALPHABETA_GPC								
6165035 BLANK QC,								
M8Q5G1AA	Beta	2.81E+00 +- 1.2E+00		pCi/L	100%			1.69E+00
6165035 LCS,								
M8Q5G1AC	Beta	2.38E+01 +- 3.4E+00		pCi/L	100%	108%	0.1	1.52E+00

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

rptSTLRchQcSummary V5.6 A2002 **U Qual** - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

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QC Results Summary

Date: 29-Jul-16

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 69076

SDG No.: W07500

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
C14_LSC								
6165028 MATRIX SPIKE, B35D26								
M8QEQ1AN	C-14	5.02E+02 +- 3.3E+01		pCi/L	100%	105%	0.0	1.65E+01
6165028 BLANK QC,								
M8Q481AA	C-14	9.68E+00 +- 8.5E+00	U	pCi/L	100%			1.65E+01
6165028 LCS,								
M8Q481AC	C-14	4.98E+02 +- 3.3E+01		pCi/L	100%	103%	0.0	1.67E+01
SE79_SEP_IE_LSC								
6165033 BLANK QC,								
M8Q5E1AA	Se-79	4.40E+00 +- 1.2E+01	U	pCi/L	82%			1.08E+01
TC99_ETVDSK_LSC								
6165036 MATRIX SPIKE, B35CV6								
M8P8T1AD	Tc-99	5.12E+02 +- 1.8E+01		pCi/L	100%	93%	-0.1	8.93E+00
6165036 BLANK QC,								
M8Q5H1AA	Tc-99	1.25E+00 +- 4.3E+00	U	pCi/L	100%			9.23E+00
6165036 LCS,								
M8Q5H1AC	Tc-99	1.05E+02 +- 7.3E+00		pCi/L	100%	98%	0.0	9.07E+00
906.0_H3_LSC								
6165040 MATRIX SPIKE, B352L4								
M8NQ11AD	H-3	1.76E+03 +- 7.7E+03		pCi/L	100%	116%	0.2	3.79E+02
6165040 BLANK QC,								
M8Q5M1AA	H-3	-1.85E+02 +- 1.4E+02	U	pCi/L	100%			3.37E+02
6165040 LCS,								
M8Q5M1AC	H-3	2.71E+03 +- 2.5E+02		pCi/L	100%	100%	0.0	3.40E+02

No. of Results: 34

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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 12:08:00 PM
Lot-Sample No.:	**J6E260416-1**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B34Y50**	**COC No. :**	I16-023-172	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8N1E1AA		**Report DB ID:**	9M8N1E10				
STRONTIUM	**5.16E+00**		1.2E+00	1.7E+00	1.34E+00	pCi/L	74%	*(3.8)*	7/1/16 03:51 p		0.5087	GPC32C
						6.10E-01	2.00E+00	*(6.1)*			L	

No. of Results: 1 **Comments:**

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TestAmerica Inc

rptSTLRchSample
V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 12:32:00 PM
Lot-Sample No.:	**J6E260416-2**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B34YB4**	**COC No. :**	I16-023-190	**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: 6165040	906.0_H3_LSC			**Work Order:** M8N1G1AA			**Report DB ID:** 9M8N1G10					
H-3	**-7.54E+01**	U	1.3E+02	1.4E+02	3.27E+02	pCi/L	100%	*-0.23*	6/29/16 09:32 a		0.00502	LSC9
						1.56E+02	7.00E+02	*-(1.1)*			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchSample
V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 10:08:00 AM
Lot-Sample No.:	**J6E260416-3**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B34YM9**	**COC No. :**	I16-023-215	**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: 6165040	906.0_H3_LSC			**Work Order:** M8N1N1AA			**Report DB ID:** 9M8N1N10					
H-3	**7.94E+03**		3.3E+02	4.0E+02	3.28E+02	pCi/L	100%	*(24.2)*	6/29/16 10:54 a		0.00502	LSC9
						1.56E+02	7.00E+02	*(39.5)*			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchSample
V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 1:33:00 PM
Lot-Sample No.:	**J6E310412-1**	**Report No. :**	69076	**Received Date:**	5/26/2016 10:15:00 AM
Client Sample ID:	**B35025**	**COC No. :**	I16-023-249	**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: 6165030	GAMMA_GS			**Work Order:**	M8PJL1AA		**Report DB ID:**	9M8PJL10				
CO-60	**-7.20E-01**	U	1.8E+00	1.8E+00	3.16E+00	pCi/L		*-0.23*	7/1/16 01:14 p		1.9705	GER13$1
						1.59E+00	2.50E+01	*-0.8*			L	
CS-134	**1.84E+00**	U	1.6E+00	1.6E+00	3.22E+00	pCi/L		*0.57*	7/1/16 01:14 p		1.9705	GER13$1
						1.61E+00	8.00E+01	*(2.3)*			L	
CS-137	**7.67E-02**	U	1.4E+00	1.4E+00	2.48E+00	pCi/L		*0.03*	7/1/16 01:14 p		1.9705	GER13$1
						1.25E+00	1.50E+01	*0.11*			L	
EU-152	**1.92E+00**	U	4.0E+00	4.0E+00	7.21E+00	pCi/L		*0.27*	7/1/16 01:14 p		1.9705	GER13$1
						3.61E+00	5.00E+01	*0.97*			L	
EU-154	**-2.98E+00**	U	5.2E+00	5.2E+00	8.99E+00	pCi/L		*-0.33*	7/1/16 01:14 p		1.9705	GER13$1
						4.53E+00	5.00E+01	*-(1.1)*			L	
EU-155	**2.44E+00**	U	3.0E+00	3.0E+00	5.82E+00	pCi/L		*0.42*	7/1/16 01:14 p		1.9705	GER13$1
						2.91E+00	5.00E+01	*(1.6)*			L	
K-40	**1.63E+01**	U	3.7E+01	3.7E+01	1.95E+01	pCi/L		*0.84*	7/1/16 01:14 p		1.9705	GER13$1
						1.00E+01		*0.88*			L	
SB-125	**1.07E-01**	U	3.7E+00	3.7E+00	6.39E+00	pCi/L		*0.02*	7/1/16 01:14 p		1.9705	GER13$1
						3.19E+00	5.00E+01	*0.06*			L	

