FREEPORT-McMoRan

Miami Operations
5701 New St., P.O. Box 4444
Claypool, AZ 85532-4444

February 16, 2024

VIA ELECTRONIC SUBMISSION

The Honorable Michael S. Regan
Administrator
U. S. Environmental Protection Agency
Washington, DC 20460

Re: Supplemental Submission by Freeport-McMoRan Miami Inc. on the Proposed Copper Smelting NESHAP Rule Revisions (Docket ID No. EPA-HQ-OAR-2020-0430)

Dear Administrator Regan,

Enclosed please find the report titled "Vent Fume, Aisle Scrubber and Acid Plant Tail Gas Mercury Emissions Test Report", dated February 15, 2024, which includes data for the additional emissions testing for mercury performed by Freeport-McMoRan Miami Inc. in support of the company's supplemental submission of additional information and comments transmitted to the Environmental Protection Agency on January 29, 2024.

If you have any questions concerning this submittal or need additional details, please contact me at (928) 200-3548.

Sincerely,

Mark Albertsen
General Manager,
Freeport-McMoRan Miami Inc.

cc: Amanda Hansen, U.S. Environmental Protection Agency
Chuck French, U.S. Environmental Protection Agency

Vent Fume, Aisle Scrubber and Acid Plant Tail Gas Mercury Emissions Test Report

Freeport-McMoRan Miami Inc.

5701 New Street, Claypool, Arizona 85532

Prepared by:

SLR International Corporation

1612 Specht Point Road, Suite 119, Fort Collins, Colorado, 80525

SLR Project No.: 118.01290.00025

Permit No.: 95046

February 15, 2024

Summary Information

SOURCE INFORMATION			
Source Location		Freeport-McMoRan Miami Inc. 5701 New Street Claypool, Arizona 85532	
Facility Contact	Name	Mr. Bryce Mares	
	Company	Freeport-McMoRan Miami Inc.	
	Telephone	(928) 473-7060	
	Email	bmares@fmi.com	
Project Contact	Name	Ms. Julie Lishner	
	Company	Freeport-McMoRan Miami Inc.	
	Telephone	(928) 200-3548	
	Email	jlishner@fmi.com	
Regulatory Agency	Name	Environmental Protection Agency	
	Contact	Amanda Hansen	
	Email	Hansen.Amanda@epa.gov	
Units Sampled		Vent Fume Stack	
		Aisle Scrubber Stack	
		Acid Plant Tail Gas Stack	
Primary Methods Performed		Method 29	
Purpose		Primary Copper Smelting Sector Facilities Residual Risk and Technology Review	
Sampling Equipment		Method 29 isokinetic sampling systems	
TESTING COMPANY INFORMATION			
Testing Firm		SLR International 1612 Specht Point Road, Suite 119 Fort Collins, Colorado 80525	
Contact		Mr. Doug Bopray	Mr. John Rosburg
Title		Project Manager	Source Assessments LLC, Principal Scientist
Telephone		(970) 219-1431	(970) 420-0602
Email		dbopray@slrconsulting.com	jsrosburg@gmail.com
Test Dates		Aisle Scrubber Stack - April 12 through 17, 2023 Vent Fume Stack – May 11, 2023 Acid Plant Tail Gas Stack – October 31 through November 2, 2023	

Executive Summary

Freeport-McMoRan Miami Inc. (FMMI) owns and operates a copper smelting facility located at 5701 New Street, Claypool, Arizona 85532. The FMMI facility is authorized to operate under Arizona Department of Environmental Quality (ADEQ) Air Quality Control Permit No. 95046, issued September 6, 2023 (Permit) and revised by Minor Permit Revision No. 98711 issued November 1, 2023. The facility sources are subject to requirements under the Code of Federal Regulations Title 40, Part 63 (40 CFR 63) Subpart QQQ—National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting (Copper NESHAP) and ADEQ rules and regulations.

The US Environmental Protection Agency (USEPA) proposed amendments to the Copper NESHAP including an additional standard for Mercury (Hg). The proposed Hg emission standard is 0.033 pounds per hour (lb/hr) and is primarily based on measurement of the combined Hg emissions from the Miami Smelter Vent Fume, Acid Plant Tail Gas (APTG), and Aisle Scrubber stacks.

To gather additional data for consideration by the USEPA toward informing the proposed emissions standards in the Copper NESHAP, FMMI requested that compliance test programs performed at the Vent Fume, Aisle Scrubber, and APTG stacks for the determination of lead (Pb) emissions also include analyses for mercury (Hg) emissions. This report provides the results of the requested Hg emissions measurements. The Pb emissions results were submitted in the respective compliance test reports.

As part of the compliance test programs conducted for the Aisle Scrubber stack in April 2023, Vent Fume stack in May 2023, and APTG stack in October and November 2023, Hg analyses were completed for all USEPA Method 29 samples collected for each of the sources. This report provides the results of the Hg analyses and calculation of Hg emission rates. The Hg test results are presented in terms of emission rate (lb/hr) as is the proposed combined Hg emission standard.

Error! Reference source not found. lists the average Hg mass emission rate (lb/hr) results for the Aisle Scrubber, Vent Fume and APTG stacks. Also listed in Error! Reference source not found. are the test parameters, test method and result designations. For results that are flagged below detection level (BDL), the method detection level (MDL) was substituted to calculate the concentration and emission rate of each sample run and the sample run results were averaged and flagged BDL. For average results where one but not all results are BDL, the MDL substituted result(s) and above detection level (ADL) result(s) were summed or averaged and flagged detection level limited (DLL). For average results where all samples were ADL, the average results are flagged ADL.

Table ES- 1 Average Mercury Results (lb/hr)

Source ID	Test Method	Parameter	Results Designation	Average Results
Aisle Scrubber	29	Mercury	DLL	3.41E-03
Vent Fume			DLL	1.70E-03
APTG			DLL	6.18E-03

BDL = Below the Detection Limit

DLL = Detection Level Limited – at least one but not all analytical values used to calculate the sample mass sample mass are less than the laboratory's reported detection limit(s)

ADL = Above Detection Level – the analytical value(s) used to calculate the sample mass is greater than the laboratory's reported detection level(s)

Table of Contents

Tables

Figures

Appendices

1.0 Introduction

Freeport-McMoRan Miami Inc. (FMMI) owns and operates a copper smelting facility located at 5701 New Street, Claypool, Arizona 85532. The FMMI facility is authorized to operate under Arizona Department of Environmental Quality (ADEQ) Air Quality Control Permit No. 95046, issued September 6, 2023 (Permit) and revised by Minor Permit Revision No. 98711 issued November 1, 2023. The facility sources are subject to requirements under the Code of Federal Regulations Title 40, Part 63 (40 CFR 63) Subpart QQQ—National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting (Copper NESHAP) and ADEQ rules and regulations.

1.1 Purpose

The US Environmental Protection Agency (USEPA) proposed amendments to the Copper NESHAP including an additional facility-wide emission standard for mercury (Hg). The proposed facility-wide Hg emission standard is 0.033 pounds per hour (lb/hr).

To gather additional data for consideration by the USEPA toward informing the proposed emissions standards in the Copper NESHAP, FMMI requested that compliance test programs performed at the Vent Fume, Aisle Scrubber, and APTG stacks for the determination of lead (Pb) emissions also include analyses for mercury (Hg) emissions. This report provides the results of the requested Hg emissions measurements. The Pb emissions results were submitted in the respective compliance test reports.

As part of the compliance test programs conducted for the Aisle Scrubber stack in April 2023, Vent Fume stack in May 2023, and APTG stack in October and November 2023, Hg analyses were completed for all USEPA Method 29 samples collected for each of the sources. This report provides the results of the Hg analyses and calculation of Hg emission rates. The Hg test results are presented in terms of mass emission rate (lb/hr) as is the proposed facility-wide Hg emission standard.

1.2 Project Responsibilities

FMMI retained SLR International Corporation (SLR) to perform the required and supplemental measurements. SLR is located at 1612 Specht Point Road, Suite 119, Fort Collins, Colorado 80525. Mr. Doug Bopray, SLR Associate Scientist, is the project manager for this test program. Mr. Bopray can be reached by telephone at (970) 999-3980 or by e-mail at dbopray@slrconsulting.com. Mr. John Reichenbach of FMMI was responsible for the coordination of the test program and collection of process data. Mr. Reichenbach may be reached by telephone at (928) 473-7418, by cell phone at (928) 701-3733, or by e-mail at jreichen@fmi.com.

1.3 Report Organization

This report is organized as follows:

- A summary of results is provided in Chapter 2.
- A description of the process and operations during testing is provided in Chapter 3.
- The source test methodology is presented in Chapter 4.

- Chapter 5 includes a concise description of the quality assurance/quality control (QA/QC) procedures implemented.
- **Appendix A** includes Field Data Forms and Analytical Results.
- **Appendix B** provides Calibration Data.
- **Appendix C** presents Process Data.

2.0 Summary of Results

2.1 Overview

The annual compliance test programs for the determination of lead Pb emissions, and supplemental field measurements were performed at the Aisle Scrubber, Vent Fume, and APTG stacks. Mercury measurements were performed at FMMI's request to provide additional data for consideration by the USEPA toward informing the proposed emissions standards in the Copper NESHAP. The results of the Pb compliance measurements are provided under separate cover. Each Method 29 sample run was conducted in triplicate. The results of each individual sample run as well as the average results of each triplicate test series are provided below.

The field measurements were conducted during normal and representative process operations with at least one converter operating. If a converter was rolled out for skimming, the procedure was considered to be normal operation and the testing was not interrupted.

All equipment was prepared and calibrated in accordance with USEPA's *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods*, 40 CFR 60, Appendix A and SLR's general Quality Assurance/Quality Control (QA/QC) policy. These procedures meet or exceed all USEPA requirements and guidelines for equipment maintenance and calibration. All equipment was in proper working order prior to mobilization to the facility.

2.2 Data Quality and Reporting

The detection status of the analytical mass results, calculated concentrations and emission rates determined for Hg is provided in the results tables below. If the Hg measured value is below detection limit (BDL), the result is flagged BDL. The method detection limit (MDL) for Hg is substituted for the result when calculating concentration and emission rate. If the Hg measured value is above the detection limit (ADL), the results are flagged ADL and the reported mass is used for the calculated results. If at least one but not all of the Hg mass values used to calculate the sample mass are BDL for test methods which have multiple sample fractions that are summed for the final result, the summed result is flagged detection level limited (DLL).

For the average test result of a sample series where all sample results are BDL, the average result is flagged BDL. For the average test result of a sample series where all sample results are ADL, the average result is flagged ADL. For the average result of a sample series where one but not all results are BDL, the average result is flagged DLL.

2.3 Support Measurements Results

Methods 2 (velocity), 3 (molecular weight) and 4 (moisture content) were performed in support of the pollutant measurements. The results of these test procedures allowed for the determination of effluent velocity and subsequent calculation of volumetric flow rate. The volumetric flow rate, determined for each sample run, allowed for resultant mass emission rates to be calculated for Hg. Method 2 and 4 were incorporated into and performed in conjunction with each Method 29 sample run. Method 3 was performed simultaneously with each APTG Method 29 sample run. Integrated bag samples were collected at the APTG stack and subjected to Fyrite instrument for analyses following Method 3. The results of the diluent O_2 and CO_2 analysis were used to determine the effluent gas dry molecular weight for each APTG Method

29 sample run. The effluent of the Vent Fume System and Aisle Scrubber stacks are at nearly ambient conditions. Therefore, gas analysis for the determination of effluent molecular weight was not necessary at these sources. As stated in 40 CFR 60, Appendix A, Method 2, Section 8.6, “For processes emitting essentially air, an analysis need not be conducted; use a dry molecular weight of 29.”[1]

The support measurements results were applied to each corresponding Method 29 run to determine mass emission rates.

2.4 Mercury Emissions Results

The Hg emission rate results were quantified following Method 29, “Determination of Metals Emissions from Stationary Sources.” This method is applicable for the determination of lead and other elemental metallic emissions from stationary sources. Samples were withdrawn isokinetically from the Aisle Scrubber, Vent Fume, and APTG stack exhausts and collected on the front-half and in the condensate portion of the sample trains.

2.4.1 Aisle Scrubber Mercury Results

The Aisle Scrubber stack Method 29 samples were collected on April 12, 15, and 17, 2023. The three samples were collected over a total sampling duration of 120-minutes. All samples were collected using 24, 5-minute traverse points. The Aisle Scrubber stack Hg sample results as well as the average of the sample series are presented in **Table 2-1**.

Included in the table are the average of the recorded test parameters, calculated effluent volumetric flow rates, and Hg results. The Hg emission rate ranged from 1.05E-03 lb/hr for run AS29-2 to 7.94E-03 lb/hr for run AS29-1. The average Hg emission rate is 3.41E-03 lb/hr.

2.4.2 Vent Fume Mercury Results

The Vent Fume stack Method 29 samples were collected on May 11, 2023. The three samples were each collected over a total sampling duration of 120-minutes. All samples were collected using 12, 10-minute traverse points. The Vent Fume stack Hg sample results as well as the average of the sample series are presented in **Table 2-2**.

Included in the table are the average of the recorded test parameters, calculated effluent volumetric flow rates, and Hg results. The Hg emission rate ranged from 5.92E-04 lb/hr for run VF29-3 to 3.88E-03 lb/hr for run VF29-1. The average Hg emission rate is 1.70E-03 lb/hr.

2.4.3 Acid Plant Tail Gas Mercury Results

The APTG stack Method 29 samples were collected on October 31 through November 2, 2023. The three samples were collected over a total sampling duration of 120-minutes. All samples were collected using 12, 10-minute traverse points. The APTG stack Hg sample results as well as the average of the sample series are presented in **Table 2-3**.

