SAF-RC-074
100-D/DR Burial Grounds & Remaining Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 1/29/13
INITIAL/DATE

COMMENTS:

SDG J01678 SAF RC-074

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 100-D-100 BCL SPA

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 48 *Pages*

Report No.: 54365

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.
J01678	RC-074	J1R975	J3A240406-1	MXX5F1AC	9MXX5F10	3024031
		J1R976	J3A240406-2	MXX5G1AC	9MXX5G10	3024031
		J1R977	J3A240406-3	MXX5H1AC	9MXX5H10	3024031
		J1R978	J3A240406-4	MXX5J1AC	9MXX5J10	3024031
		J1R979	J3A240406-5	MXX5K1AC	9MXX5K10	3024031
		J1R985	J3A230412-1	MXXWP1AC	9MXXWP10	3023043
		J1R986	J3A230412-2	MXXWQ1AC	9MXXWQ10	3023043
		J1R987	J3A230412-3	MXXWR1AC	9MXXWR10	3023043
		J1R990	J3A240406-6	MXX5L1AC	9MXX5L10	3024031
		J1R991	J3A240406-7	MXX5M1AC	9MXX5M10	3024031
		J1R992	J3A240406-8	MXX5N1AC	9MXX5N10	3024031
		J1R993	J3A240406-9	MXX5P1AC	9MXX5P10	3024031
		J1R994	J3A240406-10	MXX5Q1AC	9MXX5Q10	3024031
	RC-074	J1RC29	J3A240406-11	MXX5R1AC	9MXX5R10	3024031

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

January 28, 2013

Attention: Joan Kessner

SAF Number	:	RC-074
Date SDG Closed	:	January 25, 2013
Number of Samples	:	Fourteen (14)
Sample Type	:	Soil
SDG Number	:	J01678
Data Deliverable	:	Quick Turn Metals / Summary

CASE NARRATIVE

I. Introduction

Between January 23, 2013 and January 24, 2013, fourteen soil samples were received at TestAmerica for analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Washington Closure Hanford (WCH) specific ID;

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1R985	MXXWP	SOIL	1/23/13
J1R986	MXXWQ	SOIL	1/23/13
J1R987	MXXWR	SOIL	1/23/13
J1R975	MXX5F	SOIL	1/24/13
J1R976	MXX5G	SOIL	1/24/13
J1R977	MXX5H	SOIL	1/24/13
J1R978	MXX5J	SOIL	1/24/13
J1R979	MXX5K	SOIL	1/24/13
J1R990	MXX5L	SOIL	1/24/13
J1R991	MXX5M	SOIL	1/24/13
J1R992	MXX5N	SOIL	1/24/13
J1R993	MXX5P	SOIL	1/24/13
J1R994	MXX5Q	SOIL	1/24/13
J1RC29	MXX5R	SOIL	1/24/13

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:

ICP Metals
ICP Metals by method SW-846 6010A
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

SDG J01678 includes a minimum of one Laboratory Control Samples (LCS), one method (reagent) blank, a duplicate sample, matrix spike sample and a matrix spike duplicate sample. Any exceptions have been noted in the "Comments" section.

Blanks and LCS are reported in mg/L units, other QC and sample results are reported in the same units.

V. Comments

ICP Metals
ICP Metals by method SW-846 6010A
Two batches were analyzed for the samples with the standard metal request list.

Batch 3023041:
The LCS, batch blank, samples, sample duplicate, MS, MSD, ICB, ICV, CCB and CCV results are within contractual limits.

Batch 3024032:
The LCS, batch blank, samples, sample duplicate, MS, MSD, ICB, ICV, CCB and CCV results are within contractual limits.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
Two batches were analyzed.

Batch 3023043:
The LCS, batch blank, samples, sample duplicate (J1R985) and sample matrix spike (J1R985) results are within contractual requirements.

Batch 3024031:
The LCS, batch blank, samples, sample duplicate (J1R975) and sample matrix spike (J1R975) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Washington Closure Hanford
January 28, 2013

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

TestAmerica
rptGeneralInfo v3.72

Sample Results Summary

TestAmerica TARL

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

Date: 28-Jan-13

Report No. : 54365

SDG No: J01678

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
3023043 7196_CR6									
J1R985									
	MXXWP1AC	HEXCHROME	2.87E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	MXXWP1CF	HEXCHROME	2.87E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	3.50E-01	0.0
J1R986									
	MXXWQ1A	HEXCHROME	2.44E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R987									
	MXXWR1A	HEXCHROME	3.93E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
3024031 7196_CR6									
J1R975									
	MXX5F1AC	HEXCHROME	3.17E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	MXX5F1AW	HEXCHROME	2.37E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01		28.9
J1R976									
	MXX5G1AC	HEXCHROME	3.42E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R977									
	MXX5H1AC	HEXCHROME	1.80E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R978									
	MXX5J1AC	HEXCHROME	2.21E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R979									
	MXX5K1AC	HEXCHROME	2.83E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R990									
	MXX5L1AC	HEXCHROME	1.80E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R991									
	MXX5M1AC	HEXCHROME	2.82E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R992									
	MXX5N1AC	HEXCHROME	3.68E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R993									
	MXX5P1AC	HEXCHROME	3.42E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1R994									
	MXX5Q1AC	HEXCHROME	3.31E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1RC29									
	MXX5R1AC	HEXCHROME	3.00E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 16

TestAmerica **RPD** - Relative Percent Difference.

rptSTLRchSaSum
mary2 V5.2.23
A2002

QC Results Summary

Date: 28-Jan-13

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 54365

SDG No.: J01678

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
7196_CR6								
3023043 MATRIX SPIKE, J1R985								
MXXWP1CE	HEXCHROME	2.61E+01 +- 0.0E+00		mg/kg	N/A	87%	-0.1	1.55E-01
3023043 LCS,								
MXXXT1AC	HEXCHROME	1.87E+01 +- 0.0E+00		mg/kg	N/A	98%	0.0	1.55E-01
3023043 BLANK QC,								
MXXXT1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01
7196_CR6								
3024031 MATRIX SPIKE, J1R975								
MXX5F1AW	HEXCHROME	2.77E+01 +- 0.0E+00		mg/kg	N/A	93%	-0.1	1.55E-01
3024031 LCS,								
MXX6J1AC	HEXCHROME	1.88E+01 +- 0.0E+00		mg/kg	N/A	99%	0.0	1.55E-01
3024031 BLANK QC,								
MXX6J1AB	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 6

TestAmerica

rptSTLRchQcSummary V5.2.23 A2002

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

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

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:09:00 PM
Lot-Sample No.:	**J3A240406-1**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R975**	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5F1AC		**Report DB ID:**	9MXX5F10				
HEXCHROME	**3.17E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.)*	1/24/13 10:30 a		2.507	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:31:00 PM
Lot-Sample No.:	**J3A240406-2**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R976**	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5G1AC		**Report DB ID:**	9MXX5G10				
HEXCHROME	**3.42E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.2)*	1/24/13 10:30 a		2.5038	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	TestAmerica	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:15:00 PM
Lot-Sample No.:	J3A240406-3	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	J1R977	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5H1AC		**Report DB ID:**	9MXX5H10				
HEXCHROME	**1.80E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.2)*	1/24/13 10:30 a		2.5071	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:20:00 PM
Lot-Sample No.:	**J3A240406-4**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R978**	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5J1AC		**Report DB ID:**	9MXX5J10				
HEXCHROME	2.21E-01			0.0E+00	1.55E-01	mg/kg	N/A	*(1.4)*	1/24/13 10:30 a		2.5049	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:23:00 PM
Lot-Sample No.:	**J3A240406-5**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R979**	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5K1AC		**Report DB ID:**	9MXX5K10				
HEXCHROME	2.83E-01			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	1/24/13 10:30 a		2.5049	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	TestAmerica	**SDG:**	J01678	**Collection Date:**	1/22/2013 2:44:00 PM
Lot-Sample No.:	J3A230412-1	**Report No. :**	54365	**Received Date:**	1/23/2013 8:45:00 AM
Client Sample ID:	J1R985	**COC No. :**	RC-074-437	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3023043	7196_CR6			**Work Order:**	MXXWP1AC		**Report DB ID:**	9MXXWP10				
HEXCHROME	**2.87E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.9)*	1/23/13 11:30 a		2.4999	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/22/2013 2:47:00 PM
Lot-Sample No.:	**J3A230412-2**	**Report No. :**	54365	**Received Date:**	1/23/2013 8:45:00 AM
Client Sample ID:	**J1R986**	**COC No. :**	RC-074-437	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3023043	7196_CR6			**Work Order:**	MXXWQ1AC		**Report DB ID:**	9MXXWQ10				
HEXCHROME	**2.44E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.6)*	1/23/13 11:30 a		2.5064	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/22/2013 2:50:00 PM
Lot-Sample No.:	**J3A230412-3**	**Report No. :**	54365	**Received Date:**	1/23/2013 8:45:00 AM
Client Sample ID:	**J1R987**	**COC No. :**	RC-074-437	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3023043	7196_CR6			**Work Order:**	MXXWR1AC		**Report DB ID:**	9MXXWR10				
HEXCHROME	**3.93E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.5)*	1/23/13 11:30 a		2.5024	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:26:00 PM
Lot-Sample No.:	**J3A240406-6**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R990**	**COC No. :**	RC-074-438	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5L1AC		**Report DB ID:**	9MXX5L10				
HEXCHROME	**1.80E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.2)*	1/24/13 10:30 a		2.5024	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:29:00 PM
Lot-Sample No.:	**J3A240406-7**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R991**	**COC No. :**	RC-074-438	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5M1AC		**Report DB ID:**	9MXX5M10				
HEXCHROME	**2.82E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	1/24/13 10:30 a		2.5062	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:37:00 PM
Lot-Sample No.:	**J3A240406-8**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R992**	**COC No. :**	RC-074-438	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5N1AC		**Report DB ID:**	9MXX5N10				
HEXCHROME	**3.68E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.4)*	1/24/13 10:30 a		2.5064	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:40:00 PM
Lot-Sample No.:	**J3A240406-9**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R993**	**COC No. :**	RC-074-438	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5P1AC		**Report DB ID:**	9MXX5P10				
HEXCHROME	**3.42E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.2)*	1/24/13 10:30 a		2.511	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:43:00 PM
Lot-Sample No.:	**J3A240406-10**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R994**	**COC No. :**	RC-074-438	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5Q1AC		**Report DB ID:**	9MXX5Q10				
HEXCHROME	**3.31E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(2.1)*	1/24/13 10:30 a		2.5037	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 28-Jan-13