No. of Results: 8 **Comments:**

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TestAmerica Inc
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V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 10:54:00 AM
Lot-Sample No.:	**J6E260416-4**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B350H0**	**COC No. :**	I16-023-285	**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: 6165028	C14_LSC			**Work Order:**	M8N1Q1AC		**Report DB ID:**	9M8N1Q10				
C-14	**2.53E+01**		7.6E+00	9.0E+00	1.62E+01	pCi/L	100%	*(1.6)*	6/22/16 10:03 p		0.075	LSC9
						7.80E+00	5.00E+01	*(5.6)*			L	
Batch: 6165030	GAMMA_GS			**Work Order:**	M8N1Q1AD		**Report DB ID:**	9M8N1Q10				
CO-60	**4.74E-01**	U	2.1E+00	2.1E+00	3.92E+00	pCi/L		*0.12*	7/1/16 01:13 p		2.0032	GER12$1
						1.95E+00	2.50E+01	*0.46*			L	
CS-134	**1.28E+00**	U	2.1E+00	2.1E+00	4.03E+00	pCi/L		*0.32*	7/1/16 01:13 p		2.0032	GER12$1
						1.95E+00	8.00E+01	*(1.2)*			L	
CS-137	**9.44E-02**	U	1.9E+00	1.9E+00	3.39E+00	pCi/L		*0.03*	7/1/16 01:13 p		2.0032	GER12$1
						1.70E+00	1.50E+01	*0.1*			L	
EU-152	**-2.51E+00**	U	5.2E+00	5.2E+00	8.89E+00	pCi/L		*-0.28*	7/1/16 01:13 p		2.0032	GER12$1
						4.43E+00	5.00E+01	*-0.96*			L	
EU-154	**5.69E+00**	U	6.1E+00	6.1E+00	1.22E+01	pCi/L		*0.47*	7/1/16 01:13 p		2.0032	GER12$1
						6.07E+00	5.00E+01	*(1.9)*			L	
EU-155	**5.28E+00**	U	4.8E+00	4.8E+00	8.93E+00	pCi/L		*0.59*	7/1/16 01:13 p		2.0032	GER12$1
						4.41E+00	5.00E+01	*(2.2)*			L	
K-40	**-6.46E+01**	U	5.5E+01	5.5E+01	1.11E+02	pCi/L		*-0.58*	7/1/16 01:13 p		2.0032	GER12$1
						5.54E+01		*-(2.3)*			L	
SB-125	**-3.58E+00**	U	4.9E+00	4.9E+00	8.14E+00	pCi/L		*-0.44*	7/1/16 01:13 p		2.0032	GER12$1
						3.98E+00	5.00E+01	*-(1.4)*			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8N1Q1AF		**Report DB ID:**	9M8N1Q10				

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TestAmerica Inc
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 10:54:00 AM
Lot-Sample No.:	**J6E260416-4**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B350H0**	**COC No. :**	I16-023-285	**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
Tc-99	**1.23E+00**	U	3.7E+00	4.1E+00	8.80E+00	pCi/L	100%	*0.14*	7/14/16 04:24 a		0.1316	LSC8
						4.21E+00	5.00E+01	*0.6*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8N1Q1AE		**Report DB ID:**	9M8N1Q10				
STRONTIUM	**-1.17E-01**	U	7.0E-01	7.0E-01	1.28E+00	pCi/L	82%	*-0.09*	7/1/16 03:51 p		0.5109	GPC32D
						5.87E-01	2.00E+00	*-0.34*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8N1Q1AA		**Report DB ID:**	9M8N1Q10				
H-3	**6.72E+03**		3.1E+02	3.7E+02	3.29E+02	pCi/L	100%	*(20.4)*	6/29/16 12:16 p		0.005	LSC2
						1.57E+02	7.00E+02	*(36.6)*			L	

No. of Results: 12 **Comments:**

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TestAmerica Inc
rptSTLRchSample
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 11:15:00 AM
Lot-Sample No.:	**J6E260416-5**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B350L3**	**COC No. :**	I16-023-293	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8N1X1AC		**Report DB ID:**	9M8N1X10				
STRONTIUM	**-1.97E-02**	U	6.7E-01	6.7E-01	1.22E+00	pCi/L	83%	*-0.02*	7/1/16 04:50 p		0.5062	GPC31A
						5.55E-01	2.00E+00	*-0.06*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8N1X1AA		**Report DB ID:**	9M8N1X10				
H-3	**1.56E+04**		4.4E+02	6.2E+02	3.25E+02	pCi/L	100%	*(47.9)*	6/29/16 01:38 p		0.00501	LSC9
						1.55E+02	7.00E+02	*(50.6)*			L	

No. of Results: 2 **Comments:**

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TestAmerica Inc
rptSTLRchSample
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 10:47:00 AM
Lot-Sample No.:	**J6E260416-6**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B350M4**	**COC No. :**	I16-023-297	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8N151AC			**Report DB ID:** 9M8N1510					
STRONTIUM	**1.34E+00**		8.0E-01	8.6E-01	1.18E+00	pCi/L	78%	*(1.1)*	7/1/16 04:50 p		0.5155	GPC31B
						5.33E-01	2.00E+00	*(3.1)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:** M8N151AA			**Report DB ID:** 9M8N1510					
H-3	**3.55E+03**		2.4E+02	2.7E+02	3.25E+02	pCi/L	100%	*(10.9)*	6/29/16 03:00 p		0.00502	LSC9
						1.55E+02	7.00E+02	*(26.4)*			L	

No. of Results: 2 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchSample V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/26/2016 8:27:00 AM
Lot-Sample No.:	**J6E310411-1**	**Report No. :**	69076	**Received Date:**	5/26/2016 2:00:00 PM
Client Sample ID:	**B35144**	**COC No. :**	S16-005-203	**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: 6165032	9310_ALPHABETA_GPC			**Work Order:** M8PJG1AA			**Report DB ID:** 9M8PJG10					
Alpha	**2.14E-02**	U	2.1E+00	2.1E+00	3.72E+00	pCi/L	100%	*0.01*	7/20/16 07:21 p		0.1214	GPC22A
						1.71E+00	3.00E+00	*0.02*			L	
Batch: 6165035	9310_ALPHABETA_GPC			**Work Order:** M8PJG1AC			**Report DB ID:** 9M8PJG10					
Beta	**2.57E+01**		2.0E+00	3.7E+00	1.81E+00	pCi/L	100%	*(14.2)*	7/20/16 06:42 p		0.2069	GPC27B
						8.69E-01	4.00E+00	*(13.8)*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8PJG1AD			**Report DB ID:** 9M8PJG10					
STRONTIUM	**6.58E-01**	U	7.6E-01	7.7E-01	1.23E+00	pCi/L	73%	*0.53*	7/1/16 04:50 p		0.5152	GPC31C
						5.57E-01	2.00E+00	*(1.7)*			L	