Included in the table are the average of the recorded test parameters, calculated effluent volumetric flow rates, and Hg results. The Hg emission rate ranged from 4.66E-03 lb/hr for run AP29-1 to 7.74E-03 lb/hr for run AP29-3. The average Hg emission rate is 6.18E-03 lb/hr.

[1] See Section 8.6 of 40 CFR 50, Appendix A, Method 2.

Table 2-1 Mercury Results - Aisle Scrubber Stack

Test Parameters	AS29-1 04/12/23 1431-1637		AS29-2 04/15/23 1405-1613		AS29-3 04/17/23 1335-1542		Average	
Sample Time (min)	120		120		120		120	
Vol meter (acf)	82.385		87.763		85.736		85.295	
Ave. SQRT dP (in WC)1/2	0.448		0.477		0.464		0.463	
dH (in WC)	1.26		1.43		1.35		1.35	
T stack (F)	70.4		69.2		68.5		69.4	
T meter (F)	94.3		81.8		87.2		87.8	
P static (in WC)	0.60		0.60		0.62		0.61	
P bar (in Hg)	26.30		26.30		26.30		26.30	
P stack (in Hg)	26.34		26.34		26.35		26.34	
H_2O Mass Gain (g)	35.80		38.60		45.90		40.10	
Yd (meter coef.)	0.9932		0.9932		0.9932		0.9932	
dH @ (in WC)	1.7674		1.7674		1.7674		1.7674	
Cp (pitot coef.)	0.84		0.84		0.84		0.84	
Dia stack (in)	359.5		359.5		359.5		359.5	
Dia nozzle (in)	0.278		0.278		0.278		0.278	
CO_2 (%)	0.00		0.00		0.00		0.00	
O_2 (%)	20.90		20.90		20.90		20.90	
Vol meter (std) (dscf)	68.725		74.941		72.465		72.044	
Md (lb/lb-mole)	28.84		28.84		28.84		28.84	
Ms (lb/lb-mole)	28.58		28.58		28.52		28.56	
Vwc	1.69		1.82		2.16		1.89	
H_2O (%)	2.4		2.4		2.9		2.6	
ISO (%)	98.3		100.6		100.3		99.7	
Flow Rate Results								
Velocity (ft/s)	27.0		28.7		27.9		27.9	
Vol. Flow Rate (kcfm)	1,142		1,214		1,182		1,179	
Vol. Flow Rate (kwscfm)	1,001		1,066		1,040		1,036	
Vol. Flow Rate (kdscfm)	977		1,041		1,010		1,009	
Mercury Results								
Hg Front Half Sample(ug)	0.0840	BDL	0.0840	BDL	0.0840	BDL	0.084	BDL
Hg Front Half Blank(ug)	ND		ND		ND		ND	
Hg HNO_3/H_2O_2 (ug)	0.120	BDL	0.120	BDL	0.120	BDL	0.120	BDL
Hg Empty Mass (ug)	0.120	BDL	0.114	BDL	0.120	BDL	0.118	BDL
Hg $KMnO_4$ (ug)	0.0480	BDL	0.0480	BDL	0.0480	BDL	0.0480	BDL
Hg HCl (ug)	3.85	ADL	0.208	ADL J	0.303	ADL	1.454	ADL
Hg Total Back Half Sample (ug)	4.14	DLL	0.490	DLL	0.591	DLL	1.740	DLL
Hg Back Half Blank Sum (ug)	ND		ND		ND		ND	
Hg Total Mass (ug)	4.22	DLL	0.574	DLL	0.675	DLL	1.824	DLL
Hg Concentration (mg/dscm)	2.17E-03	DLL	2.71E-04	DLL	3.29E-04	DLL	9.24E-04	DLL
Hg Concentration (lb/dscf)	1.35E-10	DLL	1.69E-11	DLL	2.05E-11	DLL	5.76E-11	DLL
Hg Concentration (gr/dscf)	9.48E-07	DLL	1.18E-07	DLL	1.44E-07	DLL	4.03E-07	DLL
Hg Emission Rate (lb/hr)	7.94E-03	DLL	1.05E-03	DLL	1.24E-03	DLL	3.41E-03	DLL

MDL = Method Detection Limit

BDL = Below the Detection Limit, the MDL is reported.

DLL = Detection Level Limited – at least one but not all analytical values used to calculate the sample mass are less than the laboratory's reported detection limit(s)

ADL = Above Detection Level – the analytical value(s) used to calculate the sample mass is greater than the laboratory's reported detection level(s)

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Table 2-2 Mercury Results - Vent Fume Stack

Test Parameters	VF29-1 05/11/23 0942-1145		VF29-2 05/11/23 1206-1409		VF29-3 05/11/23 1433-1636		Average	
Sample Time (min)	120		120		120		120	
Vol meter (acf)	106.320		101.881		101.470		103.224	
Ave. SQRT dP (in WC)1/2	0.58		0.56		0.56		0.57	
dH (in WC)	2.26		2.07		2.04		2.12	
T stack (F)	73.8		74.1		76.4		74.8	
T meter (F)	79.0		80.3		87.1		82.1	
P static (in WC)	0.82		0.81		0.80		0.81	
P bar (in Hg)	26.10		26.10		26.05		26.08	
P stack (in Hg)	26.16		26.16		26.11		26.14	
H_2O Mass Gain (g)	56.00		53.90		58.20		56.03	
Yd (meter coef.)	1.0068		1.0068		1.0068		1.0068	
dH @ (in WC)	1.9156		1.9156		1.9156		1.9156	
Cp (pitot coef.)	0.84		0.84		0.84		0.84	
Dia stack (in)	159.5		159.5		159.5		159.5	
Dia nozzle (in)	0.277		0.277		0.277		0.277	
CO_2 (%)	0.00		0.00		0.00		0.00	
O_2 (%)	20.90		20.90		20.90		20.90	
Vol meter (dscf)	92.017		87.910		86.306		88.745	
Md (lb/lb-mole)	28.84		28.84		28.84		28.84	
Ms (lb/lb-mole)	28.53		28.53		28.50		28.52	
Vwc	2.64		2.54		2.74		2.64	
H_2O (%)	2.8		2.8		3.1		2.9	
ISO (%)	102.4		102.1		101.4		101.9	
Flow Rate								
Velocity (ft/s)	35.5		34.1		34.0		34.5	
Vol. Flow Rate (kcfm)	295		283		283		287	
Vol. Flow Rate (kwscfm)	255		245		243		248	
Vol. Flow Rate (kdscfm)	248		238		235		241	
Mercury Results								
Hg Front Half Sample(ug)	0.114	ADL J	0.0899	ADL J	0.0840	BDL	0.096	DLL
Hg Front Half Blank(ug)	ND		ND		ND		ND	
Hg HNO_3/H_2O_2 (ug)	0.120	BDL	0.120	BDL	0.120	BDL	0.120	BDL
Hg Empty Mass (ug)	0.114	BDL	0.120	BDL	0.120	BDL	0.118	BDL
Hg $KMnO_4$ (ug)	0.127	ADL J	0.0480	BDL	0.0474	BDL	0.0741	DLL
Hg HCl (ug)	10.4	ADL J	1.35	ADL J	1.27	ADL J	4.340	ADL
Hg Total Back Half Sample (ug)	10.76	DLL	1.638	DLL	1.557	DLL	4.652	DLL
Hg Back Half Blank Sum (ug)	ND		ND		ND		ND	
Hg Total Mass (ug)	10.88	DLL	1.728	DLL	1.641	DLL	4.748	DLL
Hg Concentration (mg/dscm)	4.18E-03	DLL	6.95E-04	DLL	6.72E-04	DLL	1.85E-03	DLL
Hg Concentration (lb/dscf)	2.61E-10	DLL	4.33E-11	DLL	4.19E-11	DLL	1.15E-10	DLL
Hg Concentration (gr/dscf)	1.82E-06	DLL	3.03E-07	DLL	2.93E-07	DLL	8.07E-07	DLL
Hg Emission Rate (lb/hr)	3.88E-03	DLL	6.19E-04	DLL	5.92E-04	DLL	1.70E-03	DLL

MDL = Method Detection Limit

BDL = Below the Detection Limit, the MDL is reported.

DLL = Detection Level Limited – at least one but not all analytical values used to calculate the sample mass are less than the laboratory's reported detection limit(s)

ADL = Above Detection Level – the analytical value(s) used to calculate the sample mass is greater than the laboratory's reported detection level(s)

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Table 2-3 Mercury Results - Acid Plant Tail Gas Stack

Test Parameters	AP29-1 10/31/23 1317-1524		AP29-2 11/01/23 1203-1408		AP29-3 11/02/23 0959-1205		Average	
Sample Time (min)	120		120		120		120	
Vol meter (acf)	99.948		100.380		85.032		95.120	
Ave. SQRT dP (in WC)1/2	0.57		0.57		0.49		0.54	
dH (in WC)	1.89		1.90		1.41		1.74	
T stack (F)	81.6		81.5		80.1		81.1	
T meter (F)	75.8		78.3		70.3		74.8	
P static (in WC)	0.31		0.32		0.31		0.31	
P bar (in Hg)	26.35		26.35		26.40		26.37	
P stack (in Hg)	26.37		26.37		26.42		26.39	
H_2O Mass Gain (g)	66.90		74.60		62.80		68.10	
Yd (meter coef.)	0.9932		0.9932		0.9932		0.9932	
dH @ (in WC)	1.7674		1.7674		1.7674		1.7674	
Cp (pitot coef.)	0.84		0.84		0.84		0.84	
Dia stack (in)	125.5		125.5		125.5		125.5	
Dia nozzle (in)	0.276		0.276		0.276		0.276	
CO_2 (%)	1.00		0.50		0.50		0.67	
O_2 (%)	11.00		10.00		10.00		10.33	
Vol meter (dscf)	86.573		86.543		74.454		82.523	
Md (lb/lb-mole)	28.60		28.48		28.48		28.52	
Ms (lb/lb-mole)	28.23		28.07		28.08		28.13	
Vwc	3.15		3.51		2.96		3.21	
H_2O (%)	3.5		3.9		3.8		3.7	
ISO (%)	99.9		99.7		100.3		100.0	
Flow Rate								
Velocity (ft/s)	34.9		35.1		29.8		33.3	
Vol. Flow Rate (kcfm)	180		181		154		171	
Vol. Flow Rate (kwscfm)	155		155		133		148	
Vol. Flow Rate (kdscfm)	149		149		128		142	
Mercury Results								
Hg Front Half Sample(ug)	2.38	ADL	1.40	ADL	1.31	ADL	1.70	ADL
Hg Front Half Blank(ug)	ND		ND		ND		ND	
Hg HNO_3/H_2O_2 (ug)	1.37	ADL	9.83	ADL	16.90	ADL	9.37	ADL
Hg Empty Mass (ug)	0.108	BDL	0.120	BDL	0.120	BDL	0.116	BDL
Hg $KMnO_4$ (ug)	0.122	ADL	0.296	ADL	0.274	ADL	0.231	ADL
Hg HCl (ug)	16.5	ADL	15.3	ADL	15.5	ADL	15.8	ADL
Hg Total Back Half Sample (ug)	18.1	DLL	25.5	DLL	32.8	DLL	25.5	DLL
Hg Back Half Blank Sum (ug)	ND		ND		ND		ND	
Hg Total Mass (ug)	20.48	DLL	26.95	DLL	34.10	DLL	27.18	DLL
Hg Concentration (mg/dscm)	8.36E-03	DLL	1.10E-02	DLL	1.62E-02	DLL	1.18E-02	DLL
Hg Concentration (lb/dscf)	5.22E-10	DLL	6.86E-10	DLL	1.01E-09	DLL	7.39E-10	DLL
Hg Concentration (gr/dscf)	3.65E-06	DLL	4.81E-06	DLL	7.07E-06	DLL	5.17E-06	DLL
Hg Emission Rate (lb/hr)	4.66E-03	DLL	6.15E-03	DLL	7.74E-03	DLL	6.18E-03	DLL

MDL = Method Detection Limit

BDL = Below the Detection Limit, the MDL is reported.

DLL = Detection Level Limited – at least one but not all analytical values used to calculate the sample mass are less than the laboratory's reported detection limit(s)

ADL = Above Detection Level – the analytical value(s) used to calculate the sample mass is greater than the laboratory's reported detection level(s)

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

3.0 Process Description

3.1 Smelter Operation

All measurement procedures at the Vent Fume, Aisle Scrubber and APTG stacks were performed at a normal and representative IsaSmelt® Furnace feed rate; nominally not less than 120 tons per hour. All measurements were conducted with at least one converter operating. If a converter was rolled out to skim during a sample run, it was not considered cause to halt testing.

During testing, all required pertinent process, air pollution control device (APCD) and Continuous Parameter Monitoring System (CPMS) operations data was monitored and recorded. The data recorded includes:

- Process rate in tons of concentrated ore fed introduced to the IsaSmelt® furnace per hour.
- If process units of a different type have combined emissions prior to the sampling location, a description of each process unit contributing was recorded.
- For baghouses, pressure drop across the baghouse; flue gas inlet temperature; maximum temperature and minimum temperature during test.
- For wet scrubbers and dynamic wet scrubbers the water flow rate; flow rate and identification of any additive in the scrubber water; pH; and pressure drop across the scrubber or the fan amperage; and scrubber discharge gas temperature; and average outlet gas temperature for each scrubber.
- Key design or operational characteristics of the APCD including if any sorbents or bag coatings were used in a baghouse or if alkali was added to wet control device liquids.