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 8:10:00 AM
Lot-Sample No.:	**J3A240406-11**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1RC29**	**COC No. :**	RC-074-461	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(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: 3024031	7196_CR6			**Work Order:**	MXX5R1AC		**Report DB ID:**	9MXX5R10				
HEXCHROME	**3.00E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.9)*	1/24/13 10:30 a		2.5085	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 28-Jan-13

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/23/2013 2:09:00 PM
Lot-Sample No.:	**J3A240406-1**	**Report No. :**	54365	**Received Date:**	1/24/2013 8:30:00 AM
Client Sample ID:	**J1R975**	**COC No. :**	RC-074-435	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 3024031	7196_CR6			**Work Order:** MXX5F1AW		**Report DB ID:** MXX5F1ER			**Orig Sa DB ID:** 9MXX5F10			
HEXCHROME	2.37E-01			0.0E+00	1.55E-01	mg/kg	N/A	(1.5)	1/24/13 10:30 a		2.5038	
	3.17E-01		**RPD**	**28.9**				N/A			g	

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

TestAmerica
rptSTLRchDupV5.
2.23 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.

FORM II

Date: 28-Jan-13

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	J01678	**Collection Date:**	1/22/2013 2:44:00 PM
Lot-Sample No.:	**J3A230412-1**	**Report No. :**	54365	**Received Date:**	1/23/2013 8:45:00 AM
Client Sample ID:	**J1R985**	**COC No. :**	RC-074-437	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 3023043	7196_CR6			**Work Order:** MXXWP1CF		**Report DB ID:** MXXWP1ER			**Orig Sa DB ID:** 9MXXWP10			
HEXCHROME	2.87E-01			0.0E+00	1.55E-01	mg/kg	N/A	(1.9)	1/23/13 11:30 a		2.5015	
	2.87E-01		**RPD**	**0.0**		3.50E-01		N/A			g	

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

TestAmerica
rptSTLRchDupV5.
2.23 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.

FORM II

BLANK RESULTS

Date: 28-Jan-13

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01678

Report No. : 54365

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 3023043	7196_CR6			**Work Order:**	MXXXT1AA		**Report DB ID:**	MXXXT1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	1/23/13 11:30 a		2.5	
						1.55E-01		N/A			g	
Batch: 3024031	7196_CR6			**Work Order:**	MXX6J1AB		**Report DB ID:**	MXX6J1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	1/24/13 10:30 a		2.5	
								N/A			g	

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

TestAmerica

rptSTLRchBlank
V5.2.23 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. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 28-Jan-13

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01678

Report No. : 54365

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 3023043	7196_CR6			**Work Order:**	MXXXT1AC		**Report DB ID:**	MXXXT1AS					
HEXCHROME	1.87E+01			0.0E+00	1.55E-01	mg/kg	N/A	1.90E+01		98%	1/23/13 11:30 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 3024031	7196_CR6			**Work Order:**	MXX6J1AC		**Report DB ID:**	MXX6J1AS					
HEXCHROME	1.88E+01			0.0E+00	1.55E-01	mg/kg	N/A	1.90E+01		99%	1/24/13 10:30 a	2.5	
							Rec Limits:	80	120	0.0		g	

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

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

rptSTLRchLcs
V5.2.23 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 28-Jan-13

Lab Name: TestAmerica **SDG:** J01678

Lot-Sample No.: J3A230412-1, J1R985 **Report No. :** 54365 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 3023043	**Work Order:** MXXWP1CE			**Report DB ID:** MXXWP1CW			**Orig Sa DB ID:** 9MXXWP10					
HEXCHROME	2.61E+01			0.0E+00	1.55E-01	mg/kg	N/A	86.84%	3.00E+01	1/23/13 11:30 a	2.5097	7196_CR6
	2.87E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.23 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

FORM II

MATRIX SPIKE RESULTS

Date: 28-Jan-13

Lab Name: TestAmerica **SDG:** J01678

Lot-Sample No.: J3A240406-1, J1R975 **Report No. :** 54365 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 3024031	**Work Order:** MXX5F1AW			**Report DB ID:** MXX5F1CW			**Orig Sa DB ID:** 9MXX5F10					
HEXCHROME	2.77E+01			0.0E+00	1.55E-01	mg/kg	N/A	92.80%	2.99E+01	1/24/13 10:30 a	2.5042	7196_CR6
	3.17E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.23 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