No. of Results: 3 **Comments:**

July 29, 2016

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TestAmerica Inc
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V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/26/2016 8:16:00 AM
Lot-Sample No.:	**J6E310411-2**	**Report No. :**	69076	**Received Date:**	5/26/2016 2:00:00 PM
Client Sample ID:	**B351B4**	**COC No. :**	S16-005-223	**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: 6165040	906.0_H3_LSC			**Work Order:** M8PJH1AA			**Report DB ID:** 9M8PJH10					
H-3	**7.66E+02**		1.6E+02	1.8E+02	3.27E+02	pCi/L	100%	*(2.3)*	6/29/16 04:22 p		0.00501	LSC9
						1.56E+02	7.00E+02	*(8.7)*			L	

No. of Results: 1 **Comments:**

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/27/2016 8:13:00 AM
Lot-Sample No.:	**J6E310415-1**	**Report No. :**	69076	**Received Date:**	5/27/2016 3:20:00 PM
Client Sample ID:	**B351C3**	**COC No. :**	S16-005-226	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8PJ71AC			**Report DB ID:** 9M8PJ710					
STRONTIUM	**3.10E-01**	U	7.2E-01	7.3E-01	1.24E+00	pCi/L	83%	*0.25*	7/1/16 04:50 p		0.5027	GPC32A
						5.64E-01	2.00E+00	*0.85*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:** M8PJ71AA			**Report DB ID:** 9M8PJ710					
H-3	**2.15E+03**		2.0E+02	2.2E+02	3.26E+02	pCi/L	100%	*(6.6)*	6/29/16 05:43 p		0.00503	LSC9
						1.56E+02	7.00E+02	*(19.2)*			L	

No. of Results: 2 **Comments:**

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TestAmerica Inc
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/26/2016 11:29:00 AM
Lot-Sample No.:	**J6E310411-3**	**Report No. :**	69076	**Received Date:**	5/26/2016 2:00:00 PM
Client Sample ID:	**B351C8**	**COC No. :**	S16-005-228	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8PJJ1AA			**Report DB ID:** 9M8PJJ10					
STRONTIUM	**1.89E+00**		7.9E-01	9.0E-01	1.05E+00	pCi/L	84%	*(1.8)*	7/1/16 04:50 p		0.5089	GPC31D
						4.73E-01	2.00E+00	*(4.2)*			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 10:35:00 AM
Lot-Sample No.:	**J6F060405-1**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B358B1**	**COC No. :**	I16-025-021	**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: 6165040	906.0_H3_LSC			**Work Order:** M8P741AA			**Report DB ID:** 9M8P7410					
H-3	**2.29E+02**	U	1.4E+02	1.5E+02	3.22E+02	pCi/L	100%	*0.71*	6/29/16 08:27 p		0.00503	LSC9
						1.54E+02	7.00E+02	*(3.)*			L	

No. of Results: 1 **Comments:**

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TestAmerica Inc

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 12:25:00 PM
Lot-Sample No.:	**J6F060408-2**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35BP8**	**COC No. :**	S16-006-439	**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: 6165035	9310_ALPHABETA_GPC			**Work Order:** M8P8V1AC			**Report DB ID:** 9M8P8V10					
Beta	**2.59E+03**		1.7E+01	3.2E+02	1.87E+00	pCi/L	100%	*(1379.9)*	7/20/16 10:30 p		0.2078	GPC27C
						9.01E-01	4.00E+00	*(16.2)*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8P8V1AD			**Report DB ID:** 9M8P8V10					
STRONTIUM	**1.36E+03**		1.4E+01	3.1E+02	1.02E+00	pCi/L	88%	*(1332.4)*	7/1/16 05:47 p		0.5013	GPC31D
						4.59E-01	2.00E+00	*(8.8)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:** M8P8V1AA			**Report DB ID:** 9M8P8V10					
H-3	**9.89E+03**		3.6E+02	4.6E+02	3.27E+02	pCi/L	100%	*(30.2)*	6/29/16 11:11 p		0.00502	LSC9
						1.56E+02	7.00E+02	*(43.2)*			L	

No. of Results: 3 **Comments:**

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TestAmerica Inc
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 11:11:00 AM
Lot-Sample No.:	**J6F060408-3**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35C70**	**COC No. :**	S16-006-470	**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: 6165035	9310_ALPHABETA_GPC			**Work Order:** M8P8W1AC			**Report DB ID:** 9M8P8W10					
Beta	**3.48E+03**		2.0E+01	4.5E+02	2.05E+00	pCi/L	100%	*(1699.8)*	7/20/16 10:30 p		0.2017	GPC28A
						9.84E-01	4.00E+00	*(15.5)*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8P8W1AD			**Report DB ID:** 9M8P8W10					
STRONTIUM	**2.14E+03**		1.8E+01	4.9E+02	1.16E+00	pCi/L	88%	*(1843.6)*	7/1/16 05:47 p		0.507	GPC32A
						5.29E-01	2.00E+00	*(8.7)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:** M8P8W1AA			**Report DB ID:** 9M8P8W10					
H-3	**9.68E+03**		3.6E+02	4.5E+02	3.28E+02	pCi/L	100%	*(29.5)*	6/30/16 12:33 a		0.005	LSC9
						1.56E+02	7.00E+02	*(42.8)*			L	

No. of Results: 3 **Comments:**

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FORM I

SAMPLE RESULTS

Date: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 10:00:00 AM
Lot-Sample No.:	**J6F060408-4**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CR2**	**COC No. :**	S16-006-509	**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: 6165033	SE79_SEP_IE_LSC			**Work Order:**	M8P8X1AC		**Report DB ID:**	9M8P8X10				
Se-79	**3.21E+01**		6.3E+00	4.7E+01	1.26E+01	pCi/L	73%	*(2.6)*	7/29/16 04:14 a		0.2016	LSC8
						6.01E+00	3.00E+01	*(1.4)*			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8P8X1AD		**Report DB ID:**	9M8P8X10				
Tc-99	**1.00E+04**		5.4E+01	2.2E+02	9.14E+00	pCi/L	100%	*(1094.2)*	7/14/16 08:33 a		0.1268	LSC8
						4.37E+00	5.00E+01	*(92.2)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8P8X1AA		**Report DB ID:**	9M8P8X10				
H-3	**3.28E+03**		2.3E+02	2.6E+02	3.26E+02	pCi/L	100%	*(10.1)*	6/30/16 01:55 a		0.00504	LSC9
						1.55E+02	7.00E+02	*(25.2)*			L	