Table 3-1 lists the average IsaSmelt® vessel feed rate (dry ton concentrated ore fed per hour) recorded during the time samples were collected at the Aisle Scrubber, Vent Fume, and APTG stack exhausts. Process operation data for the time periods during which testing was conducted is stored on FMMI's local servers and can be accessed by the data acquisition system.

Table 3-1 IsaSmelt® Furnace Feed Rate

Date	Time	Source ID	Run Number	IsaSmelt®Feed Rate (dry ton concentrated ore fed/hr)
4/12/2023	1431-1637	Aisle Scrubber	AS29-1	125.0
4/15/2023	1405-1613		AS29-2	125.0
4/17/2023	1335-1542		AS29-3	125.0
5/11/2023	0942-1145	Vent Fume	VF29-1	125.0
5/11/2023	1206-1409		VF29-2	125.0
5/11/2023	1433-1636		VF29-3	125.0
10/31/2023	1317-1524	APTG	AP29-1	125.0
11/1/2023	1203-1408		AP29-2	125.0
11/2/2023	0959-1205		AP29-3	125.0

3.2 Smelter Process Description

The following is a brief description of the smelter process. A process flow diagram showing the process units and control devices is included in the appendices of this report.

3.2.1 Materials Handling, Blending, and Bedding Plants

Copper concentrate is delivered by truck and railcar to the bedding and blending plants where stockpiles are built up and prepared for feed to the IsaSmelt® Furnace. The blended copper concentrate is conveyed to the copper concentrate bin, where it is then conveyed to the paddle mixer to be combined with fluxes, external copper bearing feeds, and internal copper bearing streams (reverts, acid plant solids, etc.), which is then fed to the IsaSmelt® Furnace.

3.2.2 IsaSmelt® Furnace

The IsaSmelt® Furnace is the primary smelting furnace at the Miami Smelter. Concentrate is fed with oxygen-enriched air and fuel (natural gas, coal, metallurgical coke, etc.) into a closed vessel to produce copper matte and slag. The furnace is aerated to facilitate oxidation of the charge for utilization of residual heat. The furnace is then tapped, and the resulting mixture of copper matte and slag is fed to the Electric Furnace via launders for separation of slag.

Process off-gases produced by the IsaSmelt® Furnace are captured and routed to the waste heat boiler, electrostatic precipitator, and acid plant for removal of particulate matter and metals followed by conversion of sulfur dioxide (SO_2) to sulfuric acid (H_2SO_4). The remaining gases from the acid plant are routed to the tail gas caustic scrubber for removal of residual SO_2 before being vented to the APTG stack.

Fugitive gases from furnace tapping and transfer of molten copper matte and slag to the electric furnace are captured by the Vent Fume system and routed to the Vent Fume caustic scrubber for removal of SO_2, followed by two stages of wet electrostatic precipitators (WESPs) for removal of particulate matter and metals, before being vented to the Vent Fume stack.

Uncaptured gases from the IsaSmelt® Furnace and transfer of molten copper matte and slag exit exhaust to the atmosphere primarily through the roofline vents located above the IsaSmelt® vessel and Electric Furnace roofline.

3.2.3 Electric Furnace

The Electric Furnace serves as a slag separation device for mixed copper matte and slag transferred periodically by launder from the IsaSmelt® Furnace. Copper matte settles to the bottom of the electric furnace before being tapped in batches into ladles, which are then transported by crane to one of the four Hoboken Converters. The remaining slag layer in the electric furnace bath is removed in batches by a slag tapping launder and is transported by slag hauler to the slag storage area. A natural gas burner is utilized as needed to maintain heat for the bath during periods of maintenance or shut down.

Process off-gases produced by the Electric Furnace are captured and routed to the acid plant for removal of particulate matter before SO_2 in the gas stream is converted to H_2SO_4 in the acid plant. The remaining gases from the acid plant are routed to the tail gas caustic scrubber for removal of residual SO_2 before being vented to the APTG stack.

Gases from the molten matte and slag laundering are captured by the vent fume system, routed to the vent fume caustic scrubber for removal of SO_2, followed by two stages of WESPs for removal of particulate matter and metals, and vented the vent fume stack.

Uncaptured fugitive gases from the electric furnace exhaust to the atmosphere primarily through the roofline vent located above the electric furnace.

3.2.4 Copper Converters

Copper matte from the electric furnace is fed to the Hoboken Batch Copper Converters by ladle, where it is injected with air to further remove iron and other impurities, skimmed for slag by ladle, and injected with air again to removal residual sulfur from the molten bath. The resulting product, known as blister copper, is transferred in batches by ladle to the anode barrel or a holding vessel (also known as mold barrel). Slag skimmed from the converters is transferred by ladle to the Electric Furnace for recovery of entrained copper. Each converter utilizes two natural gas burners on an as-needed basis to warm vessels after cold startup or to burn out any copper deposits that have formed inside the vessel and are interfering with operations.

Process off-gases produced in the batch copper converters are vented to the acid plant for removal of particulate matter before SO_2 in the gas stream is converted to H_2SO_4. The remaining gases from the acid plant are routed to the tail gas caustic scrubber for removal of residual SO_2 before being vented to the APTG stack.

The batch copper converters utilize mouth covers to minimize fugitive gases and a canopy roofline collection system to facilitate the capture of fugitive gases that do occur. Captured gases are routed to the caustic aisle scrubber for removal of SO_2 before being vented to the Aisle Scrubber stack.

Uncaptured fugitive gases from the copper converters exhaust into the atmosphere primarily through the roofline vent located above the converters.

3.2.5 Anode Furnaces and Utility Vessel

Blister copper from the copper converters is transferred by ladle to the anode vessels to be refined to anode copper, or utility vessel for holding blister copper when the anode furnaces are full. Anode refining consists of oxidizing the bath to remove trace sulfur remaining in the blister copper, reducing the bath using a mixture of steam and natural gas to remove oxides, and casting the remaining copper by pouring it into molds on the rotating casting wheel to produce copper anode. Anode slag is skimmed and returned to the converters for recovery of residual copper.

Process gas from the anode furnace is captured and treated for particulate matter and metals by the anode furnace baghouse before being routed to the caustic aisle scrubber for removal of SO_2 and vented to the Aisle Scrubber stack.

4.0 Sampling and Analysis Methods

The field measurements program was performed according to the following accepted and approved Methods as contained in the USEPA's *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III, Stationary Source Specific Methods*, 40 CFR 60, Appendix A. The general procedures that were followed for this measurements evaluation include:

Method 1	Sample and Velocity Traverses for Stationary Sources
Method 2	Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)
Method 3	Gas Analysis for the Determination of Dry Molecular Weight
Method 4	Determination of Moisture Content in Stack Gases
Method 5	Determination of Particulate Matter Emissions from Stationary Sources
Method 29	Determination of Metals Emissions from Stationary Sources

4.1 Support Measurements

Methods 1 through 4 were performed in support of the emissions measurement procedures selected for quantifying Hg emissions. Method 1 was completed for the Aisle Scrubber, Vent Fume and APTG stack test locations previously. The determination of stack gas flow rate, molecular weight, and moisture content (Methods 2 through 4) were integrated into and performed concurrently with each Method 29 sample run.

4.1.1 Selection of Traverse point

Method 1 was followed for the selection of velocity/isokinetic measurement points at the test locations. The calculated measurement points were used for all Method 29 sample runs.

The ideal measurement criteria are not met at the Aisle Scrubber test location. The stack measures 359.5 inches inside diameter at the test location. According to Method 1, a total of 24 traverse points are required for sampling the Aisle Scrubber exhaust. Sampling of the measurement points was accomplished by sampling six points through each of three horizontal test ports (one port being sampled twice each run) located at 90° to each other. The six measurement points for each port and their distance from the duct wall are listed in **Table 4-1**. **Figure 4-1** illustrates the test and sample point locations at the Aisle Scrubber exhaust.

The Vent Fume test location meets the ideal criteria of Method 1. The Vent Fume stack measures 159.5 inches inside diameter at the test location. According to Method 1, a total of 12 traverse points are needed for sampling. This was accomplished by sampling three points through each of the four horizontal test ports located at 90° to each other. The three measurement points for each port and their distance from the duct wall are listed in **Table 4-2**. **Figure 4-2** illustrates the test and sample point configurations at the Vent Fume test location.

The APTG stack test location meets the ideal criteria of Method 1. The APTG stack measures 125.5 inches inside diameter at the test location. According to Method 1, a total of 12 traverse points are needed for sampling. This was accomplished by sampling three points through each of the four horizontal test ports located at 90° to each other. The three measurement points for

each port and their distance from the duct wall are listed in **Table 4-3**. **Figure 4-3** illustrates the test and sample point configurations at the APTG test location.

Table 4-1 Aisle Scrubber Traverse Point Locations

Point Number	Distance from Wall (inches)
1	7.5
2	24.1
3	42.4
4	63.5
5	89.8
6	127.8

Table 4-2 Vent Fume Traverse Point Locations

Point Number	Distance from Wall (inches)
1	47.2
2	23.3
3	7.0

Table 4-3 Acid Plant Tail Gas Stack Traverse Point Locations

Point Number	Distance from Wall (inches)
1	37.1
2	18.3
3	5.5

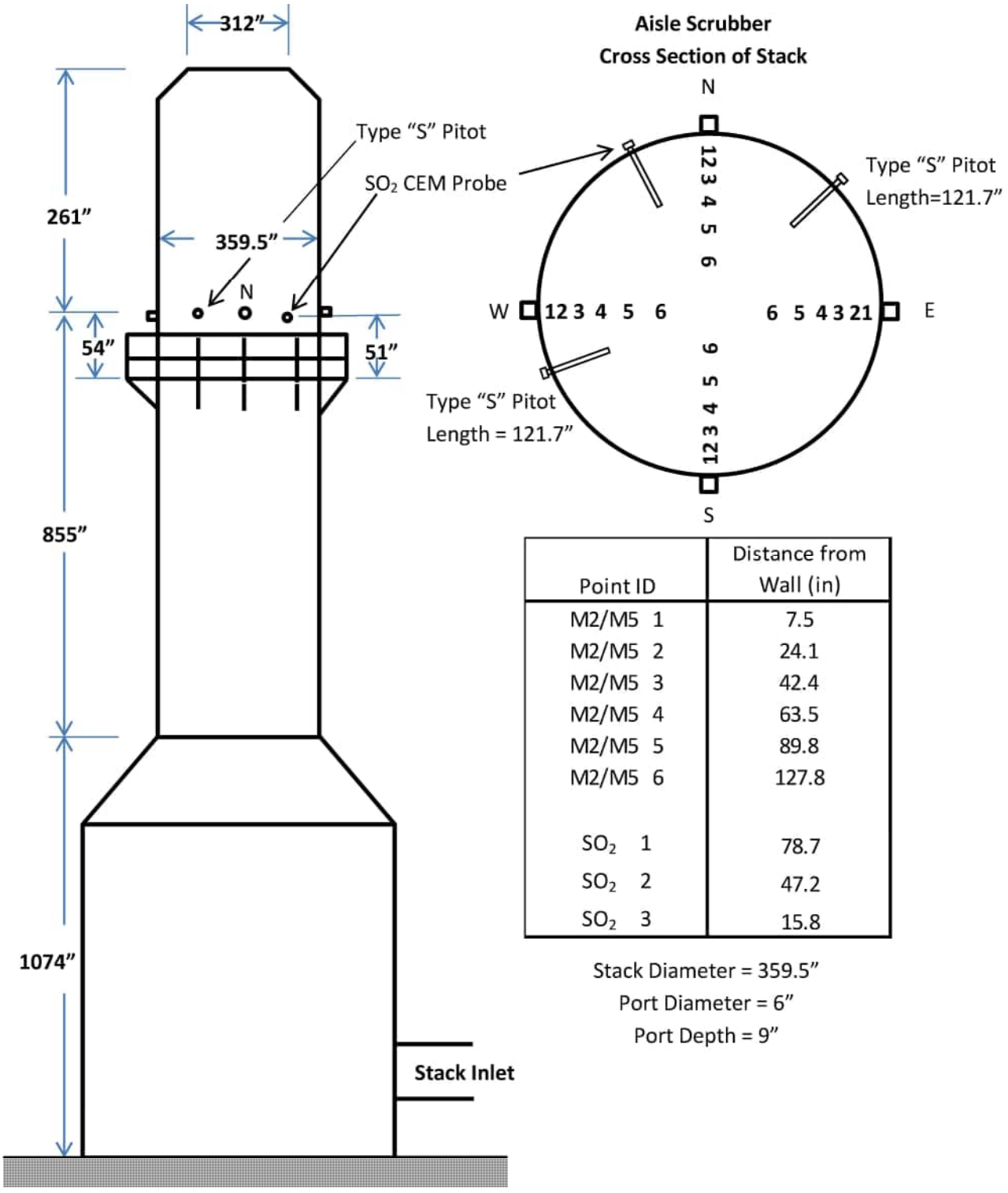
4.1.2 Stack Gas Volumetric Flow Rate Determination

Method 2 was followed to measure the velocity and calculate volumetric flow rate at each sample location. This method was incorporated into, and conducted concurrently with, each isokinetic sample run. This method allows for a stainless-steel Type-S or standard pitot tube to be connected to a differential pressure gauge (inclined manometer). The measured pressure differential, observed at each traverse point, was recorded on field data forms, and used in determining effluent velocity and subsequent volumetric flow rate for each sample run.

In addition to velocity pressures, gas temperatures were measured and recorded concurrently with all differential pressure data. The temperature was measured with a Type K thermocouple located at the measurement tip of the pitot tube (in the same measurement plane). The Type K thermocouple was connected directly to a calibrated digital temperature indicator for accurate measurements.