SDG: J01678
SAF: RC-074
BATCH: 3023041
MATRIX: SOIL
ANALYSIS DATE: 1/23/13

Client_id	Matrix	Result_t	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_	Reporting_Limits	Uncertainty_1s	Analyzed_s	Analyze	Decision_level_lc	LCSRec	Adde	Analysis_date_time	Batch_nbr	Test_Me	Lab_sample_id
J1R985	**SOIL**	**CS**	**7440-22-4**	**Ag**	**-2.41E-01**	**U**	**UG/G**	9.94E+00	9.94E+00	3.10E-02	0.2514	G	2.55E-02			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7440-38-2**	**As**	**1.42E+00**	**U**	**UG/G**	9.94E+00	9.94E+00	7.30E-01	0.2514	G	6.00E-01			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7440-39-3**	**Ba**	**6.15E+01**		**UG/G**	1.99E+00	1.99E+00	4.30E-01	0.2514	G	3.57E-01			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**2.00E-01**		**UG/G**	9.94E-02	9.94E-02	8.10E-03	0.2514	G	6.65E-03			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.20E-01**	**U**	**UG/G**	1.99E+00	1.99E+00	1.70E-02	0.2514	G	1.40E-02			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**6.40E+00**	**U**	**UG/G**	9.94E+00	9.94E+00	8.80E-02	0.2514	G	7.25E-02			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7439-92-1**	**Lead**	**3.19E+00**	**U**	**UG/G**	9.94E+00	9.94E+00	2.10E-01	0.2514	G	1.75E-01			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R985	**SOIL**	**CS**	**7782-49-2**	**Se**	**-3.77E-01**	**U**	**UG/G**	9.94E+00	9.94E+00	5.70E-01	0.2514	G	4.68E-01			1/23/2013 16:44	3023041	46DQ	MXXWP1A0
J1R986	**SOIL**	**CS**	**7440-22-4**	**Ag**	**-2.36E-01**	**U**	**UG/G**	9.96E+00	9.96E+00	6.00E-02	0.2511	G	4.90E-02			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7440-38-2**	**As**	**1.81E+00**	**U**	**UG/G**	9.96E+00	9.96E+00	2.90E-01	0.2511	G	2.37E-01			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7440-39-3**	**Ba**	**6.92E+01**		**UG/G**	1.99E+00	1.99E+00	6.70E-01	0.2511	G	5.53E-01			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**2.16E-01**		**UG/G**	9.96E-02	9.96E-02	2.00E-02	0.2511	G	1.61E-02			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.22E-01**	**U**	**UG/G**	1.99E+00	1.99E+00	5.20E-02	0.2511	G	4.27E-02			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**7.92E+00**	**U**	**UG/G**	9.96E+00	9.96E+00	1.30E-01	0.2511	G	1.05E-01			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7439-92-1**	**Lead**	**3.63E+00**	**U**	**UG/G**	9.96E+00	9.96E+00	3.00E-01	0.2511	G	2.48E-01			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R986	**SOIL**	**CS**	**7782-49-2**	**Se**	**-1.43E-01**	**U**	**UG/G**	9.96E+00	9.96E+00	2.30E-01	0.2511	G	1.93E-01			1/23/2013 17:04	3023041	46DQ	MXXWQ1AA
J1R987	**SOIL**	**CS**	**7440-22-4**	**Ag**	**-2.28E-01**	**U**	**UG/G**	9.99E+00	9.99E+00	2.00E-01	0.2503	G	1.65E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7440-38-2**	**As**	**1.47E+00**	**U**	**UG/G**	9.99E+00	9.99E+00	2.20E-01	0.2503	G	1.81E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7440-39-3**	**Ba**	**5.70E+01**		**UG/G**	2.00E+00	2.00E+00	3.10E-01	0.2503	G	2.58E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**2.03E-01**		**UG/G**	9.99E-02	9.99E-02	8.10E-03	0.2503	G	6.68E-03			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.13E-01**	**U**	**UG/G**	2.00E+00	2.00E+00	7.00E-02	0.2503	G	5.72E-02			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**5.88E+00**	**U**	**UG/G**	9.99E+00	9.99E+00	1.70E-01	0.2503	G	1.41E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7439-92-1**	**Lead**	**3.22E+00**	**U**	**UG/G**	9.99E+00	9.99E+00	4.30E-01	0.2503	G	3.51E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
J1R987	**SOIL**	**CS**	**7782-49-2**	**Se**	**2.20E-01**	**U**	**UG/G**	9.99E+00	9.99E+00	3.50E-01	0.2503	G	2.84E-01			1/23/2013 17:23	3023041	46DQ	MXXWR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-22-4	Ag	1.01E-03	U	MG/L	5.00E-02	5.00E-02	7.90E-04	0.2516	L	6.52E-04			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-38-2	As	3.19E-04	U	MG/L	5.00E-02	5.00E-02	2.10E-03	0.2516	L	1.71E-03			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-39-3	Ba	2.34E-05	U	MG/L	1.00E-02	1.00E-02	1.80E-05	0.2516	L	1.51E-05			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-41-7	Beryllium	5.16E-05	U	MG/L	5.00E-04	5.00E-04	4.10E-05	0.2516	L	3.39E-05			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-43-9	Cadmium	1.97E-04	U	MG/L	1.00E-02	1.00E-02	4.90E-05	0.2516	L	4.05E-05			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7440-47-3	Chromium	-3.06E-04	U	MG/L	5.00E-02	5.00E-02	1.60E-03	0.2516	L	1.30E-03			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7439-92-1	Lead	-3.43E-04	U	MG/L	5.00E-02	5.00E-02	8.30E-04	0.2516	L	6.82E-04			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB BLANK	SOIL	BLK	7782-49-2	Se	4.44E-04	U	MG/L	5.00E-02	5.00E-02	8.60E-04	0.2516	L	7.05E-04			1/23/2013 16:31	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-22-4	Ag	8.89E-01		MG/L	5.00E-02	5.00E-02	1.70E-02	0.2507	L	1.42E-02	0.89	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-38-2	As	9.26E-01		MG/L	5.00E-02	5.00E-02	8.90E-03	0.2507	L	7.32E-03	0.93	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-39-3	Ba	9.48E-01		MG/L	1.00E-02	1.00E-02	1.70E-02	0.2507	L	1.36E-02	0.95	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-41-7	Beryllium	9.04E-01		MG/L	5.00E-04	5.00E-04	1.90E-02	0.2507	L	1.53E-02	0.9	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-43-9	Cadmium	8.83E-01		MG/L	1.00E-02	1.00E-02	1.10E-03	0.2507	L	9.09E-04	0.88	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7440-47-3	Chromium	9.49E-01		MG/L	5.00E-02	5.00E-02	2.10E-02	0.2507	L	1.75E-02	0.95	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7439-92-1	Lead	9.22E-01		MG/L	5.00E-02	5.00E-02	1.90E-03	0.2507	L	1.56E-03	0.92	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
INTRA-LAB CHECK	SOIL	LCS	7782-49-2	Se	8.47E-01		MG/L	5.00E-02	5.00E-02	5.10E-03	0.2507	L	4.16E-03	0.85	1	1/23/2013 16:34	3023041	46DQ	MXXXR1AA
J1R985 DUP	SOIL	DUP	7440-22-4	Ag	-2.26E-01	U	UG/G	9.91E+00	9.91E+00	1.10E-01	0.2523	L	9.43E-02			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7440-38-2	As	1.57E+00	U	UG/G	9.91E+00	9.91E+00	3.10E-01	0.2523	G	2.55E-01			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7440-39-3	Ba	7.16E+01		UG/G	1.98E+00	1.98E+00	3.20E-01	0.2523	G	2.66E-01			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7440-41-7	Beryllium	1.89E-01		UG/G	9.91E-02	9.91E-02	1.30E-02	0.2523	G	1.11E-02			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7440-43-9	Cadmium	1.28E-01	U	UG/G	1.98E+00	1.98E+00	3.90E-02	0.2523	G	3.18E-02			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7440-47-3	Chromium	6.21E+00	U	UG/G	9.91E+00	9.91E+00	9.40E-02	0.2523	G	7.74E-02			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7439-92-1	Lead	2.98E+00	U	UG/G	9.91E+00	9.91E+00	6.50E-02	0.2523	G	5.31E-02			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985 DUP	SOIL	DUP	7782-49-2	Se	-1.82E-01	U	UG/G	9.91E+00	9.91E+00	8.50E-01	0.2523	G	6.96E-01			1/23/2013 16:58	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-22-4	Ag	1.72E+02		% REC	9.98E+00	9.98E+00	3.90E-01	0.2506	L	3.24E-01	0.86	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-38-2	As	1.88E+02		% REC	9.98E+00	9.98E+00	8.90E-01	0.2506	L	7.28E-01	0.94	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-39-3	Ba	1.74E+02		% REC	2.00E+00	2.00E+00	2.70E+00	0.2506	L	2.23E+00	0.87	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-41-7	Beryllium	1.79E+02		% REC	9.98E-02	9.98E-02	1.50E+00	0.2506	L	1.21E+00	0.9	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-43-9	Cadmium	1.78E+02		% REC	2.00E+00	2.00E+00	1.10E+00	0.2506	L	9.36E-01	0.89	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7440-47-3	Chromium	1.83E+02		% REC	9.98E+00	9.98E+00	1.80E+00	0.2506	L	1.48E+00	0.92	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7439-92-1	Lead	1.78E+02		% REC	9.98E+00	9.98E+00	2.10E+00	0.2506	L	1.73E+00	0.89	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MS	7782-49-2	Se	1.73E+02		% REC	9.98E+00	9.98E+00	5.70E-01	0.2506	L	4.72E-01	0.87	200	1/23/2013 16:48	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-22-4	Ag	1.76E+02		% REC	9.94E+00	9.94E+00	1.10E+00	0.2515	L	9.13E-01	0.88	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-38-2	As	1.80E+02		% REC	9.94E+00	9.94E+00	9.80E-01	0.2515	L	8.10E-01	0.9	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-39-3	Ba	1.85E+02		% REC	1.99E+00	1.99E+00	1.80E-01	0.2515	L	1.50E-01	0.93	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-41-7	Beryllium	1.79E+02		% REC	9.94E-02	9.94E-02	6.90E-01	0.2515	L	5.71E-01	0.9	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-43-9	Cadmium	1.71E+02		% REC	1.99E+00	1.99E+00	4.50E-01	0.2515	L	3.73E-01	0.86	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7440-47-3	Chromium	1.82E+02		% REC	9.94E+00	9.94E+00	5.20E-01	0.2515	L	4.26E-01	0.92	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7439-92-1	Lead	1.70E+02		% REC	9.94E+00	9.94E+00	5.70E-01	0.2515	L	4.70E-01	0.86	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0
J1R985	SOIL	MSD	7782-49-2	Se	1.64E+02		% REC	9.94E+00	9.94E+00	5.40E-01	0.2515	L	4.42E-01	0.83	199	1/23/2013 16:53	3023041	46DQ	MXXWP1A0