No. of Results: 3 **Comments:**

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TestAmerica Inc
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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 10:52:00 AM
Lot-Sample No.:	**J6F060408-1**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CV6**	**COC No. :**	S16-006-517	**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: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8P8T1AC		**Report DB ID:**	9M8P8T10				
Tc-99	**1.41E+01**		4.2E+00	4.6E+00	8.88E+00	pCi/L	100%	*(1.6)*	7/14/16 06:28 a		0.1305	LSC8
						4.25E+00	5.00E+01	*(6.2)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8P8T1AA		**Report DB ID:**	9M8P8T10				
H-3	**-8.26E+01**	U	1.3E+02	1.4E+02	3.27E+02	pCi/L	100%	*-0.25*	6/29/16 09:49 p		0.00502	LSC9
						1.56E+02	7.00E+02	*-(1.2)*			L	

No. of Results: 2 **Comments:**

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 9:49:00 AM
Lot-Sample No.:	**J6F060408-7**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CW8**	**COC No. :**	S16-006-521	**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: 6165031	UISO_PLATE_AEA			**Work Order:**	M8P821AG		**Report DB ID:**	9M8P8210				
U-234	**6.42E-01**		3.2E-01	3.4E-01	1.47E-01	pCi/L	82%	*(4.4)*	7/13/16 08:34 p		0.2091	ALP405
						3.75E-02	1.00E+00	*(3.8)*			L	
U-235	**8.02E-02**	U	1.1E-01	1.1E-01	1.47E-01	pCi/L	82%	*0.54*	7/13/16 08:34 p		0.2091	ALP405
						3.75E-02	1.00E+00	*(1.4)*			L	
U-238	**9.16E-01**		3.8E-01	4.1E-01	1.64E-01	pCi/L	82%	*(5.6)*	7/13/16 08:34 p		0.2091	ALP405
						4.46E-02	1.00E+00	*(4.5)*			L	
							Ratio U-234/238 = 0.7					
Batch: 6165033	SE79_SEP_IE_LSC			**Work Order:**	M8P821AD		**Report DB ID:**	9M8P8210				
Se-79	**1.75E+01**		4.8E+00	2.6E+01	1.00E+01	pCi/L	88%	*(1.7)*	7/29/16 07:02 a		0.2088	LSC8
						4.79E+00	3.00E+01	*(1.3)*			L	
Batch: 6165034	I129LL_SEP_LEPS_GS			**Work Order:**	M8P821AC		**Report DB ID:**	9M8P8210				
I129	**1.62E-01**	U	2.7E-01	2.7E-01	5.21E-01	pCi/L	92%	*0.31*	7/11/16 09:54 p		2.0007	LEP5$1
						2.43E-01	1.00E+00	*(1.2)*			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8P821AF		**Report DB ID:**	9M8P8210				
Tc-99	**5.65E+03**		4.0E+01	1.3E+02	8.97E+00	pCi/L	100%	*(629.9)*	7/14/16 11:39 a		0.1292	LSC8
						4.30E+00	5.00E+01	*(90.2)*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8P821AE		**Report DB ID:**	9M8P8210				
STRONTIUM	**8.00E-01**	U	7.4E-01	7.6E-01	1.17E+00	pCi/L	84%	*0.68*	7/1/16 05:47 p		0.501	GPC32C
						5.32E-01	2.00E+00	*(2.1)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8P821AA		**Report DB ID:**	9M8P8210				

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 9:49:00 AM
Lot-Sample No.:	**J6F060408-7**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CW8**	**COC No. :**	S16-006-521	**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
H-3	**6.37E+03**		3.0E+02	3.6E+02	3.26E+02	pCi/L	100%	*(19.5)*	6/30/16 06:01 a		0.00503	LSC9
						1.55E+02	7.00E+02	*(35.9)*			L	

No. of Results: 8 **Comments:**

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 9:49:00 AM
Lot-Sample No.:	**J6F060408-6**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CW9**	**COC No. :**	S16-006-523	**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: 6165031	UISO_PLATE_AEA			**Work Order:** M8P811AG			**Report DB ID:** 9M8P8110					
U-234	**3.76E-01**		2.5E-01	2.6E-01	1.54E-01	pCi/L	80%	*(2.4)*	7/13/16 08:33 p		0.2039	ALP403
						3.90E-02	1.00E+00	*(2.9)*			L	
U-235	**8.36E-02**	U	1.2E-01	1.2E-01	1.54E-01	pCi/L	80%	*0.54*	7/13/16 08:33 p		0.2039	ALP403
						3.90E-02	1.00E+00	*(1.4)*			L	
U-238	**3.34E-01**		2.4E-01	2.4E-01	1.54E-01	pCi/L	80%	*(2.2)*	7/13/16 08:33 p		0.2039	ALP403
						3.90E-02	1.00E+00	*(2.8)*			L	
							Ratio U-234/238 = 1.1					
Batch: 6165033	SE79_SEP_IE_LSC			**Work Order:** M8P811AD			**Report DB ID:** 9M8P8110					
Se-79	**1.63E+01**		5.0E+00	2.6E+01	1.06E+01	pCi/L	85%	*(1.5)*	7/29/16 06:20 a		0.2044	LSC8
						5.09E+00	3.00E+01	*(1.3)*			L	
Batch: 6165034	I129LL_SEP_LEPS_GS			**Work Order:** M8P811AC			**Report DB ID:** 9M8P8110					
I129	**6.11E-01**	U	4.6E-01	4.6E-01	9.46E-01	pCi/L	79%	*0.65*	7/11/16 09:53 p		2.0027	LEP4$1
						3.74E-01	1.00E+00	*(2.7)*			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:** M8P811AF			**Report DB ID:** 9M8P8110					
Tc-99	**5.62E+03**		4.0E+01	1.2E+02	9.08E+00	pCi/L	100%	*(619.3)*	7/14/16 10:37 a		0.1273	LSC8
						4.35E+00	5.00E+01	*(90.1)*			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8P811AE			**Report DB ID:** 9M8P8110					
STRONTIUM	**3.90E-01**	U	6.4E-01	6.4E-01	1.07E+00	pCi/L	84%	*0.36*	7/1/16 05:47 p		0.5119	GPC32B
						4.84E-01	2.00E+00	*(1.2)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:** M8P811AA			**Report DB ID:** 9M8P8110					

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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.