The stack gas velocity (Method 2), the stack gas dry molecular weight (Methods 3), and the stack gas moisture (Method 4) data were used to calculate stack gas volumetric flow using equations set out in Method 2, Section 12.

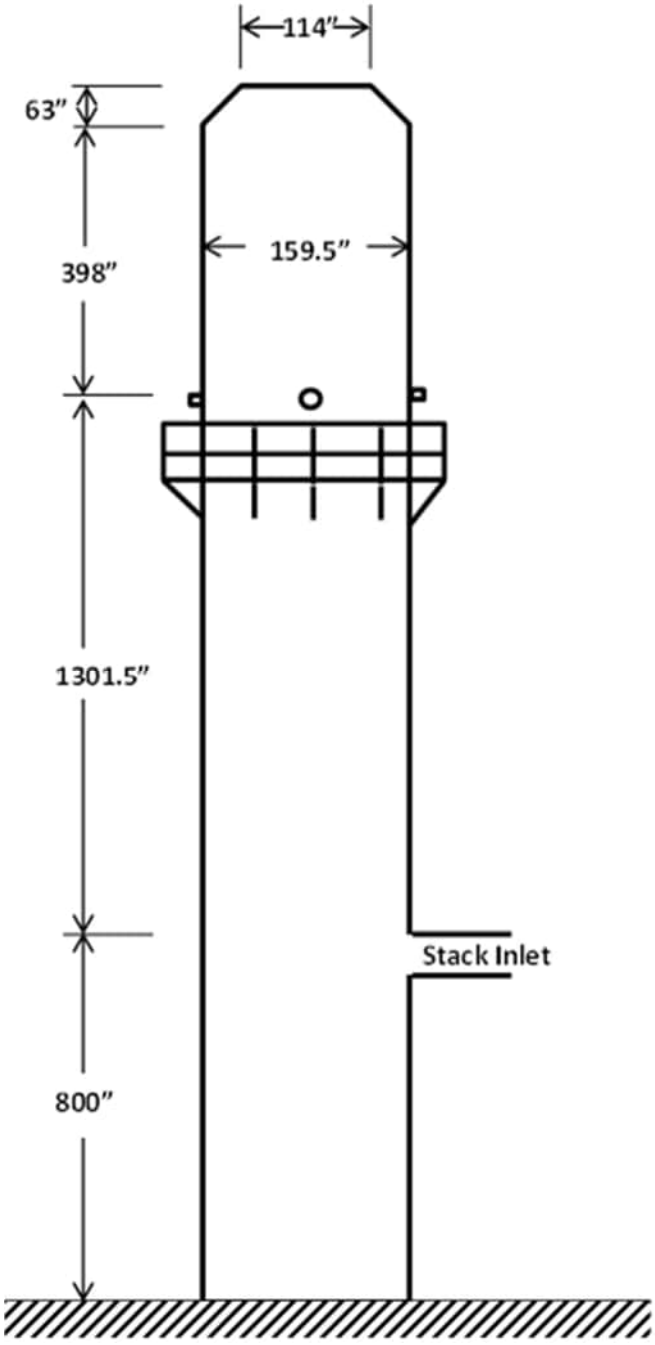
Figure 4-1 Aisle Scrubber Stack Schematic



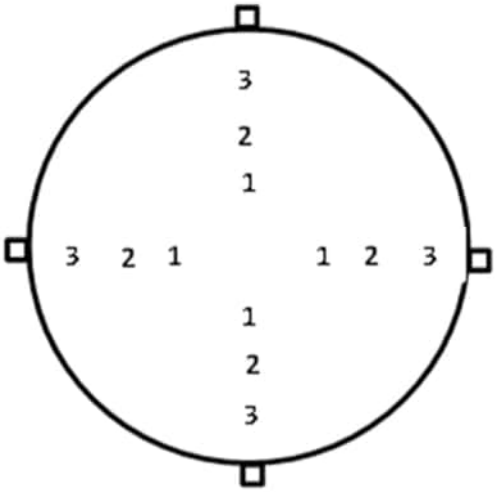
Point ID	Distance from Wall (in)
M2/M5 1	7.5
M2/M5 2	24.1
M2/M5 3	42.4
M2/M5 4	63.5
M2/M5 5	89.8
M2/M5 6	127.8
SO_2 1	78.7
SO_2 2	47.2
SO_2 3	15.8

Stack Diameter = 359.5"
Port Diameter = 6"
Port Depth = 9"

Figure 4-2 Vent Fume Stack Schematic

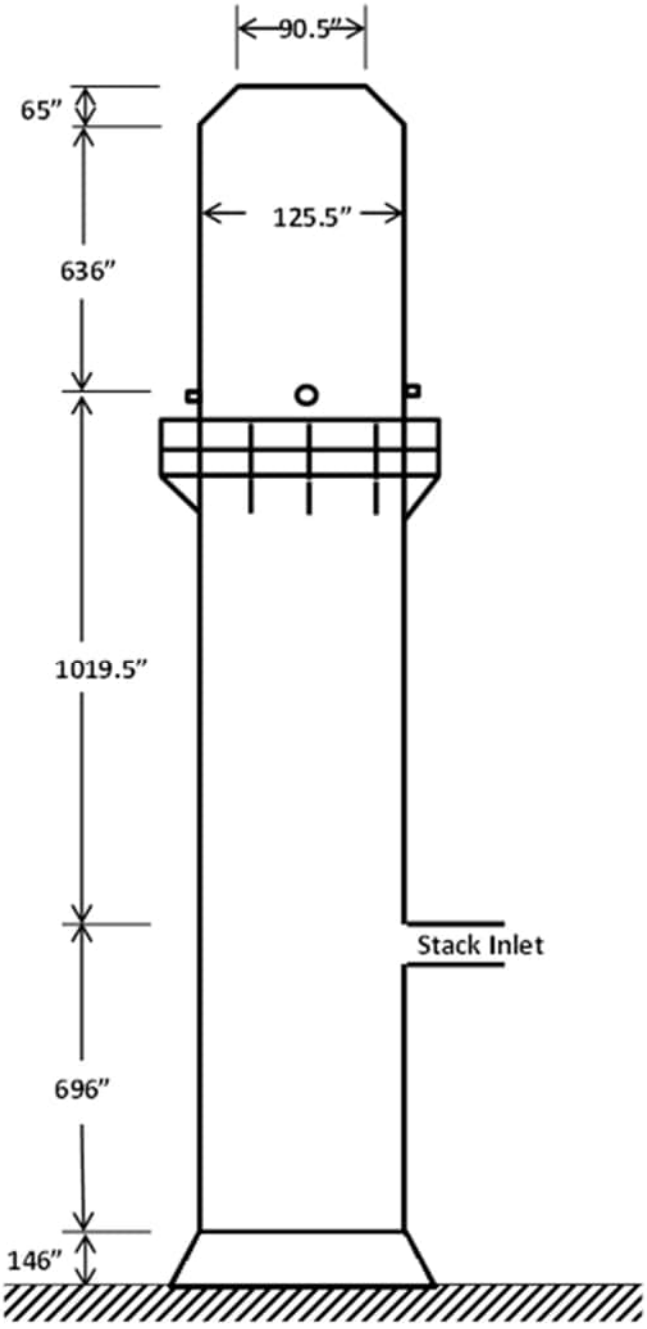


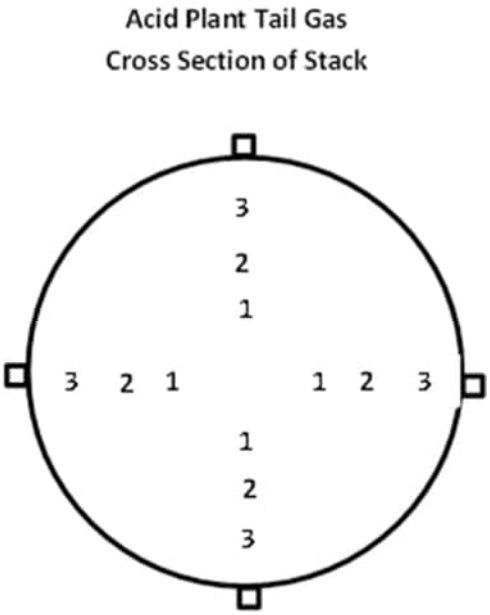
Vent Fume
Cross Section of Stack



Point ID	Distance from Wall (in)
RM2/RM5 1	47.2
RM2/RM5 2	23.3
RM2/RM5 3	7
SO_2 1	78.7
SO_2 2	47.2
SO_2 3	15.7

Figure 4-3 Acid Plant Tail Gas Stack Schematic





Point ID	Distance from Wall (in)
RM2/RM5 1	37.1
RM2/RM5 2	18.3
RM2/RM5 3	5.5
SO_2 1	78.7
SO_2 2	47.2
SO_2 3	15.7

4.1.3 Molecular Weight Determination

The effluent from the Aisle Scrubber and Vent Fume stacks are essentially ambient air with a dry molecular weight of approximately 29 pounds per pound-mole. Method 3 is applicable for the determination of diluent CO_2 and O_2 concentrations and dry molecular weight of samples from an effluent gas stream of a fossil-fuel combustion process or other processes. For processes emitting essentially air, Method 2 provides that Method 3/3A need not be conducted, but rather a dry molecular weight of 29 may be used. SLR assumed a dry molecular weight of 29 for the Aisle Scrubber and Vent Fume stacks in lieu of conducting Method 3 as discussed in the Administrator (ADEQ) approved test plan.

Integrated bag samples were collected at the APTG stack and subjected to a Fyrite O_2 and CO_2 instrument for analyses following Method 3. The results of the diluent O_2 and CO_2 analysis were used to determine the effluent gas dry molecular weight for each APTG Hg sample run.

4.1.4 Percent Moisture determination

Method 4 was incorporated into each Hg sample run. The determination of moisture content using a condenser and pump assembly, connected between a sample probe and metering system, was performed concurrently with each Method 29 sample run.

During each sample run, a known volume of gas (measured by a dry gas meter) was passed through the condenser assembly. Upon completion of each sample run, the total amount of condensate collected was gravimetrically measured and the net gain calculated. The total moisture gain, volume of gas extracted, and measured meter temperature data was used to calculate the actual moisture content of the effluent. The moisture results determined from each sample run were used to convert the stack gas volumetric flow rate data from a wet basis to a dry basis.

4.2 Mercury Determination by Method 29

Method 29 was followed for determination of Hg emission rates at the Aisle Scrubber, Vent Fume and APTG stack test locations. Included in the Method 29 sampling system were a calibrated Teflon-coated stainless-steel nozzle, stainless-steel probe, Teflon probe liner, insulated filter oven, glass filter holder and tared quartz-fiber filter, condenser assembly, and calibrated extraction system. The system vacuum was used to extract the effluent gas through the interconnected, leak-free components. The entire system was leak-checked before and after each individual sample run to ensure sample integrity.

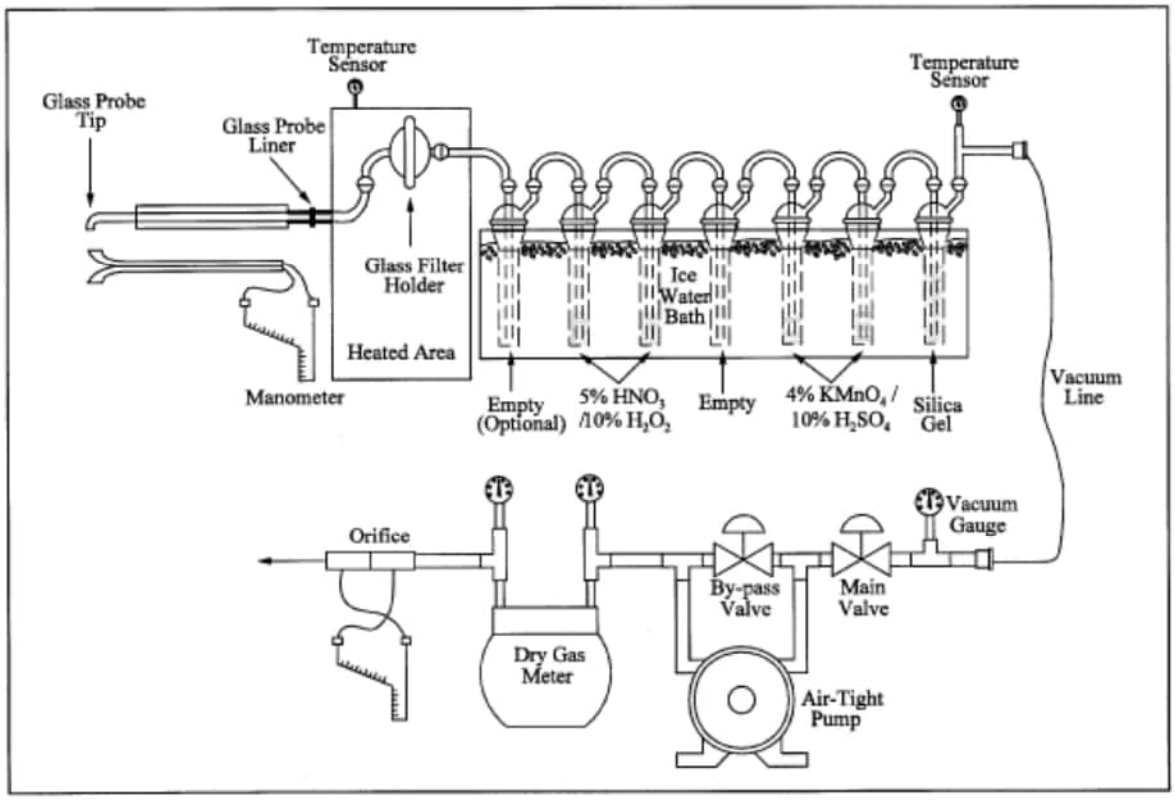
A “K-factor” (coefficient) was determined prior to the initiation of each Hg sample run. This coefficient was based upon preliminary measurements of gas temperature, flow rate, pressure, and moisture content. The isokinetic sample rate for each sample point was determined by multiplying the K-factor by the measured differential pressure. If a variable changed during a sample run, the coefficient was adjusted to maintain isokinetic sampling rates. At isokinetic conditions, the velocity of the stack gas entering the nozzle of the extraction system was equal to the effluent velocity at the sample point.