SDG: J01678
SAF: RC-074
BATCH: 3024032
MATRIX: SOIL
ANALYSIS DATE: 1/24/13

Client_id	Matrix	Result_	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_Sa	Reporting_Limits	Uncertainty_1s	Analyzed_s	Analyz	Decision_level_lc	LCSRecc	Adde	Analysis_date_time	Batch_nbr	Test_Metl	Lab_sample_id
J1R975	SOIL	CS	7440-22-4	Ag	-2.53E-01	U	UG/G	9.96E+00	9.96E+00	1.00E-01	0.2511	G	8.26E-02			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7440-38-2	As	1.12E+00	U	UG/G	9.96E+00	9.96E+00	4.40E-01	0.2511	G	3.65E-01			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7440-39-3	Ba	6.26E+01		UG/G	1.99E+00	1.99E+00	6.00E-01	0.2511	G	4.94E-01			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7440-41-7	Beryllium	2.10E-01		UG/G	9.96E-02	9.96E-02	6.10E-02	0.2511	G	4.98E-02			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7440-43-9	Cadmium	1.26E-01	U	UG/G	1.99E+00	1.99E+00	7.10E-03	0.2511	G	5.83E-03			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7440-47-3	Chromium	4.39E+00	U	UG/G	9.96E+00	9.96E+00	9.30E-02	0.2511	G	7.66E-02			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7439-92-1	Lead	2.30E+00	U	UG/G	9.96E+00	9.96E+00	1.10E-01	0.2511	G	9.23E-02			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R975	SOIL	CS	7782-49-2	Se	-4.22E-01	U	UG/G	9.96E+00	9.96E+00	6.70E-01	0.2511	G	5.52E-01			1/24/2013 21:06	3024032	46DQ	MXX5F1A0
J1R976	SOIL	CS	7440-22-4	Ag	-2.95E-01	U	UG/G	1.00E+01	1.00E+01	1.30E-01	0.2488	G	1.06E-01			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7440-38-2	As	1.52E+00	U	UG/G	1.00E+01	1.00E+01	2.60E-01	0.2488	G	2.18E-01			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7440-39-3	Ba	6.43E+01		UG/G	2.01E+00	2.01E+00	3.10E+00	0.2488	G	2.52E+00			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7440-41-7	Beryllium	2.23E-01		UG/G	1.00E-01	1.00E-01	1.30E-02	0.2488	G	1.11E-02			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7440-43-9	Cadmium	1.35E-01	U	UG/G	2.01E+00	2.01E+00	4.60E-02	0.2488	G	3.80E-02			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7440-47-3	Chromium	7.90E+00	U	UG/G	1.00E+01	1.00E+01	1.90E-01	0.2488	G	1.57E-01			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7439-92-1	Lead	2.99E+00	U	UG/G	1.00E+01	1.00E+01	2.20E-01	0.2488	G	1.85E-01			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R976	SOIL	CS	7782-49-2	Se	-2.80E-01	U	UG/G	1.00E+01	1.00E+01	6.60E-01	0.2488	G	5.47E-01			1/24/2013 21:23	3024032	46DQ	MXX5G1AA
J1R977	SOIL	CS	7440-22-4	Ag	-3.68E-01	U	UG/G	9.94E+00	9.94E+00	3.00E-01	0.2516	G	2.44E-01			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7440-38-2	As	1.40E+00	U	UG/G	9.94E+00	9.94E+00	3.30E-01	0.2516	G	2.75E-01			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7440-39-3	Ba	7.11E+01		UG/G	1.99E+00	1.99E+00	3.70E-01	0.2516	G	3.01E-01			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7440-41-7	Beryllium	2.31E-01		UG/G	9.94E-02	9.94E-02	4.70E-02	0.2516	G	3.87E-02			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7440-43-9	Cadmium	1.08E-01	U	UG/G	1.99E+00	1.99E+00	4.40E-02	0.2516	G	3.61E-02			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7440-47-3	Chromium	6.18E+00	U	UG/G	9.94E+00	9.94E+00	4.40E-03	0.2516	G	3.66E-03			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7439-92-1	Lead	2.66E+00	U	UG/G	9.94E+00	9.94E+00	9.60E-02	0.2516	G	7.88E-02			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R977	SOIL	CS	7782-49-2	Se	-2.31E-01	U	UG/G	9.94E+00	9.94E+00	4.70E-01	0.2516	G	3.90E-01			1/24/2013 21:40	3024032	46DQ	MXX5H1AA
J1R978	SOIL	CS	7440-22-4	Ag	-1.12E-01	U	UG/G	1.01E+01	1.01E+01	1.70E-01	0.248	G	1.36E-01			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7440-38-2	As	1.22E+00	U	UG/G	1.01E+01	1.01E+01	5.20E-01	0.248	G	4.30E-01			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7440-39-3	Ba	6.44E+01		UG/G	2.02E+00	2.02E+00	6.30E-01	0.248	G	5.14E-01			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7440-41-7	Beryllium	2.14E-01		UG/G	1.01E-01	1.01E-01	3.40E-02	0.248	G	2.77E-02			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7440-43-9	Cadmium	1.45E-01	U	UG/G	2.02E+00	2.02E+00	4.00E-02	0.248	G	3.25E-02			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7440-47-3	Chromium	5.73E+00	U	UG/G	1.01E+01	1.01E+01	2.00E-01	0.248	G	1.68E-01			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7439-92-1	Lead	2.68E+00	U	UG/G	1.01E+01	1.01E+01	1.00E-01	0.248	G	8.55E-02			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R978	SOIL	CS	7782-49-2	Se	2.97E-03	U	UG/G	1.01E+01	1.01E+01	2.20E-01	0.248	G	1.77E-01			1/24/2013 21:44	3024032	46DQ	MXX5J1AA
J1R979	SOIL	CS	7440-22-4	Ag	-1.95E-01	U	UG/G	9.92E+00	9.92E+00	3.00E-02	0.252	G	2.50E-02			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7440-38-2	As	1.48E+00	U	UG/G	9.92E+00	9.92E+00	1.60E-01	0.252	G	1.33E-01			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7440-39-3	Ba	6.78E+01		UG/G	1.98E+00	1.98E+00	1.90E+00	0.252	G	1.53E+00			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7440-41-7	Beryllium	2.14E-01		UG/G	9.92E-02	9.92E-02	1.00E-02	0.252	G	8.35E-03			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7440-43-9	Cadmium	1.26E-01	U	UG/G	1.98E+00	1.98E+00	6.30E-02	0.252	G	5.16E-02			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7440-47-3	Chromium	6.58E+00	U	UG/G	9.92E+00	9.92E+00	4.00E-01	0.252	G	3.30E-01			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7439-92-1	Lead	3.18E+00	U	UG/G	9.92E+00	9.92E+00	2.70E-01	0.252	G	2.19E-01			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R979	SOIL	CS	7782-49-2	Se	-3.02E-01	U	UG/G	9.92E+00	9.92E+00	3.50E-01	0.252	G	2.85E-01			1/24/2013 21:49	3024032	46DQ	MXX5K1AA
J1R990	SOIL	CS	7440-22-4	Ag	-1.61E-01	U	UG/G	9.92E+00	9.92E+00	5.50E-02	0.2519	G	4.56E-02			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7440-38-2	As	1.23E+00	U	UG/G	9.92E+00	9.92E+00	6.20E-01	0.2519	G	5.11E-01			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7440-39-3	Ba	5.85E+01		UG/G	1.98E+00	1.98E+00	6.90E-01	0.2519	G	5.70E-01			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7440-41-7	Beryllium	1.87E-01		UG/G	9.92E-02	9.92E-02	1.00E-02	0.2519	G	8.19E-03			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7440-43-9	Cadmium	1.12E-01	U	UG/G	1.98E+00	1.98E+00	4.90E-02	0.2519	G	4.00E-02			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7440-47-3	Chromium	5.40E+00	U	UG/G	9.92E+00	9.92E+00	1.80E-01	0.2519	G	1.48E-01			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7439-92-1	Lead	2.68E+00	U	UG/G	9.92E+00	9.92E+00	3.90E-01	0.2519	G	3.25E-01			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R990	SOIL	CS	7782-49-2	Se	-6.07E-01	U	UG/G	9.92E+00	9.92E+00	4.20E-01	0.2519	G	3.47E-01			1/24/2013 21:53	3024032	46DQ	MXX5L1AA
J1R991	SOIL	CS	7440-22-4	Ag	-2.38E-01	U	UG/G	1.00E+01	1.00E+01	3.60E-01	0.2492	G	3.00E-01			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7440-38-2	As	1.23E+00	U	UG/G	1.00E+01	1.00E+01	4.40E-01	0.2492	G	3.58E-01			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7440-39-3	Ba	7.76E+01		UG/G	2.01E+00	2.01E+00	4.90E+00	0.2492	G	4.02E+00			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7440-41-7	Beryllium	2.03E-01		UG/G	1.00E-01	1.00E-01	3.60E-03	0.2492	G	2.98E-03			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7440-43-9	Cadmium	1.30E-01	U	UG/G	2.01E+00	2.01E+00	4.10E-02	0.2492	G	3.38E-02			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7440-47-3	Chromium	7.67E+00	U	UG/G	1.00E+01	1.00E+01	4.50E-01	0.2492	G	3.67E-01			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7439-92-1	Lead	2.49E+00	U	UG/G	1.00E+01	1.00E+01	2.50E-01	0.2492	G	2.06E-01			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R991	SOIL	CS	7782-49-2	Se	-1.97E-01	U	UG/G	1.00E+01	1.00E+01	8.80E-01	0.2492	G	7.20E-01			1/24/2013 21:57	3024032	46DQ	MXX5M1AA
J1R992	SOIL	CS	7440-22-4	Ag	-2.02E-01	U	UG/G	1.00E+01	1.00E+01	1.70E-01	0.2488	G	1.44E-01			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7440-38-2	As	2.10E+00	U	UG/G	1.00E+01	1.00E+01	4.50E-01	0.2488	G	3.68E-01			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7440-39-3	Ba	6.95E+01		UG/G	2.01E+00	2.01E+00	4.20E+00	0.2488	G	3.45E+00			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7440-41-7	Beryllium	2.44E-01		UG/G	1.00E-01	1.00E-01	1.60E-02	0.2488	G	1.34E-02			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7440-43-9	Cadmium	1.34E-01	U	UG/G	2.01E+00	2.01E+00	1.70E-02	0.2488	G	1.39E-02			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7440-47-3	Chromium	9.20E+00	U	UG/G	1.00E+01	1.00E+01	7.20E-01	0.2488	G	5.95E-01			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7439-92-1	Lead	3.61E+00	U	UG/G	1.00E+01	1.00E+01	1.00E-01	0.2488	G	8.28E-02			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R992	SOIL	CS	7782-49-2	Se	-4.68E-01	U	UG/G	1.00E+01	1.00E+01	7.30E-01	0.2488	G	6.03E-01			1/24/2013 22:01	3024032	46DQ	MXX5N1AA
J1R993	SOIL	CS	7440-22-4	Ag	-1.22E-01	U	UG/G	9.93E+00	9.93E+00	1.30E-01	0.2517	G	1.05E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	SOIL	CS	7440-38-2	As	1.88E+00	U	UG/G	9.93E+00	9.93E+00	2.70E-01	0.2517	G	2.25E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	SOIL	CS	7440-39-3	Ba	6.90E+01		UG/G	1.99E+00	1.99E+00	1.60E-01	0.2517	G	1.34E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA