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SAMPLE RESULTS

Date: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 9:49:00 AM
Lot-Sample No.:	**J6F060408-6**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CW9**	**COC No. :**	S16-006-523	**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
H-3	**6.41E+03**		3.0E+02	3.6E+02	3.30E+02	pCi/L	100%	*(19.4)*	6/30/16 04:39 a		0.00501	LSC9
						1.57E+02	7.00E+02	*(35.8)*			L	

No. of Results: 8 **Comments:**

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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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/7/2016 10:32:00 AM
Lot-Sample No.:	**J6F080405-1**	**Report No. :**	69076	**Received Date:**	6/7/2016 2:50:00 PM
Client Sample ID:	**B35D09**	**COC No. :**	S16-006-534	**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: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8QJF1AC		**Report DB ID:**	9M8QJF10				
Tc-99	**7.61E+00**	U	4.0E+00	4.4E+00	9.05E+00	pCi/L	100%	*0.84*	7/14/16 12:41 p		0.1285	LSC8
						4.33E+00	5.00E+01	*(3.4)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8QJF1AA		**Report DB ID:**	9M8QJF10				
H-3	**-3.51E+01**	U	1.3E+02	1.4E+02	3.29E+02	pCi/L	100%	*-0.11*	6/30/16 07:23 a		0.00502	LSC9
						1.57E+02	7.00E+02	*-0.49*			L	

No. of Results: 2 **Comments:**

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TestAmerica Inc
rptSTLRchSample
V5.6 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: 29-Jul-16

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 1:09:00 PM
Lot-Sample No.:	**J6F060408-5**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35D49**	**COC No. :**	S16-006-549	**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: 6165033	SE79_SEP_IE_LSC			**Work Order:**	M8P801AD		**Report DB ID:**	9M8P8010				
Se-79	**-3.03E+00**	U	4.2E+00	7.1E+00	1.05E+01	pCi/L	87%	*-0.29*	7/29/16 05:38 a		0.2013	LSC8
						5.03E+00	3.00E+01	*-0.85*			L	
Batch: 6165034	I129LL_SEP_LEPS_GS			**Work Order:**	M8P801AC		**Report DB ID:**	9M8P8010				
I129	**1.83E-01**	U	2.8E-01	2.8E-01	5.80E-01	pCi/L	95%	*0.32*	7/11/16 07:33 p		2.002	LEP481
						2.77E-01	1.00E+00	*(1.3)*			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8P801AE		**Report DB ID:**	9M8P8010				
Tc-99	**1.70E+01**		4.2E+00	4.6E+00	8.87E+00	pCi/L	100%	*(1.9)*	7/14/16 09:35 a		0.1307	LSC8
						4.25E+00	5.00E+01	*(7.3)*			L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8P801AA		**Report DB ID:**	9M8P8010				
H-3	**-7.04E+01**	U	1.3E+02	1.4E+02	3.29E+02	pCi/L	100%	*-0.21*	6/30/16 03:17 a		0.00502	LSC9
						1.57E+02	7.00E+02	*-1.*			L	

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

July 29, 2016

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TestAmerica Inc
rptSTLRchSample
V5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	5/25/2016 10:54:00 AM
Lot-Sample No.:	**J6E260416-4**	**Report No. :**	69076	**Received Date:**	5/25/2016 2:15:00 PM
Client Sample ID:	**B350H0 DUP**	**COC No. :**	I16-023-285	**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: 6165036	TC99_ETVDSK_LSC			**Work Order:** M8N1Q1AG		**Report DB ID:** M8N1Q1GR			**Orig Sa DB ID:** 9M8N1Q10			
Tc-99	3.25E+00	U	3.8E+00	4.3E+00	9.03E+00	pCi/L	100%	0.36	7/14/16 05:26 a		0.1282	LSC8
	1.23E+00	U	**RPD**	**90.4**		5.00E+01		(1.5)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07482	**Collection Date:**	5/23/2016 8:47:00 AM
Lot-Sample No.:	**J6E250414-1**	**Report No. :**	69076	**Received Date:**	5/23/2016 2:10:00 PM
Client Sample ID:	**B352K6 DUP**	**COC No. :**	X16-031-336	**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: 6165040	906.0_H3_LSC			**Work Order:**	M8NQ01AD	**Report DB ID:**	M8NQ01DR		**Orig Sa DB ID:**	9M8NQ010		
H-3	3.39E+05		1.9E+03	9.3E+03	3.20E+02	pCi/L	100%	(1057.7)	6/29/16 05:26 a		0.00502	LSC9
	3.36E+05		**RPD**	**0.8**		7.00E+02		(73.1)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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

rptSTLRchDupV5.6 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07482	**Collection Date:**	6/2/2016 12:53:00 PM
Lot-Sample No.:	**J6F060407-1**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B358L4 DUP**	**COC No. :**	X16-033-089	**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: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:** M8P8J1AE		**Report DB ID:** M8P8J1ER			**Orig Sa DB ID:** 9M8P8J10			
STRONTIUM	4.90E+02		8.7E+00	1.1E+02	1.18E+00	pCi/L	85%	(417.)	7/1/16 05:47 p		0.5098	GPC31A
	4.74E+02		**RPD**	**3.4**		2.00E+00		(8.8)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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

rptSTLRchDupV5.6 A2002 **MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.**

FORM II

Date: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07482	**Collection Date:**	5/31/2016 12:26:00 PM
Lot-Sample No.:	**J6F010407-1**	**Report No. :**	69076	**Received Date:**	5/31/2016 3:10:00 PM
Client Sample ID:	**B358N1 DUP**	**COC No. :**	X16-033-092	**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: 6165032	9310_ALPHABETA_GPC			**Work Order:** M8PMF2AE		**Report DB ID:** M8PMF2ER			**Orig Sa DB ID:** 9M8PMF10			
Alpha	-2.46E-01	U	7.6E-01	7.6E-01	1.44E+00	pCi/L	100%	-0.17	7/29/16 02:14 p		0.1985	GPC23D
	-9.76E-01	U	**RPD**	**-119.3**		3.00E+00		-0.65			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07482	**Collection Date:**	5/31/2016 1:18:00 PM
Lot-Sample No.:	**J6F020405-1**	**Report No. :**	69076	**Received Date:**	6/1/2016 10:40:00 AM
Client Sample ID:	**B358N6 DUP**	**COC No. :**	X16-033-093	**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: 6165035	9310_ALPHABETA_GPC			**Work Order:** M8PWA1AF		**Report DB ID:** M8PWA1FR			**Orig Sa DB ID:** 9M8PWA10			
Beta	1.41E+02		4.0E+00	1.8E+01	1.72E+00	pCi/L	100%	(81.9)	7/20/16 10:30 p		0.2033	GPC26C
	1.45E+02		**RPD**	**3.2**		4.00E+00		(15.3)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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