4.2.1 Sample Collection by Method 29

Stack gas sample was withdrawn isokinetically from the selected sources, collected on a heated filter (maintained at a controlled temperature of 248 ± 25°F), and passed through a series of chilled impingers containing solutions of nitric acid/hydrogen peroxide (HNO_3/H_2O_2) and

acidified potassium permanganate ($KMnO_4$) as shown in **Figure 4-4**. A minimum of three test runs were conducted for each performance test of each of the three sources. During each test run conducted using Method 29, a minimum sample volume of 60 dscf was collected.

Figure 4-4 Method 29 Sample Train



The condenser assembly consisted of a series of six glass impingers with glass inserts interconnected to each other by glass U tubes, providing a leak tight seal with 28/15 ball and socket connections. The first and second impingers contained HNO_3/H_2O_2. The third impinger was left empty. The fourth and fifth impingers contained $KMnO_4$. The sixth impinger was filled with a pre-weighed amount of silica gel to capture any residual moisture from the sample stream. The impinger train was set in an ice bath to maintain the extracted gas outlet temperature at or below 70°F. By cooling the sample, all water vapor and gases were condensed and collected. The volume of water collected in the condenser assembly was measured and used to determine stack gas moisture content. **Table 4-4** describes the condensate (impinger) train configuration for Method 29 testing, including the $KMnO_4$ impingers that are exclusive to mercury capture and analysis.

Prior to sampling, the impingers and their contents were weighed, and the initial weights recorded. Upon completion of sampling, the impingers were removed from the ice bath and the moisture gain was determined gravimetrically by subtracting the initial weight from the final weight for each impinger.

Table 4-4 Method 29 Condensate (Impinger) Train

Impinger No.	Contents	Configuration
1	100 ml HNO_3/H_2O_2	Straight
2	100 ml HNO_3/H_2O_2	Greenburg-Smith
3	Empty	Straight
4	100 ml $KMnO_4$	Straight
5	100 ml $KMnO_4$	Straight
6	200 - 300 g Silica Gel	Straight

Three valid sample runs were performed for each of the processes being tested. Upon completion of each sample run, the probe was removed from the exhaust stack and allowed to cool. A leak check of the sampling system was then performed to verify the integrity of the system. The leak rate must not exceed 0.02 actual cubic feet per minute (acfm) for the test to be considered valid.

Each sample train was carefully recovered in separate front-half (probe wash and filter) and back-half (impinger solutions) fractions. The filter was removed from its sample holder with Teflon-coated or non-metallic tweezers and placed in a labeled petri dish. The nozzle, probe, and front-half of the filter holder were rinsed with 0.1N HNO_3 to collect any metals that adhered to the front-half components. The rinse was quantitatively recovered in glass sample containers. The contents of the first two impingers were placed in a glass sample jar; the first two impingers and filter back-half were then rinsed with 100 milliliters (ml) of 0.1N HNO_3 and added to the same sample jar. The third impinger was rinsed with 100 ml of 0.1N HNO_3 and added to a separate sample jar. The contents of the fourth and fifth impingers were placed in a glass sample jar. These impingers were then rinsed with 100 ml of $KMnO_4$ into the same sample jar. The fourth and fifth impingers were then rinsed with 100 ml of deionized water. The water rinse was added to the same sample jar as the $KMnO_4$ impingers. The fourth and fifth impingers were then rinsed with 25 ml of 8 N HCl to remove any residual $KMnO_4$ deposits from the impingers. The HCl rinse was added to a separate sample jar containing 200 ml of deionized water. The silica gel from the sixth impinger was weighed to determine moisture gain.

4.2.2 Analysis by Method 29

Each recovered sample was composed of six fractions: a filter, HNO_3 front-half wash, HNO_3/H_2O_2 impinger contents with rinse, empty impinger HNO_3 rinse, $KMnO_4$ impinger contents and rinses, and HCl rinse of the $KMnO_4$ impingers. The filter was digested and added to the probe wash for mercury analysis. Proportional aliquots of the probe rinse (front-half of the sample train) and samples recovered from impingers 1 through 5 and rinses (back-half of the sample train) were combined and analyzed for mercury by inductively coupled plasma-mass spectrometry (ICPMS). Each sample fraction was also analyzed for mercury by Cold Vapor Atomic Absorption (CVAA).

The analytical laboratory deviated from the sample preparation procedures for field reagent blanks specified at Method 29 Section 9.1, instead analyzing each field blank container separately. If a field reagent blank result is BDL, zero is substituted for the result (i.e., field reagent blank results are not subtracted from the sample results if the field blank results are

BDL). Because mercury was not detected in any of the field reagent blanks, this has no impact on the test results.

According to Method 29, the anticipated limits of detection for mercury can be estimated with the use of Equation 1 listed below. A detection limit that is at or below the permitted level of mercury is necessary for the successful completion of this project. Previous sampling at the test locations demonstrates that a sample volume of 60 dscf is adequate to achieve the goals of this test program. The sample size of 60 dscf was collected over a 2-hour sample period at each of the test locations.

Equation 1: A * B / C = D

Where:

A = analytical detection limit, micrograms per milliliter (µg/ml)

B = liquid volume of digested sample prior to aliquotting for analysis, ml

C = stack sample volume, dry standard cubic meters (dscm)

D = in-stack detection limit, micrograms per cubic meter (µg/m^3)

4.3 Calculations and Nomenclature

The following section presents the calculations for determining flow rate, molecular weight, and moisture content. In addition, calculations for the determination of mercury concentrations and mass emissions rates are provided. The nomenclature for each calculation also is defined.

Calculations

Stack Pressure (in Hg)

$$P_s = P_b + \frac{P_g}{13.6}$$

Volume of Water Collected (scf):

$$V_{wc(std)} = 0.04707 \times MG$$

Gas Meter Volume at Standard Conditions (dscf):

$$V_{m(std)} = V_m \times Y_d \times \left(\frac{T_{std}}{P_{std}}\right) \times \left(\frac{P_b + \frac{\Delta H_{avg}}{13.6}}{T_{m(avg)}}\right)$$

Fractional Moisture Content (dimensionless):

$$B_{ws} = \frac{V_{wc(std)}}{V_{wc(std)} + V_{m(std)}}$$

Moisture Content (%):

$$H_2O\% = B_{ws} \times 100$$

Molecular Weight (dry, lb/lb-mole):

$$M_d = 0.44 \times \%CO_2 + 0.32 \times \%O_2 + \left(0.28 \times (100 - \%CO_2 - \%O_2)\right)$$

Molecular Weight (wet, lb/lb-mole):

$$M_w = M_d \times (1 - B_{ws}) + (18 \times B_{ws})$$

Velocity (feet per second):

$$v_s = 85.49 \times C_p \times \sqrt{\Delta p} \times \sqrt{\frac{T_s}{P_s \times M_w}}$$

Flow Rate (actual cubic feet per minute):

$$Q_a = v_s \times A_s \times 60$$

Flow Rate (dry standard cubic feet per minute):

$$Q_s = Q_a \times (1 - B_{ws}) \times 17.64 \times \left(\frac{P_s}{T_s}\right)$$

Pollutant Concentration (lb/dscf):

$$C_{pollutant} = \frac{MG_{pollutant}}{1{,}000{,}000 \times 453.5924 \times V_{m(std)}}$$

Pollutant Emission Rate (lb/hr):

$$E_{pollutant} = C_{pollutant} \times Q_s \times 60$$

Nomenclature

A_s	Cross-Sectional Area of the Stack (Square Feet)
B_{ws}	Water Vapor in Gas Stream (proportional by volume)
$C_{pollutant}$	Pollutant Concentration (lb/dscf or mg/dscm)
ΔP	Average Velocity Head of Gas (in WC)
ΔH_{avg}	Average Differential Pressure of DGM (in WC)
$E_{pollutant}$	Pollutant Emission Rate (lb/hr)
$H_2O\%$	Moisture Content of Gas Stream (%)
MG	Mass Gain (µg)
M_d	Molecular Weight of Stack Gas, dry basis (lb/lb-mole)
M_w	Molecular Weight of Stack Gas, wet basis (lb/lb-mole)
P_b	Uncorrected Barometric Pressure (in Hg)
P_g	Static Pressure of Stack Gas (in WC)
P_s	Absolute Pressure of Stack Gas (in Hg)
P_{std}	Standard Absolute Pressure (29.92 in. Hg)
$\%CO_2$	Percent Carbon Dioxide, Dry Basis
$\%O_2$	Percent Oxygen, Dry Basis
Q_a	Actual Flow Rate (acfm)
Q_s	Dry Standard Flow Rate (dscfm)

$T_{m(avg)}$ Average DGM Absolute Temperature (°R)

T_s Average Stack Gas Temperature (°R)

v_s Average Gas Velocity (feet per minute)

T_{std} Standard Absolute Temperature (528 °R)

V_m Dry Gas Volume as Measured by the DGM (dcf)

$V_{m(std)}$ Dry Gas Volume Corrected to Standard Conditions (dscf)

$V_{wc(std)}$ Volume of H_2O Collected in Impingers and Silica Gel Corrected to Standard Conditions (ml)

Y_d DGM Calibration Factor

5.0 Quality Assurance/Quality Control

5.1 Objectives

The objectives of SLR's Quality Assurance/Quality Control (QA/QC) program are as follows:

- To continually monitor the precision and accuracy of the data being generated for all source emission measurements.
- To implement measures designed to control the precision and accuracy of all data generated for individual sources.
- To maintain permanent records of analytical QC data and equipment calibrations that include traceability and certification; and
- To identify, document, and maintain a chain-of-custody log that accounts for each method sample collected during each measurement program.

5.2 Field Program

All primary, USEPA-approved testing procedures are referenced in the 40 CFR 60, Appendix A. All field personnel responsible for this emission test program strictly followed the procedures dictated by the applicable test methods.

All field test personnel involved with this test program are experienced and trained in field sampling methods and procedures. Field personnel were assigned key responsibilities in phases of sample collection, sample recovery, chain-of-custody, and transportation of samples. Basic responsibilities for field personnel include, but are not limited to the following:

Recordkeeping. Field personnel recorded all pertinent test parameters and relevant observations on the appropriate field data forms.

Safety Requirements. Field personnel were familiar with all company safety regulations and were provided with all the necessary safety equipment.

Sample Handling. Field personnel were trained in the proper procedures for handling samples including use of sample containers, sample preservation, identification, storage of collected samples, and chain-of-custody.

Instrumentation. Specific field personnel were trained in the proper operation, calibration, trouble shooting, and maintenance of the instrumentation intended for this program. This includes the use of pumps, control console(s), samplers, and instrumentation.

Quality Control. Field personnel were trained in all aspects of QC that relate directly to the specific USEPA method test procedures, sample handling, analyses, and reporting.

Mr. Bopray, of SLR, was the designated field manager and was responsible for coordinating testing activities with FMMI and USEPA if necessary. He provided answers to questions concerning test methodology, quality control, and all other project aspects. The field manager was also responsible for delegating work assignments to the members of the test crew, making sure all QA/QC procedures were carried out, and documenting all field activities in a bound logbook.

Method (reagent) blanks were collected for every parameter associated with each test series. This was done to determine if any interfering substance is present in any of the reagents. Storage containers deemed acceptable for the storage of reagents were used for the blanks as well as the samples.

All field instrumentation was maintained and calibrated according to all applicable USEPA guidelines. Records of instrument maintenance and calibration are kept in historical files and continually updated. Calibrations of all field instrumentation, at a minimum, meet or exceed the mandated procedures stipulated in the *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III*. Documentation of calibrations is maintained on file at all times. Calibration documentation for the equipment used in this test program was made available on the days of testing and is presented in the appendices of this test report.

5.3 Sample Documentation

All field data collected for each selected test procedure was documented on field data forms. Each form, specific to each sample run, includes information as to the source tested, date and time of sample collection, analyst(s) performing the test, and all data necessary for test validation. Each field data sheet was completed by the responsible technician at the time of the test and checked by the field manager for accuracy and completeness after each test series. Copies of all raw field data sheets are included in the appendices of this test report, with the originals maintained in project files at SLR's Fort Collins, Colorado office.

Sample containers utilized for the collection and storage of samples were specific to each test procedure. Sample bottles deemed acceptable by each test method were used for this measurement program. Filter substrates were maintained in individually labeled polyethylene Petri dishes sufficient in size to receive the samples unaltered and with the exposed surface protected from sample loss.

Collection of all blanks were specific to each test performed. The field blanks were collected at the test locations and subjected to the same ambient conditions as the samples. This type of blank was collected for each reagent used in each test series and analyzed in the same manner as the sample itself.

Each recovered sample was labeled with standard sample tags. Each tag uniquely identified each sample. The tags provided information regarding the unit tested, sample location, date and time of collection, reagent(s) used, and sample identification. The sample containers were sealed, liquid level marked (if applicable) and properly stored until it was transported to the laboratory.