Client_id	Matrix	Result_	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_S	Reporting_Limits	Uncertainty_1s	Analyzed_s	Analyz	Decision_level_lc	LCSRec	Adde	Analysis_date_time	Batch_nbr	Test_Metl	Lab_sample_id
J1R993	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**2.40E-01**		**UG/G**	9.93E-02	9.93E-02	3.00E-03	0.2517	G	2.47E-03			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.59E-01**	**U**	**UG/G**	1.99E+00	1.99E+00	5.10E-02	0.2517	G	4.22E-02			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**7.32E+00**	**U**	**UG/G**	9.93E+00	9.93E+00	2.20E-01	0.2517	G	1.85E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	**SOIL**	**CS**	**7439-92-1**	**Lead**	**3.53E+00**	**U**	**UG/G**	9.93E+00	9.93E+00	2.10E-01	0.2517	G	1.72E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R993	**SOIL**	**CS**	**7782-49-2**	**Se**	**-4.49E-01**	**U**	**UG/G**	9.93E+00	9.93E+00	7.80E-01	0.2517	G	6.43E-01			1/24/2013 22:05	3024032	46DQ	MXX5P1AA
J1R994	**SOIL**	**CS**	**7440-22-4**	**Ag**	**-1.81E-01**	**U**	**UG/G**	1.00E+01	1.00E+01	9.80E-02	0.249	G	8.10E-02			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7440-38-2**	**As**	**1.85E+00**	**U**	**UG/G**	1.00E+01	1.00E+01	4.70E-01	0.249	G	3.85E-01			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7440-39-3**	**Ba**	**6.56E+01**		**UG/G**	2.01E+00	2.01E+00	4.00E-01	0.249	G	3.28E-01			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**2.27E-01**		**UG/G**	1.00E-01	1.00E-01	9.00E-03	0.249	G	7.37E-03			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.38E-01**	**U**	**UG/G**	2.01E+00	2.01E+00	1.70E-02	0.249	G	1.43E-02			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**6.92E+00**	**U**	**UG/G**	1.00E+01	1.00E+01	1.10E-01	0.249	G	8.81E-02			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7439-92-1**	**Lead**	**2.85E+00**	**U**	**UG/G**	1.00E+01	1.00E+01	2.10E-01	0.249	G	1.70E-01			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1R994	**SOIL**	**CS**	**7782-49-2**	**Se**	**-4.71E-01**	**U**	**UG/G**	1.00E+01	1.00E+01	2.70E-01	0.249	G	2.24E-01			1/24/2013 22:09	3024032	46DQ	MXX5Q1AA
J1RC29	**SOIL**	**CS**	**7440-22-4**	**Ag**	**-1.67E-01**	**U**	**UG/G**	9.88E+00	9.88E+00	9.80E-02	0.253	G	8.09E-02			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7440-38-2**	**As**	**8.91E-01**	**U**	**UG/G**	9.88E+00	9.88E+00	5.50E-01	0.253	G	4.52E-01			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7440-39-3**	**Ba**	**5.44E+01**		**UG/G**	1.98E+00	1.98E+00	1.90E-01	0.253	G	1.52E-01			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7440-41-7**	**Beryllium**	**1.74E-01**		**UG/G**	9.88E-02	9.88E-02	1.90E-02	0.253	G	1.59E-02			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7440-43-9**	**Cadmium**	**1.71E-01**	**U**	**UG/G**	1.98E+00	1.98E+00	4.00E-02	0.253	G	3.26E-02			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7440-47-3**	**Chromium**	**5.11E+00**	**U**	**UG/G**	9.88E+00	9.88E+00	5.40E-02	0.253	G	4.42E-02			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7439-92-1**	**Lead**	**2.98E+00**	**U**	**UG/G**	9.88E+00	9.88E+00	1.50E-01	0.253	G	1.27E-01			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
J1RC29	**SOIL**	**CS**	**7782-49-2**	**Se**	**-4.86E-01**	**U**	**UG/G**	9.88E+00	9.88E+00	9.90E-01	0.253	G	8.15E-01			1/24/2013 22:13	3024032	46DQ	MXX5R1AA
INTRA-LAB BLANK	SOIL	BLK	7440-22-4	Ag	1.35E-03	U	MG/L	5.00E-02	5.00E-02	1.80E-04	0.2527	L	1.46E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7440-38-2	As	3.29E-04	U	MG/L	5.00E-02	5.00E-02	6.60E-04	0.2527	L	5.47E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7440-39-3	Ba	4.16E-05	U	MG/L	1.00E-02	1.00E-02	2.00E-05	0.2527	L	1.65E-05			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7440-41-7	Beryllium	4.66E-05	U	MG/L	5.00E-04	5.00E-04	3.70E-05	0.2527	L	3.06E-05			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7440-43-9	Cadmium	2.18E-04	U	MG/L	1.00E-02	1.00E-02	2.50E-04	0.2527	L	2.05E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7440-47-3	Chromium	1.21E-04	U	MG/L	5.00E-02	5.00E-02	1.10E-03	0.2527	L	8.67E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7439-92-1	Lead	-4.76E-04	U	MG/L	5.00E-02	5.00E-02	9.90E-04	0.2527	L	8.11E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB BLANK	SOIL	BLK	7782-49-2	Se	-4.49E-04	U	MG/L	5.00E-02	5.00E-02	9.70E-04	0.2527	L	7.94E-04			1/24/2013 20:16	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-22-4	Ag	9.43E-01		MG/L	5.00E-02	5.00E-02	4.10E-03	0.2478	L	3.33E-03	0.94	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-38-2	As	9.47E-01		MG/L	5.00E-02	5.00E-02	4.60E-03	0.2478	L	3.77E-03	0.95	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-39-3	Ba	1.00E+00		MG/L	1.00E-02	1.00E-02	2.10E-03	0.2478	L	1.73E-03	1	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-41-7	Beryllium	9.36E-01		MG/L	5.00E-04	5.00E-04	5.30E-03	0.2478	L	4.37E-03	0.94	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-43-9	Cadmium	9.15E-01		MG/L	1.00E-02	1.00E-02	3.10E-03	0.2478	L	2.58E-03	0.92	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7440-47-3	Chromium	9.32E-01		MG/L	5.00E-02	5.00E-02	4.10E-03	0.2478	L	3.34E-03	0.93	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7439-92-1	Lead	9.39E-01		MG/L	5.00E-02	5.00E-02	3.70E-03	0.2478	L	3.00E-03	0.94	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
INTRA-LAB CHECK	SOIL	LCS	7782-49-2	Se	8.68E-01		MG/L	5.00E-02	5.00E-02	4.10E-03	0.2478	L	3.34E-03	0.87	1	1/24/2013 20:32	3024032	46DQ	MXX6T1AA
J1R975 DUP	SOIL	DUP	7440-22-4	Ag	-2.76E-01	U	UG/G	9.95E+00	9.95E+00	2.20E-01	0.2512	G	1.81E-01			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7440-38-2	As	8.85E-01	U	UG/G	9.95E+00	9.95E+00	5.10E-02	0.2512	G	4.18E-02			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7440-39-3	Ba	6.15E+01		UG/G	1.99E+00	1.99E+00	5.90E-01	0.2512	G	4.88E-01			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7440-41-7	Beryllium	2.00E-01		UG/G	9.95E-02	9.95E-02	2.30E-02	0.2512	G	1.85E-02			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7440-43-9	Cadmium	1.46E-01	U	UG/G	1.99E+00	1.99E+00	2.80E-02	0.2512	G	2.34E-02			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7440-47-3	Chromium	4.24E+00	U	UG/G	9.95E+00	9.95E+00	1.50E-01	0.2512	G	1.26E-01			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7439-92-1	Lead	2.12E+00	U	UG/G	9.95E+00	9.95E+00	9.00E-02	0.2512	G	7.40E-02			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975 DUP	SOIL	DUP	7782-49-2	Se	-2.86E-01	U	UG/G	9.95E+00	9.95E+00	6.60E-01	0.2512	G	5.45E-01			1/24/2013 21:19	3024032	DWEA	MXX5F-X
J1R975	SOIL	MS	7440-22-4	Ag	1.84E+02		% REC(	1.00E+01	1.00E+01	1.70E-01	0.2493	L	1.37E-01	0.92	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7440-38-2	As	1.86E+02		% REC(	1.00E+01	1.00E+01	1.70E+00	0.2493	L	1.37E+00	0.93	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7440-39-3	Ba	1.82E+02		% REC(	2.01E+00	2.01E+00	4.10E+00	0.2493	L	3.37E+00	0.91	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7440-41-7	Beryllium	1.89E+02		% REC(	1.00E-01	1.00E-01	6.20E-01	0.2493	L	5.07E-01	0.94	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7440-43-9	Cadmium	1.80E+02		% REC(	2.01E+00	2.01E+00	1.40E+00	0.2493	L	1.14E+00	0.9	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7440-47-3	Chromium	1.86E+02		% REC(	1.00E+01	1.00E+01	1.60E+00	0.2493	L	1.35E+00	0.93	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7439-92-1	Lead	1.78E+02		% REC(	1.00E+01	1.00E+01	1.80E+00	0.2493	L	1.52E+00	0.89	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MS	7782-49-2	Se	1.71E+02		% REC(	1.00E+01	1.00E+01	5.00E-01	0.2493	L	4.14E-01	0.85	201	1/24/2013 21:10	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-22-4	Ag	1.83E+02		% REC(	1.01E+01	1.01E+01	1.70E+00	0.2487	L	1.39E+00	0.91	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-38-2	As	1.87E+02		% REC(	1.01E+01	1.01E+01	1.00E+00	0.2487	L	8.46E-01	0.93	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-39-3	Ba	1.93E+02		% REC(	2.01E+00	2.01E+00	2.20E+00	0.2487	L	1.77E+00	0.96	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-41-7	Beryllium	1.87E+02		% REC(	1.01E-01	1.01E-01	2.80E+00	0.2487	L	2.33E+00	0.93	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-43-9	Cadmium	1.81E+02		% REC(	2.01E+00	2.01E+00	1.90E-01	0.2487	L	1.55E-01	0.9	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7440-47-3	Chromium	1.83E+02		% REC(	1.01E+01	1.01E+01	2.70E+00	0.2487	L	2.25E+00	0.91	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7439-92-1	Lead	1.81E+02		% REC(	1.01E+01	1.01E+01	9.70E-01	0.2487	L	7.94E-01	0.9	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0
J1R975	SOIL	MSD	7782-49-2	Se	1.70E+02		% REC(	1.01E+01	1.01E+01	6.20E-01	0.2487	L	5.13E-01	0.85	201	1/24/2013 21:15	3024032	46DQ	MXX5F1A0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s):	3023043	Lab Sample Numbers or SDG:	J01678