rptSTLRchDupV5.6 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07500	**Collection Date:**	6/6/2016 9:31:00 AM
Lot-Sample No.:	**J6F070415-4**	**Report No. :**	69076	**Received Date:**	6/6/2016 3:00:00 PM
Client Sample ID:	**B35CP9 DUP**	**COC No. :**	S16-006-508	**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: 6165030	GAMMA_GS			**Work Order:**	M8QEN1AP	**Report DB ID:**	M8QEN1PR		**Orig Sa DB ID:** 9M8QEN10			
CO-60	-4.17E-01	U	2.0E+00	2.0E+00	3.62E+00	pCi/L		-0.12	7/5/16 09:57 a		1.9898	GER13$1
	1.10E+00	U	**RPD**	**444.9**		2.50E+01		-0.41			L	
CS-134	6.25E-01	U	1.5E+00	1.5E+00	2.89E+00	pCi/L		0.22	7/5/16 09:57 a		1.9898	GER13$1
	7.10E-02	U	**RPD**	**159.2**		8.00E+01		0.83			L	
CS-137	4.78E-01	U	1.5E+00	1.5E+00	2.81E+00	pCi/L		0.17	7/5/16 09:57 a		1.9898	GER13$1
	2.57E+00	U	**RPD**	**137.2**		1.50E+01		0.63			L	
EU-152	3.42E-01	U	3.7E+00	3.7E+00	6.55E+00	pCi/L		0.05	7/5/16 09:57 a		1.9898	GER13$1
	4.35E-01	U	**RPD**	**23.8**		5.00E+01		0.19			L	
EU-154	-2.36E+00	U	4.5E+00	4.5E+00	7.73E+00	pCi/L		-0.31	7/5/16 09:57 a		1.9898	GER13$1
	-2.98E+00	U	**RPD**	**-23.4**		5.00E+01		-(1.1)			L	
EU-155	3.57E+00	U	3.3E+00	3.3E+00	6.09E+00	pCi/L		0.59	7/5/16 09:57 a		1.9898	GER13$1
	-4.28E+00	U	**RPD**	**-2202.2**		5.00E+01		(2.2)			L	
K-40	-2.16E+01	U	3.4E+01	3.4E+01	6.77E+01	pCi/L		-0.32	7/5/16 09:57 a		1.9898	GER13$1
	-5.13E+01	U	**RPD**	**-81.6**				-(1.3)			L	
SB-125	1.10E+00	U	3.7E+00	3.7E+00	6.63E+00	pCi/L		0.17	7/5/16 09:57 a		1.9898	GER13$1
	3.61E-01	U	**RPD**	**101.3**		5.00E+01		0.59			L	

No. of Results: 8 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 10:00:00 AM
Lot-Sample No.:	**J6F060408-4**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CR2 DUP**	**COC No. :**	S16-006-509	**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: 6165033	SE79_SEP_IE_LSC			**Work Order:**	M8P8X1AE	**Report DB ID:**	M8P8X1ER		**Orig Sa DB ID:** 9M8P8X10			
Se-79	3.31E+01		5.3E+00	4.8E+01	1.01E+01	pCi/L	91%	(3.3)	7/29/16 04:56 a		0.201	LSC8
	3.21E+01		**RPD**	**3.2**		5.00E+01		(1.4)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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

rptSTLRchDupV5.6 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

Date: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 9:49:00 AM
Lot-Sample No.:	**J6F060408-6**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35CW9 DUP**	**COC No. :**	S16-006-523	**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: 6165031	UISO_PLATE_AEA			**Work Order:**	M8P811AH	**Report DB ID:**	M8P811HR		**Orig Sa DB ID:** 9M8P8110			
U-234	9.97E-01		3.9E-01	4.2E-01	1.41E-01	pCi/L	83%	(7.1)	7/13/16 08:33 p		0.2114	ALP404
	3.76E-01		**RPD**	**90.4**		1.00E+00		(4.7)			L	
U-235	0.00E+00	U	0.0E+00	7.7E-02	1.41E-01	pCi/L	83%	0.	7/13/16 08:33 p		0.2114	ALP404
	8.36E-02	U	**RPD**	**200.0**		1.00E+00		0.			L	
U-238	4.60E-01		2.7E-01	2.8E-01	1.41E-01	pCi/L	83%	(3.3)	7/13/16 08:33 p		0.2114	ALP404
	3.34E-01		**RPD**	**31.7**		1.00E+00		(3.3)			L	

Ratio U-234/238 = 2.2 ***Alpha Spec Result Sum = 1.5E+00***

No. of Results: 3 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07500	**Collection Date:**	6/6/2016 10:20:00 AM
Lot-Sample No.:	**J6F070415-5**	**Report No. :**	69076	**Received Date:**	6/6/2016 3:00:00 PM
Client Sample ID:	**B35D25 DUP**	**COC No. :**	S16-006-539	**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: 6165028	C14_LSC			**Work Order:** M8QEP1AN		**Report DB ID:** M8QEP1NR			**Orig Sa DB ID:** 9M8QEP10			
C-14	-1.81E+00	U	6.8E+00	8.1E+00	1.63E+01	pCi/L	100%	-0.11	6/23/16 01:09 a		0.075	LSC9
	6.02E+00	U	**RPD**	**371.7**		5.00E+01		-0.45			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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: 29-Jul-16

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	W07485	**Collection Date:**	6/3/2016 1:09:00 PM
Lot-Sample No.:	**J6F060408-5**	**Report No. :**	69076	**Received Date:**	6/3/2016 3:05:00 PM
Client Sample ID:	**B35D49 DUP**	**COC No. :**	S16-006-549	**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: 6165034	I129LL_SEP_LEPS_GS			**Work Order:** M8P801AF		**Report DB ID:** M8P801FR			**Orig Sa DB ID:** 9M8P8010			
I129	1.95E-01	U	2.3E-01	2.3E-01	4.52E-01	pCi/L	96%	0.43	7/11/16 07:35 p		2.0026	LEP5$1
	1.83E-01	U	**RPD**	**6.5**		1.00E+00		(1.7)			L	