Standard chain-of-custody forms were completed before any samples were transported to the laboratory. This procedure is dictated by the USEPA and strictly adhered to by SLR. Each sample was tagged with a chain-of-custody tag, which requires the same information as the field sample label.

5.4 Analytical Quality Control

Eurofins, Knoxville, located at 5815 Middlebrook Pike, Knoxville, Tennessee 37921 was selected to perform all analyses. SLR has worked with Eurofins laboratories in the past, and their QA/QC programs are known to meet or exceed USEPA standards. Key components of Eurofins' QC program include:

Recordkeeping. Personnel are trained in the proper use of field and laboratory work sheets, recording of analytical and QC data, and recordkeeping.

Safety Regulations. Personnel are trained in all company safety policies and provided with all necessary safety equipment.

Sample Handling. Personnel are trained in the proper storage and handling of samples and sample containers.

Use of Volumetric Glassware. Personnel are trained in the proper use of graduated cylinders, burets, pipets, and volumetric flasks.

Use of Balances. Personnel are trained in the proper use of analytical balances. Balance checks with class “S” weights are routinely performed.

Instrumentation. Personnel are trained in the proper operation, calibration, and maintenance of all instrumentation utilized for emission testing programs.

Data Handling and Reporting. Personnel are trained in the proper procedures for recording raw laboratory data, calibrations, standards information and results, along with QC data. Analytical data will be reported in meaningful engineering units.

Quality Control. Personnel are trained on all of the QC procedures specific to the requirements established for this emission testing program.

All pertinent data, such as reagent preparation, filter weights, samples analyzed, blank analysis, and QA data will be available upon request.

5.4.1 Laboratory Notes

Eurofins reports data qualifiers for sample and quality control results. The data qualifiers presented in the Method 29 lab reports included the following.

> J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
>
> ND – Not detected at the MDL.

About half of the results that were flagged ADL were qualified as J.

All blank samples were ND indicating they were BDL.

5.5 Data Reduction, Validation and Reporting

SLR has implemented specific measures to ensure that reliable data is generated as a result of the sampling and analytical activities of every field program. The objective of this phase of SLR’s QA/QC program is to follow the proper collection of representative and QA field and analytical data with approved data reduction methods and equations.

All calculations are performed using QA spreadsheets incorporating standard accepted equations, as required by the applicable pollutant specific sampling methodology. Data reduction was performed by qualified engineers or data analysts familiar with standard engineering practices and approved methods. Calculation methods and equations, including conversion factors and units, are defined in this test report to allow the reviewer to easily reproduce the results from the raw field data and process information provided in the appendices of the report. This final report includes all raw data, QA/QC documentation, and

process data collected during the test program. The initial draft of the test report, including both narrative and calculations, was subjected to review by the Project Manager and/or Principal-in-Charge prior to final publication.

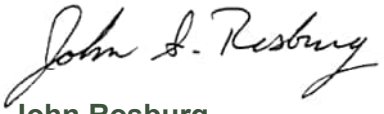
6.0 Closure

This document has been prepared by SLR International Corporation (SLR). The material and data in this report were prepared under the supervision and direction of the undersigned.

Sincerely,

SLR International Corporation

Douglas Bopray
Associate Scientist
dbopray@slrconsulting.com



John Rosburg
Source Assessments, LLC, Principal Scientist
jsrosburg@gmail.com

Appendix A Field Data Forms and Analytical Results

Vent Fume, Aisle Scrubber and Acid Plant Tail Gas Mercury Emissions Test Report

Freeport-McMoRan Miami Inc.

SLR Project No.: 118.01290.00025

February 15, 2024

Plant =	FMMI	Point Duration (min) =	5		Moisture
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.30		Initial Final Change
Source ID =	Aisle Scrubber	Static Pres. (in WC) =	0.60		711.8 732.0 20.2
Run No =	AS29-1	Nozzle Dia (in WC) =	0.278		690.0 694.8 4.8
Date =	4/12/2023	Meter dH @ =	1.7674		595.3 595.6 0.3
Run Time =	1431-1637	Meter Yd =	0.9932		714.7 713.8 -0.9
Sample Duration (min) =	120	H2O Mass (ml/g) =	35.8		716.8 717.1 0.3
					843.3 854.4 11.1
				Sum	4271.9 4307.7

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
S1	510.955	3.735	0.23	0.480	1.44	1.200	72.0	85.0	88.0	86.5	29.0	26.34	26.41
2	514.690	3.710	0.23	0.480	1.44	1.200	71.0	90.0	88.0	89.0	28.9	26.34	26.41
3	518.400	3.680	0.23	0.480	1.44	1.200	71.0	92.0	88.0	90.0	28.9	26.34	26.41
4	522.080	3.420	0.20	0.447	1.24	1.114	71.0	94.0	89.0	91.5	27.0	26.34	26.39
5	525.500	3.170	0.17	0.412	1.06	1.030	71.0	95.0	89.0	92.0	24.9	26.34	26.38
6	528.670	2.996	0.15	0.387	0.93	0.964	72.0	95.0	89.0	92.0	23.4	26.34	26.37
S1	531.666	2.994	0.23	0.480	1.44	1.200	71.0	95.0	90.0	92.5	28.9	26.34	26.41
2	534.660	3.530	0.22	0.469	1.37	1.170	71.0	97.0	90.0	93.5	28.3	26.34	26.40
3	538.190	3.760	0.23	0.480	1.44	1.200	70.0	99.0	91.0	95.0	28.9	26.34	26.41
4	541.950	3.450	0.20	0.447	1.24	1.114	71.0	100.0	91.0	95.5	27.0	26.34	26.39
5	545.400	3.150	0.17	0.412	1.06	1.030	70.0	100.0	92.0	96.0	24.8	26.34	26.38
6	548.550	3.005	0.15	0.387	0.93	0.964	70.0	100.0	92.0	96.0	23.3	26.34	26.37
E1	551.555	3.725	0.23	0.480	1.44	1.200	70.0	98.0	93.0	95.5	28.9	26.34	26.41
2	555.280	2.730	0.23	0.480	1.44	1.200	70.0	100.0	95.0	97.5	28.9	26.34	26.41
3	558.010	4.740	0.23	0.480	1.44	1.200	70.0	100.0	93.0	96.5	28.9	26.34	26.41
4	562.750	3.460	0.20	0.447	1.24	1.114	70.0	100.0	93.0	96.5	26.9	26.34	26.39
5	566.210	3.150	0.16	0.400	1.00	1.000	70.0	100.0	93.0	96.5	24.1	26.34	26.37
6	569.360	3.072	0.15	0.387	0.93	0.964	70.0	99.0	93.0	96.0	23.3	26.34	26.37
W1	572.432	3.548	0.23	0.480	1.44	1.200	70.0	98.0	93.0	95.5	28.9	26.34	26.41
2	575.980	3.730	0.23	0.480	1.44	1.200	69.0	99.0	93.0	96.0	28.9	26.34	26.41
3	579.710	3.730	0.23	0.480	1.44	1.200	70.0	99.0	93.0	96.0	28.9	26.34	26.41
4	583.440	3.590	0.22	0.469	1.37	1.170	70.0	99.0	93.0	96.0	28.3	26.34	26.40
5	587.030	3.190	0.17	0.412	1.06	1.030	70.0	99.0	93.0	96.0	24.8	26.34	26.38
6	590.220	3.120	0.16	0.400	1.00	1.000	70.0	99.0	93.0	96.0	24.1	26.34	26.37
	593.340												
	82.385		0.202	0.448	1.26	1.12	70.4	97.2	91.5	94.3	27.0	26.3	26.4

ISOKINETIC SAMPLE DATA FORM

SLR

Plant:	FMMI	Filter ID:	W28
Location:	Claypool, AZ	Ambient Temp. (°F):	85
Source I.D.:	Aisle Scrubber	Baro. Press. (in. Hg):	26.30
Date:	4/12/23	Static Press. (in H_2O):	0.60
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	A829-1	CO_2 (%):	0.0
Operators:	OB, RB	Duct Dia. (in):	359.5
Meter Box I.D.:	Hawkeye	B_{ws} (assumed):	0.03
Meter Y:	0.9932	Nozzle Dia. (in):	0.278
Meter Delta H@:	1.7674	K Factor:	6.16 6.22
Probe I.D./ Impinger outlet I.D.:	1712724 / Green	Leak Check:	
Probe Length/Type:	12' RMS SFIE	Pre: 0.000	acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.000	acf 7 in. Hg Vac.

Moisture Train: 2

Imp.	Initial	Final
1	711.8	732.0
2	690.0	694.8
3	595.3	595.6
4	714.7	713.8
5	716.8	717.1
6	843.3	854.4
	Net Gain	

Pitot:	Impact	Static	
Pre:	0.0	0.0	in. H_2O/15 sec.
Post:	0.0	0.0	in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1431	S 1	0	510.955	0.23	1.44	72	240	251	63	85	88	6
	2	5	514.69	0.23	1.44	71	244	249	61	90	88	6
	3	10	518.40	0.23	1.44	71	246	250	59	92	88	6
	4	15	522.08	0.20	1.24	71	237	251	58	94	89	6
	5	20	525.50	0.17	1.06	71	240	250	59	95	89	6
	6	25	528.67	0.15	0.93	72	242	252	59	95	89	5
1501/1503	S 1	30	531.666	0.23	1.44	71	250	254	60	95	90	5
	2	35	534.66	0.22	1.37	71	255	250	55	97	90	5
	3	40	538.19	0.23	1.44	70	249	250	55	99	91	6
	4	45	541.95	0.20	1.24	71	258	250	54	100	91	5
	5	50	545.40	0.17	1.06	70	250	250	58	100	92	5
	6	55	548.55	0.15	0.93	70	244	250	59	100	92	5
1533/1535	E 1	60	551.555	0.23	1.44	70	252	254	60	98	93	6
	2	65	555.28	0.23	1.44	70	254	248	52	100	95	6
	3	70	559.01	0.23	1.44	70	248	249	52	100	93	6
	4	75	562.75	0.20	1.24	70	252	250	51	100	93	6
	5	80	566.21	0.16	1.00	70	251	250	51	100	93	5
	6	85	569.36	0.15	0.93	70	243	248	52	99	93	5
1605/1607	W 1	90	572.432	0.23	1.44	70	249	249	53	98	93	6
	2	95	575.98	0.23	1.44	69	248	250	54	99	93	6
	3	100	579.71	0.23	1.44	70	251	250	56	99	93	6
	4	105	583.44	0.22	1.37	70	254	251	56	99	93	6
	5	110	587.03	0.17	1.06	70	246	248	58	99	93	5
	6	115	590.22	0.16	1.00	70	245	249	59	99	93	5
1637		120	593.340									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	5		Moisture
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.30	Initial	Final	Change
Source ID =	Aisle Scrubber	Static Pres. (in WC) =	0.60	715.8	736.0	20.2
Run No =	AS29-2	Nozzle Dia (in WC) =	0.278	693.3	702.4	9.1
Date =	4/15/2023	Meter dH @ =	1.7674	599.6	597.0	-2.6
Run Time =	1405-1613	Meter Yd =	0.9932	712.6	712.7	0.1
Sample Duration (min) =	120	H2O Mass (ml/g) =	38.6	714.9	715.2	0.3
				854.5	866.0	11.5
			Sum	4290.7	4329.3	

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
S1	644.410	3.680	0.23	0.480	1.44	1.200	66.0	75.0	74.0	74.5	28.8	26.34	26.41
2	648.090	3.700	0.23	0.480	1.44	1.200	66.0	77.0	76.0	76.5	28.8	26.34	26.41
3	651.790	3.690	0.24	0.490	1.51	1.229	65.0	78.0	75.0	76.5	29.4	26.34	26.41
4	655.480	3.570	0.22	0.469	1.38	1.175	65.0	81.0	75.0	78.0	28.1	26.34	26.40
5	659.050	3.330	0.19	0.436	1.19	1.091	66.0	81.0	76.0	78.5	26.2	26.34	26.39
6	662.380	3.001	0.15	0.387	0.94	0.970	65.0	82.0	79.0	80.5	23.2	26.34	26.37
E1	665.381	3.769	0.24	0.490	1.51	1.229	66.0	82.0	76.0	79.0	29.4	26.34	26.41
2	669.150	4.090	0.26	0.510	1.63	1.277	67.0	83.0	77.0	80.0	30.6	26.34	26.42
3	673.240	3.760	0.26	0.510	1.63	1.277	68.0	84.0	78.0	81.0	30.7	26.34	26.42
4	677.000	3.890	0.24	0.490	1.51	1.229	69.0	85.0	78.0	81.5	29.5	26.34	26.41
5	680.890	3.410	0.20	0.447	1.26	1.122	68.0	87.0	79.0	83.0	26.9	26.34	26.39
6	684.300	3.318	0.18	0.424	1.13	1.063	69.0	87.0	80.0	83.5	25.5	26.34	26.38
E1	687.618	3.892	0.26	0.510	1.63	1.277	70.0	86.0	80.0	83.0	30.7	26.34	26.42
2	691.510	3.910	0.26	0.510	1.63	1.277	71.0	87.0	80.0	83.5	30.8	26.34	26.42
3	695.420	3.960	0.26	0.510	1.63	1.277	71.0	88.0	81.0	84.5	30.8	26.34	26.42
4	699.380	3.820	0.25	0.500	1.57	1.253	71.0	88.0	81.0	84.5	30.2	26.34	26.42
5	703.200	3.470	0.22	0.469	1.38	1.175	71.0	87.0	81.0	84.0	28.3	26.34	26.40
6	706.670	3.257	0.18	0.424	1.13	1.063	71.0	87.0	81.0	84.0	25.6	26.34	26.38
W1	709.927	4.043	0.26	0.510	1.63	1.277	73.0	86.0	81.0	83.5	30.8	26.34	26.42
2	713.970	3.810	0.26	0.510	1.63	1.277	72.0	87.0	81.0	84.0	30.8	26.34	26.42
3	717.780	3.940	0.27	0.520	1.69	1.300	72.0	88.0	81.0	84.5	31.4	26.34	26.42
4	721.720	4.060	0.26	0.510	1.63	1.277	73.0	88.0	81.0	84.5	30.8	26.34	26.42
5	725.780	3.370	0.22	0.469	1.28	1.131	72.0	88.0	82.0	85.0	28.3	26.34	26.39
6	729.150	3.023	0.15	0.387	0.94	0.970	73.0	88.0	82.0	85.0	23.4	26.34	26.37
	732.173												
	87.763		0.229	0.477	1.43	1.192	69.2	84.6	79.0	81.8	28.7	26.34	26.4

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	FMM1	Filter ID:	W29
Location:	Claypool, AZ	Ambient Temp. (°F):	76
Source I.D.:	Aisle Scrubber	Baro. Press. (in. Hg):	26.30
Date:	4/15/23	Static Press. (in H_2O):	0.60
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	AS29-2	CO_2 (%):	0.0
Operators:	DB, RB	Duct Dia. (in):	359.5
Meter Box I.D.:	HawkEye	B_{ws} (assumed):	0.03
Meter Y:	0.9932	Nozzle Dia. (in):	0.278
Meter Delta H@:	1.7674	K Factor:	6.28
Probe I.D./ Impinger outlet I.D.:	1712724 green	Leak Check:	
Probe Length/Type:	12' RM5 TFE	Pre: 0.000 acf	10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.000 acf	9 in. Hg Vac.