Method/Test/Parameter: Cr+6 ☐ RL-WC-003(Aqueous) ☒ RL-WC-004(Solid)

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			X
2. Correlation coefficient greater than 0.97?	✓			X
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within 10% of expected?	✓			X
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			X
B. Continuing Calibration				
1. CCV analyzed at required frequency and all parameters within 10% of expected?	✓			X
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			X
C. Sample Analysis				
1. Were any samples with concentrations above the linear range diluted and reanalyzed?			✓	X
2. Were all sample holding times met?	✓			X
D. QC Samples				
1. All results for the preparation blank below limits?	✓			X
2. LCS percent recovery within 85-115%	✓			X
3. $PbCrO_4$ percent recovery within 75-125%?	✓			X
4 Sample and Duplicate within 20% (aqueous) or 35% (solid) RPD?	✓			X
5. MS or MS/MSD recoveries within 85-115% (aqueous) or 75-125% (solid)?	✓			X
6. On MS failure, PDMS within 85-115%?			✓	X
E. Other				
1. Are all nonconformances included and noted?			✓	X
2. Is the correct date and time of analysis shown?	✓			X
3. Did the analyst sign and date the front page of the analytical run?	✓			X
4. Correct methodology used?	✓			X
5. Transcriptions checked?	✓			X
6. Calculations checked at minimum frequency?	✓			X
7. Units checked?	✓			X

Comments on any "No" response or list NCM number:

Analyst [signature] Date 1/23/13 2nd Review [signature] Date 1/24/13

Reviewed TC vs Cr VI TAC 1/24/2013

CG-231 Rev 1 5/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s):	3024031	Lab Sample Numbers or SDG:	J01678

Method/Test/Parameter: Cr+6 ☐ RL-WC-003(Aqueous) ☒ RL-WC-004(Solid)

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration 1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient greater than 0.97?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within 10% of expected?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration 1. CCV analyzed at required frequency and all parameters within 10% of expected?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis 1. Were any samples with concentrations above the linear range diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples 1. All results for the preparation blank below limits?	✓			✓
2. LCS percent recovery within 85-115%	✓			✓
3. $PbCrO_4$ percent recovery within 75-125%?	✓			✓
4. Sample and Duplicate within 20% (aqueous) or 35% (solid) RPD?	✓			✓
5. MS or MS/MSD recoveries within 85-115% (aqueous) or 75-125% (solid)?	✓			✓
6. On MS failure, PDMS within 85-115%?			✓	✓
E. Other 1. Are all nonconformances included and noted?			✓	✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response or list NCM number:

Reviewed TM 1/25/13

Analyst [signature] Date 1/25/13 2nd Review [signature] Date 1/25/13

CG-231 Rev 1, 5/12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

CHEMISTRY, First/Second Level Review

1/23/2013 5:52:28 PM

Lot No., Due Date: J3A230412; 01/24/2013
Client, Site: 127642;
QC Batch No., Method Test: 3023041; M6010_S 6010A
SDG, Matrix: J016783 BC 1/23/13; SOIL

1.0 Initial Calibration

	Yes	No	N/A	2nd
1.1 Performed at required frequency with required number of levels?	✓			X
1.2 Correlation coefficient within QC limits?	✓			X
1.3 Initial calibration verification (ICV) analyzed immediately after calibr. and results within QC limits of +/- 10% at 0.75 ppm?	✓			X
1.4 ICB analyzed immediately after ICV and concentration of all parameters +/- report limit from zero? RL per RadCalc.	✓			X

2.0 Continuing Calibration

	Yes	No	N/A	2nd
2.1 CCV analyzed at required frequency and all parameters within QC limits or +/- 10% at 0.7500 ppm?	✓			X
2.2 CCB analyzed at required frequency and all results +/- reporting limit from zero?	✓			X

3.0 Sample Analysis

	Yes	No	N/A	2nd
3.1 Were any samples with concentration above the linear range diluted and reanalyzed?			✓	X
3.2 Were all sample holding times met?	✓			X

4.0 QC Samples

	Yes	No	N/A	2nd
4.1 All results for the preparation blank < reporting limits?	✓			X
4.2 MS or MS/MSD recoveries within 20% at 1 ppm and within 20% RPD (for MSD)?	✓			X
4.3 LCS precent recovery within 20% at 1 ppm and 20% RPD (for LCSD)?	✓			X
4.4 Analytical spikes within QC limits where applicable?	✓			X
4.5 ICP only: One serial dilution performed and within 10% of parent per SDG?	✓			X
4.6 ICP only: RLV run per batch and within 20% of current values?	✓			X
4.7 ICP only: ICSA,ICSAB analyzed at the required frequencies and within 20% of values per dilution record?	✓			X