No. of Results: 1 **Comments:**

July 29, 2016

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TestAmerica Inc

rptSTLRchDupV5.6 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

BLANK RESULTS

Date: 29-Jul-16

Lab Name: TestAmerica Inc

Matrix: WATER

SDG: W07485

Report No. : 69076

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: 6165028	C14_LSC			**Work Order:**	M8Q481AA		**Report DB ID:**	M8Q481AB				
C-14	9.68E+00	U	7.2E+00	8.5E+00	1.65E+01	pCi/L	100%	0.59	6/23/16 04:14 a		0.075	LSC9
					7.97E+00	5.00E+01		(2.3)			L	
Batch: 6165031	UISO_PLATE_AEA			**Work Order:**	M8Q5C1AA		**Report DB ID:**	M8Q5C1AB				
U-234	2.57E-02	U	7.7E-02	7.7E-02	1.76E-01	pCi/L	86%	0.15	7/13/16 08:38 p		0.2043	ALP414
					5.21E-02	1.00E+00		0.67			L	
U-235	2.88E-02	U	7.6E-02	7.7E-02	1.66E-01	pCi/L	86%	0.17	7/13/16 08:38 p		0.2043	ALP414
					4.75E-02	1.00E+00		0.75			L	
U-238	1.97E-02	U	7.7E-02	7.7E-02	1.92E-01	pCi/L	86%	0.1	7/13/16 08:38 p		0.2043	ALP414
					6.00E-02	1.00E+00		0.51			L	
							Ratio U-234/238 = 1.3					
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8Q5M1AA		**Report DB ID:**	M8Q5M1AB				
H-3	-1.85E+02	U	1.3E+02	1.4E+02	3.37E+02	pCi/L	100%	-0.55	6/30/16 08:45 a		0.00502	LSC9
					1.61E+02	7.00E+02		-(2.7)			L	
Batch: 6165030	GAMMA_GS			**Work Order:**	M8Q5A1AA		**Report DB ID:**	M8Q5A1AB				
CO-60	-8.29E-01	U	1.5E+00	1.5E+00	2.59E+00	pCi/L		-0.32	7/5/16 10:01 a		2.0	GER17$1
					1.31E+00	2.50E+01		-(1.1)			L	
CS-134	-3.17E-01	U	1.1E+00	1.1E+00	2.02E+00	pCi/L		-0.16	7/5/16 10:01 a		2.0	GER17$1
					1.02E+00	1.50E+01		-0.57			L	
CS-137	-7.55E-01	U	1.1E+00	1.1E+00	1.88E+00	pCi/L		-0.4	7/5/16 10:01 a		2.0	GER17$1
					9.49E-01	1.50E+01		-(1.3)			L	
EU-152	8.24E-01	U	2.5E+00	2.5E+00	4.67E+00	pCi/L		0.18	7/5/16 10:01 a		2.0	GER17$1
					2.35E+00	5.00E+01		0.66			L	

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: 29-Jul-16

Lab Name: TestAmerica Inc

Matrix: WATER

SDG: W07485

Report No. : 69076

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
EU-154	-3.33E-01	U	4.3E+00	4.3E+00	8.01E+00	pCi/L		-0.04	7/5/16 10:01 a		2.0	GER17$1
					4.05E+00	5.00E+01		-0.16			L	
EU-155	-5.09E-01	U	1.9E+00	1.9E+00	3.29E+00	pCi/L		-0.15	7/5/16 10:01 a		2.0	GER17$1
					1.65E+00	5.00E+01		-0.55			L	
K-40	-2.26E+01	U	2.9E+01	2.9E+01	5.81E+01	pCi/L		-0.39	7/5/16 10:01 a		2.0	GER17$1
					2.91E+01			-(1.5)			L	
SB-125	1.94E+00	U	3.2E+00	3.2E+00	5.83E+00	pCi/L		0.33	7/5/16 10:01 a		2.0	GER17$1
					2.93E+00	5.00E+01		(1.2)			L	
Batch: 6165032	9310_ALPHABETA_GPC			**Work Order:**	M8Q5D1AA		**Report DB ID:**	M8Q5D1AB				
Alpha	5.29E-02	U	5.0E-01	5.0E-01	8.91E-01	pCi/L	100%	0.06	7/22/16 02:36 p		0.2041	GPC22C
					4.06E-01	3.00E+00		0.21			L	
Batch: 6165035	9310_ALPHABETA_GPC			**Work Order:**	M8Q5G1AA		**Report DB ID:**	M8Q5G1AB				
Beta	2.81E+00		1.1E+00	1.2E+00	1.69E+00	pCi/L	100%	(1.7)	7/20/16 10:30 p		0.2043	GPC28D
					8.12E-01	4.00E+00		(4.8)			L	
Batch: 6165034	I129LL_SEP_LEPS_GS			**Work Order:**	M8Q5F1AA		**Report DB ID:**	M8Q5F1AB				
I129	-1.62E-01	U	3.6E-01	3.6E-01	6.25E-01	pCi/L	89%	-0.26	7/12/16 02:17 p		2.0028	LEP4$1
					2.81E-01	1.00E+00		-0.9			L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8Q5L1AA		**Report DB ID:**	M8Q5L1AB				
STRONTIUM	4.70E-01	U	7.9E-01	8.0E-01	1.33E+00	pCi/L	79%	0.35	7/1/16 05:47 p		0.5016	GPC32D
					6.08E-01	2.00E+00		(1.2)			L	
Batch: 6165033	SE79_SEP_IE_LSC			**Work Order:**	M8Q5E1AA		**Report DB ID:**	M8Q5E1AB				

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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: 29-Jul-16

Lab Name: TestAmerica Inc

Matrix: WATER

SDG: W07485

Report No. : 69076

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
Se-79	4.40E+00	U	4.6E+00	1.2E+01	1.08E+01	pCi/L	82%	0.41	7/29/16 10:33 a		0.2072	LSC8
					5.19E+00	5.00E+01		0.76			L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8Q5H1AA		**Report DB ID:**	M8Q5H1AB				
Tc-99	1.25E+00	U	3.8E+00	4.3E+00	9.23E+00	pCi/L	100%	0.14	7/14/16 01:43 p		0.1253	LSC8
					4.42E+00	5.00E+01		0.58			L	

No. of Results: 19 **Comments:**

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TestAmerica Inc

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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: 29-Jul-16