Moisture Train: 2

Imp.	Initial	Final
1	715.8	736.0
2	693.3	702.4
3	599.6	597.0
4	712.0	712.7
5	714.9	715.2
6	554.5	606.0
Net Gain		

Pitot:	Impact	Static	
Pre:	0.0	0.0	in. H_2O/15 sec.
Post:	0.0	0.0	in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1405	S 1	0	644.410	0.23	1.44	66	250	256	69	75	74	6
	2	5	648.09	0.23	1.44	66	259	254	52	77	76	6
	3	10	651.79	0.24	1.51	65	255	253	50	78	75	6
	4	15	655.48	0.22	1.38	65	254	250	51	81	75	6
	5	20	659.05	0.19	1.19	66	253	250	52	81	76	5.5
	6	25	662.38	0.15	0.94	65	250	249	53	82	79	5
1435/1437	E 1	30	665.381	0.24	1.51	66	246	248	56	82	76	6
	2	35	669.15	0.26	1.63	67	244	250	47	83	77	6.5
	3	40	673.24	0.26	1.63	68	248	251	47	84	78	6.5
	4	45	~~677~~ 677.00	0.24	1.51	69	255	252	45	85	78	6
	5	50	680.89	0.20	1.26	68	252	250	46	87	79	5.5
	6	55	684.30	0.13	1.13	69	243	248	50	87	80	5
1501/1509	E 1	60	687.618	0.26	1.63	70	249	250	56	86	80	6.5
	2	65	691.51	0.26	1.63	71	254	250	50	87	80	6.5
	3	70	695.42	0.26	1.63	71	252	251	51	88	80	6.5
	4	75	699.38	0.25	1.57	71	255	252	50	88	81	6
	5	80	703.20	0.22	1.38	71	259	252	49	87	81	6
	6	85	706.67	0.18	1.13	71	244	250	53	87	81	5
RB ~~1509/1511~~	W 1	90	709.927	0.26	1.63	73	250	248	56	86	81	6.5
1539/1543	2	95	713.97	0.26	1.63	72	256	250	50	87	81	6.5
	3	100	717.78	0.24	1.69	72	254	250	49	88	81	7.0
	4	105	721.72	0.24	1.63	73	252	249	49	88	81	6.5
	5	110	725.76	0.22	1.22	72	246	252	53	88	82	6
	6	115	729.15	0.15	0.94	73	251	252	52	88	82	5
1613		120	732.173									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	5
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.30
Source ID =	Aisle Scrubber	Static Pres. (in WC) =	0.62
Run No =	AS29-3	Nozzle Dia (in WC) =	0.278
Date =	4/17/2023	Meter dH @ =	1.7674
Run Time =	1335-1542	Meter Yd =	0.9932
Sample Duration (min) =	120	H2O Mass (ml/g) =	45.9

Moisture			
	Initial	Final	Change
	717.5	737.9	20.4
	695.8	703.0	7.2
	597.4	598.2	0.8
	713.6	714.3	0.7
	715.6	716.0	0.4
	852.7	869.1	16.4
Sum	4292.6	4338.5	

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
S1	783.163	3.747	0.24	0.490	1.50	1.225	68.0	81.0	82.0	81.5	29.5	26.35	26.41
5	786.910	3.780	0.24	0.490	1.50	1.225	68.0	82.0	81.0	81.5	29.5	26.35	26.41
4	790.690	3.700	0.23	0.480	1.44	1.200	68.0	84.0	81.0	82.5	28.9	26.35	26.41
3	794.390	3.560	0.22	0.469	1.38	1.175	69.0	86.0	81.0	83.5	28.3	26.35	26.40
2	797.950	3.350	0.19	0.436	1.19	1.091	69.0	87.0	82.0	84.5	26.3	26.35	26.39
1	801.300	2.979	0.15	0.387	0.93	0.964	69.0	87.0	82.0	84.5	23.3	26.35	26.37
E1	804.279	3.711	0.24	0.490	1.50	1.225	68.0	87.0	82.0	84.5	29.5	26.35	26.41
2	807.990	3.790	0.24	0.490	1.50	1.225	68.0	89.0	83.0	86.0	29.5	26.35	26.41
3	811.780	3.790	0.24	0.490	1.50	1.225	68.0	90.0	84.0	87.0	29.5	26.35	26.41
4	815.570	3.560	0.22	0.469	1.38	1.175	68.0	91.0	84.0	87.5	28.2	26.35	26.40
5	819.130	3.270	0.18	0.424	1.13	1.063	68.0	91.0	84.0	87.5	25.5	26.35	26.38
6	822.400	3.095	0.16	0.400	1.00	1.000	68.0	91.0	85.0	88.0	24.1	26.35	26.37
W1	825.495	3.755	0.24	0.490	1.50	1.225	68.0	90.0	85.0	87.5	29.5	26.35	26.41
5	829.250	3.670	0.23	0.480	1.44	1.200	68.0	92.0	86.0	89.0	28.9	26.35	26.41
4	832.920	3.670	0.23	0.480	1.44	1.200	68.0	92.0	86.0	89.0	28.9	26.35	26.41
3	836.590	3.600	0.22	0.469	1.38	1.175	68.0	93.0	86.0	89.5	28.2	26.35	26.40
2	840.190	3.360	0.18	0.424	1.13	1.063	68.0	93.0	86.0	89.5	25.5	26.35	26.38
1	843.550	3.191	0.17	0.412	1.06	1.030	69.0	93.0	86.0	89.5	24.8	26.35	26.38
W1	846.741	3.939	0.26	0.510	1.62	1.273	69.0	92.0	87.0	89.5	30.7	26.35	26.42
2	850.680	3.950	0.26	0.510	1.62	1.273	69.0	93.0	87.0	90.0	30.7	26.35	26.42
3	854.630	3.970	0.26	0.510	1.62	1.273	70.0	94.0	88.0	91.0	30.8	26.35	26.42
4	858.600	3.690	0.23	0.480	1.44	1.200	69.0	93.0	87.0	90.0	28.9	26.35	26.41
5	862.290	3.460	0.20	0.447	1.25	1.118	70.0	93.0	87.0	90.0	27.0	26.35	26.39
6	865.750	3.149	0.17	0.412	1.06	1.030	69.0	93.0	88.0	90.5	24.8	26.35	26.38
	868.899												
	85.736		0.217	0.464	1.35	1.160	68.5	89.9	84.6	87.2	27.9	26.35	26.4

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	Fmmi	Filter ID:	W30
Location:	Claypool, AZ	Ambient Temp. (°F):	77
Source I.D.:	Aisle Scrubber	Baro. Press. (in. Hg):	26.30
Date:	4/17/23	Static Press. (in H_2O):	0.62
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	AS29-3	CO_2 (%):	0.0
Operators:	DB, RB	Duct Dia. (in):	359.5
Meter Box I.D.:	Hawkeye	B_{ws} (assumed):	0.03
Meter Y:	0.9932	Nozzle Dia. (in):	0.278
Meter Delta H@:	1.7674	K Factor:	6.25
Probe I.D./ Impinger outlet I.D.:	/ green	Leak Check:	
Probe Length/Type:	12' 12mm JFE	Pre: 0.003 acf	10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.001 acf	8 in. Hg Vac.

Moisture Train: 2

Imp.	Initial	Final
1	717.5	737.9
2	695.8	703.0
3	597.4	598.2
4	713.6	714.3
5	715.6	716.0
6	852.7	869.1
Net Gain		

Pitot: Impact Pre: 0.0 Post: 0.0 — Static Pre: 0.0 Post: 0.0 — in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1335	S1	0	783.163	0.24	1.50	68	256	254	65	81	82	6
	2	5	786.91	0.24	1.50	68	243	251	54	82	81	6
	3	10	790.69	0.23	1.44	68	237	251	54	84	81	6
	4	15	794.39	0.22	1.38	69	240	248	57	86	81	6
	5	20	797.95	0.19	1.19	69	244	250	58	87	82	6
	6	25	801.30	0.14	0.93	69	251	252	59	87	82	5
1405/1408	E1	30	804.279	0.24	1.50	68	253	251	59	87	82	6
	2	35	807.99	0.24	1.50	68	248	248	49	89	83	6
	3	40	811.78	0.24	1.50	68	250	251	49	90	84	6
	4	45	815.57	0.22	1.38	68	253	252	50	91	84	6
	5	50	819.13	0.18	1.13	68	255	252	52	91	84	6
	6	55	822.40	0.16	1.00	68	249	250	53	91	85	5
1438/1440	W1	60	825.495	0.24	1.50	68	244	250	58	90	85	6
	2	65	829.25	0.23	1.44	68	251	251	53	92	86	6
	3	70	832.92	0.23	1.44	68	252	251	54	92	86	6
	4	75	836.59	0.22	1.38	68	254	251	55	93	86	6
	5	80	840.19	0.18	1.13	68	252	251	56	93	86	6
	6	85	843.55	0.17	1.06	69	246	250	58	93	86	5
1510/1512	W1	90	846.741	0.26	1.62	69	249	248	57	92	87	7
	2	95	850.68	0.26	1.62	69	241	247	54	93	87	7
	3	100	854.65	0.26	1.62	70	252	250	53	94	88	7
	4	105	858.60	0.23	1.44	69	244	250	55	93	87	6
	5	110	862.29	0.20	1.25	70	252	253	55	93	87	6
	6	115	865.75	0.17	1.06	69	252	252	56	93	88	5
1542		120	868.899									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Method 4 Moisture Gravimetric Form

SLR

Cold Box # W2 Run # AP5202-2

Imp.	Initial	Final
1	389.4	389.4
2	600.6	600.8
3	710.3	739.1
4	852.9	864.2
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Cold Box # W1 Run # AS5202-1

Imp.	Initial	Final
1	352.1	352.1
2	604.4	602.4
3	713.3	729.1
4	853.1	864.4
5		
6		
	Net Gain	

Cold Box # W1 Run # AS5202-2

Imp.	Initial	Final
1	352.4	351.8
2	604.6	602.8
3	729.1	741.2
4	864.4	873.9
5		
6		
	Net Gain	

Cold Box # W1 Run # AS5202-3

Imp.	Initial	Final
1	352.1	352.2
2	603.2	602.4
3	705.0	718.6
4	873.9	883.9
5		
6		
	Net Gain	

Cold Box # 2 Run # AS29-1

Imp.	Initial	Final
1	711.8	732.0
2	690.0	694.8
3	595.3	595.6
4	714.7	713.2
5	716.8	717.1
6	843.3	854.4
	Net Gain	

Cold Box # 2 Run # AS29-2

Imp.	Initial	Final
1	715.9	736.0
2	693.3	702.4
3	599.6	597.0
4	712.6	712.7
5	714.9	715.2
6	854.5	866.0
	Net Gain	

Cold Box # 2 Run # 2 AS29-3

Imp.	Initial	Final
1	717.5	737.9
2	695.8	703.0
3	597.4	598.2
4	713.6	714.3
5	715.6	716.0
6	852.7	869.1
	Net Gain	

Cold Box # W1 Run # AP5202-1

Imp.	Initial	Final
1	351.7	352.0
2	604.1	604.1
3	718.6	732.2
4	834.6	847.2
5		
6		
	Net Gain	

703.8

Cold Box # W1 Run # AP5202-3

Imp.	Initial	Final
1	352.2	369.2
2	603.8	602.7
3	718.0	729.4
4	847.2	857.1
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Daily Balance Calibration
Standard Weight = 500 grams