5.0 Other

	Yes	No	N/A	2nd
5.1 Are all nonconformances included and noted?			✓	X
5.2 Is the correct date and time of analysis shown?	✓			X
5.3 Did the analyst sign and date the digestion log for the analytical run?	✓			X
5.4 Correct methodology used?	✓			X
5.5 Transcriptions checked?	✓			X
5.6 Calculations checked at minimum frequency?	✓			X
5.7 Units checked?	✓			X
5.8 Verified that appropriate data transferred to ReportDB?	✓			X

6.0 Comments on any 'No' response:

First Level [signature] **Date** 01/23/13 **Second** [signature] **Date** 1/23/13

TestAmerica Richland
QAS_RADCALCv4.8.58

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

CHEMISTRY, First/Second Level Review

1/25/2013 5:49:43 AM

Lot No., Due Date: J3A240406; 01/25/2013
Client, Site: 127642; S00X235B00 HANFORD
QC Batch No., Method Test: 3024032; M6010_S 6010A
SDG, Matrix: J01678; SOIL

1.0 Initial Calibration

	Yes	No	N/A	2nd
1.1 Performed at required frequency with required number of levels?	✓			✓
1.2 Correlation coefficient within QC limits?	✓			✓
1.3 Initial calibration verification (ICV) analyzed immediately after calibr. and results within QC limits of +/- 10% at 0.75 ppm?	✓			✓
1.4 ICB analyzed immediately after ICV and concentration of all parameters +/- report limit from zero? RL per RadCalc.	✓			✓

2.0 Continuing Calibration

	Yes	No	N/A	2nd
2.1 CCV analyzed at required frequency and all parameters within QC limits or +/- 10% at 0.7500 ppm?	✓			✓
2.2 CCB analyzed at required frequency and all results +/- reporting limit from zero?	✓			✓

3.0 Sample Analysis

	Yes	No	N/A	2nd
3.1 Were any samples with concentration above the linear range diluted and reanalyzed?			✓	✓
3.2 Were all sample holding times met?	✓			✓

4.0 QC Samples

	Yes	No	N/A	2nd
4.1 All results for the preparation blank < reporting limits?	✓			✓
4.2 MS or MS/MSD recoveries within 20% at 1 ppm and within 20% RPD (for MSD)?	✓			✓
4.3 LCS precent recovery within 20% at 1 ppm and 20% RPD (for LCSD)?	✓			✓
4.4 Analytical spikes within QC limits where applicable?	✓			✓
4.5 ICP only: One serial dilution performed and within 10% of parent per SDG?	✓			✓
4.6 ICP only: RLV run per batch and within 20% of current values?	✓			✓
4.7 ICP only: ICSA,ICSAB analyzed at the required frequencies and within 20% of values per dilution record?	✓			✓

5.0 Other

	Yes	No	N/A	2nd
5.1 Are all nonconformances included and noted?			✓	✓
5.2 Is the correct date and time of analysis shown?	✓			✓
5.3 Did the analyst sign and date the digestion log for the analytical run?	✓			✓
5.4 Correct methodology used?	✓			✓
5.5 Transcriptions checked?	✓			✓
5.6 Calculations checked at minimum frequency?	✓			✓
5.7 Units checked?	✓			✓
5.8 Verified that appropriate data transferred to ReportDB?	✓			✓

6.0 Comments on any 'No' response:

First Level [signature] **Date** 1/25/13 **Second** [signature] **Date** 1/25/13

TestAmerica Richland
QAS_RADCALCv4.8.58

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Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-437	Page 1 of 1

Collector m Riddell	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	**Sampling Location** 100-D-100 BCL SPA		**SAF No.** RC-074
Ice Chest No. N/A	**Field Logbook No.** EL-1607-15	**COA** 0D10032000	**Method of Shipment** Hand Deliver
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

Price Code 8L

Data Turnaround ~~21 Days~~ 24 Hrs mw 1/22/13

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

J3A230412

J01678

J3A230412

Preservation	Cool 4C	Cool 4C										
Type of Container	G/P	G/P										
No. of Container(s)	1	1										
Volume	125mL	125mL										
	See item (1) in Special Instructions.	Chromium Hex - 7196 - Quick Turn {Hexavalent Chromium}										

Sample No.	Matrix *	Sample Date	Sample Time										
J1R985 mXXWP	SOIL	1/22/13	1444	X	X								
J1R986 mXXWQ	SOIL	↓	1447	X	X								
J1R987 mXXWR	SOIL	↓	1450	X	X								
~~J1R988~~	~~SOIL~~ AF 1-23-13												
~~J1R989~~	~~SOIL~~												

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Mike Riddell [signature]	1-22-13 1520	WCH MTStankouch [signature]	1520 1/22/13
WCH MTStankouch [signature]	1640 1/22/13	Cindy Burnham [signature]	1060#1 1640
Cindy Burnham [signature]	1060#1 1-23-13 0832	A. Freier A. Freier	0832 1-23-13
WCH A. Freier A. Freier	0845 1-23-13	J Bock J. Bock THLR	1-23-13 0845

SPECIAL INSTRUCTIONS

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

REVIEWED BY [signature] DATE 1/23/13

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 1-23-13 | 0845 Container GM Screen Result: (Airlock) .6 Initials [B]
Sample GM Screen Result (Sample Receiving) .4 Initials [B]

Client: WCH SDG #: J01678 NA [ ] SAF #: RC-074 NA [ ]

Lot Number: J3A230412

Chain of Custody # RC-074-437

Shipping Container ID: hand deliv. NA [RW] 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: 1.9 °C on 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): 3
7. Containers received: 6 x 125 mLp
8. Sample holding times exceeded? NA [ ] Yes [ ] No [B]
9. Samples have:
   - ____ tape
   - [B] custody seals
   - ____ hazard labels
   - [B] appropriate sample labels
10. Matrix:
    - [B] A (FLT, Wipe, Solid, Soil)
    - ____ S (Air, Niosh 7400)
    - ____ I (Water)
    - ____ T (Biological, Ni-63)
11. Samples:
    - [B] are in good condition
    - ____ are broken
    - ____ Other
    - ____ are leaking
    - ____ have air bubbles (Only for samples requiring no head space)
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [B]
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)

    RPL ID # of preservative used : N/A
13. Were any anomalies identified in sample receipt? Yes [ ] No [B]
14. Description of anomalies (include sample numbers): NA [B]

LS-023, Rev. 15, 07/11 See over for additional information.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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 Custodian: Jennifer Beck Date: 1-23-13

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 1/23/13

SAMPLE ID	Initial pH	Acid Amt	Final pH	SAMPLE ID	Initial pH	Acid Amt	Final pH

1-23-13 1-23-13

J3 A230412 1/23/13

LS-023, Rev. 15, 07/11

See over for additional information.

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-435	Page 1 of 1

Collector m Riddell	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH
Price Code 8L	**Data Turnaround** ~~21 Days~~ 24 Hrs		
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	**Sampling Location** 100-D-100 BCL SPA		**SAF No.** RC-074
Ice Chest No. N/A	**Field Logbook No.** EL-1607-15	**COA** 0D10032000	**Method of Shipment** Hand Deliver
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

J3A240406

J01678

Due 1-25-13

J3A240406

Preservation	Cool 4C	Cool 4C										
Type of Container	G/P	G/P										
No. of Container(s)	1	1										
Volume	125mL	125mL										
	See item (1) in Special Instructions.	Chromium Hex - 7196 - Quick Turn {Hexavalent Chromium}										

Sample No.	Matrix *	Sample Date	Sample Time										
J1R975 mXX5F	SOIL	1-23-13	1409	–	–								
J1R976 mXX5G	SOIL	↓	1431	–	–								
J1R977 mXX5H	SOIL	↓	1415	–	–								
J1R978 mXX5J	SOIL	↓	1420	–	–								
J1R979 mXX5K	SOIL	↓	1423	–	–								

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: Mike Riddell	Date/Time 1-23-13 1530	Received By/Stored In: WCH mstankovich	Date/Time 1-23-13 1530
Relinquished By/Removed From: WCH mstankovich	Date/Time 1640 1/23/13	Received By/Stored In: Burdam 1-23-13	Date/Time 1640
Relinquished By/Removed From: Burdam WCH 1-24-13	Date/Time 0830	Received By/Stored In: J. Beck TALR	Date/Time 0830 1-24-13
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

REVIEWED BY

DATE 1-24-13

Matrix *

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-074-438	Page 1 of 1
Collector: M Riddell	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: 8L
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-100 BCL SPA		SAF No.: RC-074	Data Turnaround: ~~21 Days~~ 24 Hrs 1/23/13
Ice Chest No.: N/A	Field Logbook No.: EL-1607-15	COA: 0D10032000	Method of Shipment: Hand Deliver	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