Lab Name: TestAmerica Inc

SDG: W07485

Matrix: WATER

Report No. : 69076

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: 6165028	C14_LSC			**Work Order:**	M8Q481AC		**Report DB ID:**	M8Q481CS					
C-14	4.98E+02		1.7E+01	3.3E+01	1.67E+01	pCi/L	100%	4.83E+02	9.7E+00	103%	6/23/16 05:16 a	0.075	LSC9
							Rec Limits:	80	120	0.0		L	
Batch: 6165031	UISO_PLATE_AEA			**Work Order:**	M8Q5C1AC		**Report DB ID:**	M8Q5C1CS					
U-234	1.59E+01		1.5E+00	2.9E+00	2.25E-01	pCi/L	89%	1.58E+01	8.4E-02	100%	7/13/16 08:39 p	0.2051	ALP419
							Rec Limits:	80	120	0.0		L	
U-238	1.63E+01		1.5E+00	3.0E+00	2.25E-01	pCi/L	89%	1.66E+01	8.8E-02	98%	7/13/16 08:39 p	0.2051	ALP419
							Rec Limits:	80	120	0.0		L	
Batch: 6165040	906.0_H3_LSC			**Work Order:**	M8Q5M1AC		**Report DB ID:**	M8Q5M1CS					
H-3	2.71E+03		2.2E+02	2.5E+02	3.40E+02	pCi/L	100%	2.72E+03	8.2E+01	100%	6/30/16 10:06 a	0.00503	LSC9
							Rec Limits:	80	120	0.0		L	
Batch: 6165030	GAMMA_GS			**Work Order:**	M8Q5A1AC		**Report DB ID:**	M8Q5A1CS					
CO-60	4.01E+01		6.8E+00	6.8E+00	3.23E+00	pCi/L		3.76E+01	3.2E-01	107%	7/5/16 10:02 a	2.001	GER18$1
							Rec Limits:	80	120	0.1		L	
CS-137	5.23E+01		8.8E+00	8.8E+00	3.26E+00	pCi/L		5.03E+01	5.2E-01	104%	7/5/16 10:02 a	2.001	GER18$1
							Rec Limits:	80	120	0.0		L	
EU-152	6.41E+01		1.2E+01	1.2E+01	6.81E+00	pCi/L		7.69E+01	1.1E+00	83%	7/5/16 10:02 a	2.001	GER18$1
							Rec Limits:	80	120	-0.2		L	
Batch: 6165032	9310_ALPHABETA_GPC			**Work Order:**	M8Q5D1AC		**Report DB ID:**	M8Q5D1CS					
Alpha	2.09E+01		1.6E+00	5.5E+00	7.49E-01	pCi/L	100%	2.21E+01	2.2E-01	95%	7/22/16 02:36 p	0.2036	GPC22D
							Rec Limits:	80	120	-0.1		L	
Batch: 6165035	9310_ALPHABETA_GPC			**Work Order:**	M8Q5G1AC		**Report DB ID:**	M8Q5G1CS					

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

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FORM II

LCS RESULTS

Date: 29-Jul-16

Lab Name: TestAmerica Inc

SDG: W07482

Matrix: WATER

Report No. : 69076

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
Beta	2.38E+01		1.7E+00	3.4E+00	1.52E+00	pCi/L	100%	2.20E+01	1.6E-01	108%	7/21/16 05:15 p	0.2054	GPC31C
							Rec Limits:	80	120	0.1		L	
Batch: 6165034	I129LL_SEP_LEPS_GS			**Work Order:**	M8Q5F1AC		**Report DB ID:**	M8Q5F1CS					
I129	1.76E+01		2.4E+00	2.4E+00	7.83E-01	pCi/L	90%	1.91E+01	3.1E-01	92%	7/12/16 02:18 p	2.0013	LEP5$1
							Rec Limits:	80	120	-0.1		L	
Batch: 6165039	SRISO_SEP_PRECIP_GPC			**Work Order:**	M8Q5L1AC		**Report DB ID:**	M8Q5L1CS					
STRONTIUM	1.42E+01		1.7E+00	3.6E+00	1.17E+00	pCi/L	78%	1.33E+01	9.5E-02	107%	7/1/16 06:52 p	0.5103	GPC31B
							Rec Limits:	80	120	0.1		L	
Batch: 6165036	TC99_ETVDSK_LSC			**Work Order:**	M8Q5H1AC		**Report DB ID:**	M8Q5H1CS					
Tc-99	1.05E+02		6.6E+00	7.3E+00	9.07E+00	pCi/L	100%	1.08E+02	6.4E-01	98%	7/14/16 02:45 p	0.1271	LSC8
							Rec Limits:	80	120	0.0		L	

No. of Results: 12 **Comments:**

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

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FORM II

MATRIX SPIKE RESULTS

Date: 29-Jul-16

Lab Name: TestAmerica Inc **SDG:** W07482

Lot-Sample No.: J6E250414-2, B352L4 **Report No. :** 69076 **Matrix:** WATER

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: 6165040	**Work Order:** M8NQ11AD			**Report DB ID:** M8NQ11DW			**Orig Sa DB ID:** 9M8NQ110					
H-3	1.76E+03		1.6E+03	7.7E+03	3.79E+02	pCi/L	100%	116.50%	1.51E+03	6/29/16 08:10 a	0.00432	906.0_H3_LSC
	1.95E+05								4.5E+01		L	LSC9

Number of Results: 1

Comments:

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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.

V5.6 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 29-Jul-16

Lab Name: TestAmerica Inc **SDG:** W07485

Lot-Sample No.: J6F060408-1, B35CV6 **Report No. :** 69076 **Matrix:** WATER

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: 6165036	**Work Order:** M8P8T1AD			**Report DB ID:** M8P8T1DW			**Orig Sa DB ID:** 9M8P8T10					
Tc-99	5.12E+02		1.3E+01	1.8E+01	8.93E+00	pCi/L	100%	93.08%	5.50E+02	7/14/16 07:30 a	0.1296	TC99_ETVDSK_LSC
	1.41E+01								3.3E+00		L	LSC8

Number of Results: 1

Comments:

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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.

V5.6 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 29-Jul-16

Lab Name: TestAmerica Inc **SDG:** W07500

Lot-Sample No.: J6F070415-6, B35D26 **Report No. :** 69076 **Matrix:** WATER

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: 6165028	**Work Order:** M8QEQ1AN			**Report DB ID:** M8QEQ1NW			**Orig Sa DB ID:** 9M8QEQ10					
C-14	5.02E+02		1.7E+01	3.3E+01	1.65E+01	pCi/L	100%	104.67%	4.79E+02	6/23/16 03:13 a	0.075	C14_LSC
	-7.82E-01								9.6E+00		L	LSC9

Number of Results: 1

Comments:

July 29, 2016

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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.

V5.6 A2002