J3A240406

J0678

Due 1-25-13

Preservation	Cool 4C	Cool 4C									
Type of Container	G/P	G/P									
No. of Container(s)	1	1									
Volume	125mL	125mL									
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196 - Quick Turn {Hexavalent Chromium}									

Sample No.	Matrix *	Sample Date	Sample Time										
J1R990 MXX5L	SOIL	1-23-13	1426	✓	✓								
J1R991 MXX5M	SOIL	↓	1429	✓	✓								
J1R992 MXX5N	SOIL	↓	1437	✓	✓								
J1R993 MXX5P	SOIL	↓	1440	✓	✓								
J1R994 MXX5Q	SOIL	↓	1443	✓	✓								

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Mike Riddell [signature]	1-23-13 1530	WCH MTStankovich	1/23/13 1530
WCH MTStankovich	1/23/13 1640	Cindy Bingham [signature]	1060#1 1-23-13 1640
Cindy Bingham [signature]	1060#1 1-24-13 0830	TALR J.Bock J.Bock	1-24-13 0830

SPECIAL INSTRUCTIONS

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

REVIEWED BY AJ DATE 1-24-13

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-074-461	Page 1 of 1
Collector M Riddell	**Company Contact** Joan Kessner	**Telephone No.** 509-375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 8L
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	**Sampling Location** 100-D-100 French Drain		**SAF No.** RC-074	**Data Turnaround** ~~21 Days~~ 24 Hrs 1/23/13
Ice Chest No. N/A	**Field Logbook No.** EL-1607-15	**COA** 0D10032600	**Method of Shipment** Hand Deliver	
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

J3A240406

J01678

Due 1-25-13

Preservation				Cool 4C	Cool 4C							
Type of Container				G/P	G/P							
No. of Container(s)				1	1							
Volume				60mL	125mL							
SAMPLE ANALYSIS				See item (1) in Special Instructions.	Chromium Hex - 7196 - Quick Turn {Hexavalent Chromium}							
Sample No.	Matrix *	Sample Date	Sample Time									
J1RC29 MXX5R	SOIL	1/23/13	0810	✓	✓							

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Mike Riddell [signature]	1-23-13 08:30	WCH [signature] mT Stanbouch	1/23/13 0830
[signature] mT Stanbouch	1640 1/23/13	[signature] Bingham	1060#1 1-23-13 1640
[signature] WCH	1060#1 1-24-13 0830	TALR J. Bock Bock	1-24-13 0830

SPECIAL INSTRUCTIONS

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

REVIEWED BY AF DATE 1-24-13

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 1-24-13 / 0830 Container GM Screen Result: (Airlock) .4 Initials [BS]
Sample GM Screen Result (Sample Receiving) .4 Initials [BS]

Client: WCH SDG #: 3011678 NA [ ] SAF #: RC-074 NA [ ]

Lot Number: 53A240406

Chain of Custody # RC-074-435; 438; 461

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

Samples received inside shipping container/cooler/box Yes [BS] 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 [BS]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [BS]
3. Cooler temperature: 10.0 °C Ice packs NA [ ]
4. Vermiculite/packing materials is NA [BS] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [BS] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 11
7. Containers received: 22 x 125 mLp

8. Sample holding times exceeded? NA [ ] Yes [ ] No [BS]
9. Samples have:
   - ___ tape
   - BS custody seals
   - ___ hazard labels
   - BS appropriate sample labels
10. Matrix:
    - BS A (FLT, Wipe, Solid, Soil)
    - ___ S (Air, Niosh 7400)
    - ___ I (Water)
    - ___ T (Biological, Ni-63)
11. Samples:
    - BS are in good condition
    - ___ are broken
    - ___ are leaking
    - ___ have air bubbles (Only for samples requiring no head space)
    - ___ Other
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [BS]
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)

    RPL ID # of preservative used : N/A
13. Were any anomalies identified in sample receipt? Yes [ ] No [BS]
14. Description of anomalies (include sample numbers): NA [BS]

LS-023, Rev. 15, 07/11 See over for additional information.

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THE LEADER IN ENVIRONMENTAL TESTING

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 Custodian: Jim Bock Date: 1-24-13

Client Informed on _____ by _____ Person contacted _____

[X] No action necessary; process as is

Project Manager Rhonda [illegible] Date 1/24/13

SAMPLE ID	Initial pH	Acid Amt	Final pH	SAMPLE ID	Initial pH	Acid Amt	Final pH

JBA 240400 1/24/13

LS-023, Rev. 15, 07/11

See over for additional information.

1/23/2013 10:42:43 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC ,
Washington Closure Hanford LLC

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

AnalyDueDate: 01/24/2013

Batch: 3023043 SOIL mg/kg
SEQ Batch, Test: None

PM, Quote: RW2, 88144

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

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MXXWP-1-AC													
J3A230412-1-SAMP													
01/22/2013 14:44			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
2 MXXWP-1-CE-S													
J3A230412-1-MS													
01/22/2013 14:44			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
3 MXXWP-1-CF-X													
J3A230412-1-DUP													
01/22/2013 14:44			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
4 MXXWQ-1-AC													
J3A230412-2-SAMP													
01/22/2013 14:47			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
5 MXXWR-1-AC													
J3A230412-3-SAMP													
01/22/2013 14:50			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
6 MXXXT-1-AA-B													
J3A230000-43-BLK													
01/23/2013 10:42 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
7 MXXXT-1-AC-C													
J3A230000-43-LCS													
01/23/2013 10:42 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

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ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.49

1/23/2013 10:42:44 AM

Sample Preparation/Analysis

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 01/24/2013

Batch: 3023043 **mg/kg**
SEQ Batch, Test: None

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

Comments:

All Clients for Batch:
127642, Washington Closure Hanford LLC Washington Closure Hanford LLC, RW2, 88144

MXXWP1AC-SAMP Constituent List:

MXXWP1CE-MS Constituent List:

MXXXT1AA-BLK:

MXXXT1AC-LCS:

MXXWP1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXXWP1CE-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXXXT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXXXT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

1/24/2013 10:54:59 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Washington Closure Hanford LLC

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

AnalyDueDate: 01/25/2013

Sep1 **DT/Tm Tech:**

Batch: 3024031 SOIL mg/kg PM, Quote: RW2, 88144
SEQ Batch, Test: None

Sep2 **DT/Tm Tech:**

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MXX5F-1-AC J3A240406-1-SAMP 01/23/2013 14:09			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
2 MXX5F-1-AW-S J3A240406-1-MS 01/23/2013 14:09			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
3 MXX5F-1-AX-X J3A240406-1-DUP 01/23/2013 14:09			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
4 MXX5G-1-AC J3A240406-2-SAMP 01/23/2013 14:31			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
5 MXX5H-1-AC J3A240406-3-SAMP 01/23/2013 14:15			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
6 MXX5J-1-AC J3A240406-4-SAMP 01/23/2013 14:20			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
7 MXX5K-1-AC J3A240406-5-SAMP 01/23/2013 14:23			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

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ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.49

1/24/2013 10:54:59 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Washington Closure Hanford LLC

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #:

AnalyDueDate: 01/25/2013

Sep1 DT/Tm Tech:

Batch: 3024031 SOIL mg/kg PM, Quote: RW2, 88144
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MXX5L-1-AC J3A240406-6-SAMP 01/23/2013 14:26			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
9 MXX5M-1-AC J3A240406-7-SAMP 01/23/2013 14:29			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
10 MXX5N-1-AC J3A240406-8-SAMP 01/23/2013 14:37			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
11 MXX5P-1-AC J3A240406-9-SAMP 01/23/2013 14:40			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
12 MXX5Q-1-AC J3A240406-10-SAMP 01/23/2013 14:43			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
13 MXX5R-1-AC J3A240406-11-SAMP 01/23/2013 20:10			AmtRec: 2X125MLP		#Containers: 2				Scr:		Alpha:		Beta:
14 MXX6J-1-AA-B J3A240000-31-BLK 01/24/2013 10:54 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

1/24/2013 10:55:00 AM

Sample Preparation/Analysis

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 01/25/2013

Batch: 3024031 **mg/kg**
SEQ Batch, Test: None

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

15 MXX6J-1-AC-C

J3A240000-31-LCS

01/24/2013 10:54 pd AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments:

All Clients for Batch:
127642, Washington Closure Hanford LLC Washington Closure Hanford LLC, RW2, 88144

MXX5F1AC-SAMP Constituent List:

MXX5F1AW-MS Constituent List:

MXX6J1AA-BLK:

MXX6J1AC-LCS:

MXX5F1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXX5F1AW-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXX6J1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MXX6J1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B