	Weight (g)
Date: 4/11/23	500.0
Date: 4/12/23	499.9
Date: 4/13/23	500.0

	Weight (g)
Date: _____	_____
Date: _____	_____
Date: _____	_____

Plant =	FMMI			Point Duration (min) =	10					Moisture			
Plant Location =	Claypool, AZ			Bar. Pres. (in Hg) =	26.10					Initial	Final	Change	
Source ID =	Vent Fume			Static Pres. (in WC) =	0.82					702.1	728.1	26.0	
Run No =	VF29-1			Nozzle Dia (in WC) =	0.277					688.6	700.1	11.5	
Date =	5/11/2023			Meter dH @ =	1.9156					598.0	598.9	0.9	
Run Time =	0942-1145			Meter Yd =	1.0068					713.6	712.8	-0.8	
Sample Duration (min) =	120			H2O Mass (ml/g) =	56.00					708.4	710.2	1.8	
										894.5	911.1	16.6	
									Sum	4305.2	4361.2		

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
W1	41.903	4.367	0.33	0.574	2.19	1.480	74.0	77.0	80.0	78.5	34.9	26.16	26.26
	46.270	4.500	0.37	0.608	2.45	1.565	74.0	76.0	79.0	77.5	36.9	26.16	26.28
2	50.770	4.500	0.35	0.592	2.32	1.523	74.0	78.0	78.0	78.0	35.9	26.16	26.27
	55.270	4.390	0.34	0.583	2.25	1.500	74.0	79.0	78.0	78.5	35.4	26.16	26.27
3	59.660	4.390	0.34	0.583	2.25	1.500	73.0	80.0	77.0	78.5	35.4	26.16	26.27
	64.050	4.438	0.35	0.592	2.32	1.523	74.0	81.0	77.0	79.0	35.9	26.16	26.27
N1	68.488	4.442	0.35	0.592	2.32	1.523	74.0	80.0	76.0	78.0	35.9	26.16	26.27
	72.930	4.540	0.36	0.600	2.39	1.546	74.0	82.0	76.0	79.0	36.4	26.16	26.28
2	77.470	4.330	0.32	0.566	2.12	1.456	74.0	82.0	76.0	79.0	34.4	26.16	26.26
	81.800	4.320	0.32	0.566	2.12	1.456	74.0	82.0	76.0	79.0	34.4	26.16	26.26
3	86.120	4.360	0.33	0.574	2.19	1.480	74.0	83.0	76.0	79.5	34.9	26.16	26.26
	90.480	4.357	0.33	0.574	2.19	1.480	72.0	84.0	77.0	80.5	34.8	26.16	26.26
E1	94.837	4.483	0.35	0.592	2.32	1.523	74.0	82.0	76.0	79.0	35.9	26.16	26.27
	99.320	4.450	0.35	0.592	2.32	1.523	74.0	83.0	76.0	79.5	35.9	26.16	26.27
2	103.770	4.470	0.35	0.592	2.32	1.523	73.0	83.0	76.0	79.5	35.9	26.16	26.27
	108.240	4.580	0.36	0.600	2.39	1.546	73.0	82.0	76.0	79.0	36.4	26.16	26.28
3	112.820	4.470	0.34	0.583	2.25	1.500	73.0	83.0	76.0	79.5	35.4	26.16	26.27
	117.290	4.469	0.34	0.583	2.25	1.500	73.0	83.0	76.0	79.5	35.4	26.16	26.27
S1	121.759	4.341	0.32	0.566	2.12	1.456	73.0	81.0	76.0	78.5	34.3	26.16	26.26
	126.100	4.340	0.33	0.574	2.19	1.480	74.0	82.0	76.0	79.0	34.9	26.16	26.26
2	130.440	4.410	0.34	0.583	2.25	1.500	74.0	82.0	76.0	79.0	35.4	26.16	26.27
	134.850	4.700	0.39	0.624	2.59	1.609	75.0	83.0	76.0	79.5	38.0	26.16	26.29
3	139.550	4.470	0.34	0.583	2.25	1.500	75.0	83.0	77.0	80.0	35.4	26.16	26.27
	144.020	4.203	0.30	0.548	1.99	1.411	75.0	82.0	76.0	79.0	33.3	26.16	26.25
	148.223												
	106.320		0.34	0.584	2.26	1.504	73.8	81.4	76.6	79.0	35.5	26.16	26.27

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	Fmmi	Filter ID:	D7
Location:	Claypool, AZ	Ambient Temp. (°F):	74
Source I.D.:	Vent Fume	Baro. Press. (in. Hg):	26.10
Date:	5/11/23	Static Press. (in H_2O):	0.82
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	VF29-1	CO_2 (%):	0.0
Operators:	DB, CJ	Duct Dia. (in):	159.5
Meter Box I.D.:	Blackhawk	B_{ws} (assumed):	0.03
Meter Y:	1.0068	Nozzle Dia. (in):	0.276, 0.277, 0.278 = 0.277
Meter Delta H@:	1.9156	K Factor:	6.63
Probe I.D./ Impinger outlet I.D.:	419 / yellow	Leak Check:	
Probe Length/Type:	4ft RMS TFE	Pre:	0.000 acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post:	0.000 acf 10 in. Hg Vac.

Moisture Train: 2

Imp.	Initial	Final
1	702.1	728.1
2	688.6	700.1
3	598.0	598.9
4	713.6	712.8
5	708.4	710.2
6	894.5	911.1
Net Gain		

Pitot: Impact 0.0, Static 0.0 in. H_2O/15 sec. Pre
Pitot: Impact 0.0, Static 0.0 in. H_2O/15 sec. Post

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
942	W 1	0	41.907	0.33	2.19	74	264	255	56	77	80	6
		5	46.27	0.37	2.45	74	259	255	46	76	79	6
	2	10	50.77	0.35	2.32	74	253	251	45	78	78	7
		15	55.27	0.34	2.25	74	249	250	45	79	78	7
	3	20	59.66	0.34	2.25	73	252	251	45	80	77	7
		25	64.05	0.35	2.32	74	252	251	45	81	77	7
1012/1013	N 1	30	68.498	0.35	2.32	74	250	251	48	80	76	6
		35	72.93	0.36	2.39	74	247	250	47	82	76	6
	2	40	77.47	0.32	2.12	74	248	250	48	82	76	7
		45	81.80	0.32	2.12	74	252	250	48	82	76	7
	3	50	86.12	0.33	2.19	74	252	250	49	83	76	7
		55	90.48	0.33	2.19	72	251	250	49	84	77	7
1043/1044	E 1	60	94.837	0.35	2.32	74	246	249	50	82	76	7
		65	99.32	0.35	2.32	74	251	250	51	83	76	7
	2	70	103.77	0.35	2.32	73	247	250	52	83	76	7
		75	108.24	0.36	2.39	73	251	251	52	82	76	7
	3	80	112.82	0.34	2.25	73	251	251	53	83	76	7
		85	117.29	0.34	2.25	73	249	250	54	83	76	7
1114/1115	S 1	90	121.759	0.32	2.12	73	252	251	55	81	76	7
		95	126.10	0.33	2.19	74	250	251	55	82	76	7
	2	100	130.44	0.34	2.25	74	249	250	55	82	76	7
		105	134.85	0.39	2.59	75	251	250	56	83	76	7
	3	110	139.55	0.34	2.25	75	248	249	55	83	77	7
		115	144.02	0.30	1.99	75	248	249	55	82	76	7
1145		120	148.223									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	10
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.10
Source ID =	Vent Fume	Static Pres. (in WC) =	0.81
Run No =	VF29-2	Nozzle Dia (in WC) =	0.277
Date =	5/11/2023	Meter dH @ =	1.9156
Run Time =	1206-1409	Meter Yd =	1.0068
Sample Duration (min) =	120	H2O Mass (ml/g) =	53.9

Moisture		
Initial	Final	Change
708.5	730.6	22.1
690.1	702.6	12.5
582.7	585.1	2.4
715.8	714.5	-1.3
714.0	714.0	0.0
907.2	925.4	18.2
Sum 4318.3	4372.2	

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
S1	148.764	4.226	0.32	0.566	2.10	1.449	73.0	75.0	74.0	74.5	34.3	26.16	26.25
	152.990	4.460	0.35	0.592	2.30	1.517	73.0	76.0	74.0	75.0	35.9	26.16	26.27
2	157.450	4.210	0.31	0.557	2.04	1.428	73.0	78.0	74.0	76.0	33.8	26.16	26.25
	161.660	4.320	0.31	0.557	2.04	1.428	73.0	79.0	74.0	76.5	33.8	26.16	26.25
3	165.980	4.010	0.29	0.539	1.91	1.382	73.0	80.0	74.0	77.0	32.7	26.16	26.24
	169.990	4.255	0.32	0.566	2.10	1.449	73.0	80.0	75.0	77.5	34.3	26.16	26.25
E1	174.245	4.235	0.31	0.557	2.04	1.428	73.0	80.0	74.0	77.0	33.8	26.16	26.25
	178.480	4.510	0.36	0.600	2.37	1.539	74.0	81.0	74.0	77.5	36.4	26.16	26.27
2	182.990	4.240	0.31	0.557	2.04	1.428	74.0	82.0	75.0	78.5	33.8	26.16	26.25
	187.230	4.240	0.31	0.557	2.04	1.428	74.0	83.0	75.0	79.0	33.8	26.16	26.25
3	191.470	4.130	0.29	0.539	1.91	1.382	75.0	84.0	76.0	80.0	32.7	26.16	26.24
	195.600	4.223	0.31	0.557	2.04	1.428	74.0	85.0	77.0	81.0	33.8	26.16	26.25
N1	199.823	4.257	0.31	0.557	2.04	1.428	75.0	84.0	77.0	80.5	33.8	26.16	26.25
	204.080	4.440	0.35	0.592	2.30	1.517	74.0	84.0	78.0	81.0	35.9	26.16	26.27
2	208.520	4.240	0.31	0.557	2.04	1.428	74.0	85.0	78.0	81.5	33.8	26.16	26.25
	212.760	4.370	0.34	0.583	2.23	1.493	75.0	84.0	78.0	81.0	35.4	26.16	26.26
3	217.130	4.050	0.28	0.529	1.84	1.356	75.0	84.0	78.0	81.0	32.2	26.16	26.24
	221.180	4.013	0.28	0.529	1.84	1.356	75.0	84.0	78.0	81.0	32.2	26.16	26.24
W1	225.193	4.167	0.31	0.557	2.04	1.428	74.0	84.0	80.0	82.0	33.8	26.16	26.25
	229.360	4.260	0.32	0.566	2.10	1.449	74.0	87.0	80.0	83.5	34.4	26.16	26.25
2	233.620	4.390	0.34	0.583	2.23	1.493	75.0	89.0	81.0	85.0	35.4	26.16	26.26
	238.010	4.320	0.32	0.566	2.10	1.449	75.0	90.0	83.0	86.5	34.4	26.16	26.25
3	242.330	4.290	0.32	0.566	2.10	1.449	76.0	90.0	84.0	87.0	34.4	26.16	26.25
	246.620	4.025	0.28	0.529	1.84	1.356	75.0	92.0	85.0	88.5	32.2	26.16	26.24
	250.645												
	101.881		0.31	0.561	2.07	1.437	74.1	83.3	77.3	80.3	34.1	26.16	26.25

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	Fmmi	Filter ID:	D8
Location:	Claypool, AZ	Ambient Temp. (°F):	76
Source I.D.:	vent fume	Baro. Press. (in. Hg):	26.10
Date:	5/11/23	Static Press. (in H_2O):	0.81
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	VF29-2	CO_2 (%):	0.0
Operators:	DB, CS	Duct Dia. (in):	159.5
Meter Box I.D.:	Blackhawk	B_{ws} (assumed):	0.03
Meter Y:	1.0068	Nozzle Dia. (in):	0.277
Meter Delta H@:	1.9156	K Factor:	6.57
Probe I.D./ Impinger outlet I.D.:	419 / 13lve	Leak Check:	
Probe Length/Type:	4ft Rms 0.84	Pre:	0.000 acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post:	0.000 acf 10 in. Hg Vac.

Moisture Train: 5

Imp.	Initial	Final
1	708.5	730.6
2	690.1	702.6
3	582.7	585.1
4	715.8	714.5
5	714.0	714.0
6	907.2	925.4
	Net Gain	

Pitot: Impact 0.0 Pre: Static 0.0 in. H_2O/15 sec.
Pitot: Impact 0.0 Post: Static 0.0 in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1206			148.764									
~~1202~~	S 1	0	~~148.383~~	0.32	2.10	73	257	254	63	75	74	7
	~~2~~ 2	5	152.99	0.35	2.30	73	252	253	52	76	74	7
		10	157.45	0.31	2.04	73	254	252	51	78	74	7
		15	161.66	0.31	2.04	73	254	252	52	79	74	7
	3	20	165.98	0.29	1.91	73	252	251	52	80	74	7
		25	169.99	0.32	2.10	73	251	251	53	80	75	7
1236/1236	E 1	30	174.245	0.31	2.04	73	250	250	54	80	74	7
		35	178.48	0.36	2.37	74	251	250	53	81	74	8
	2	40	182.99	0.31	2.04	74	252	250	53	82	75	7
		45	187.23	0.31	2.04	74	250	250	54	83	75	7
	3	50	191.47	0.29	1.91	75	245	249	55	84	76	7
		55	195.60	0.31	2.04	74	254	249	56	85	77	7
1306/1308	N 1	60	199.823	0.31	2.04	75	247	250	57	84	77	7
		65	204.08	0.35	2.30	74	249	250	55	84	78	8
	2	70	208.52	0.31	2.04	74	245	249	56	85	78	7
		75	212.76	0.34	2.23	75	248	250	56	84	78	7
	3	80	217.13	0.28	1.84	75	249	251	57	84	78	6
		85	221.18	0.28	1.84	75	252	252	56	84	78	6
1338/1339	W 1	90	225.193	0.31	2.04	74	255	252	57	84	80	6
		95	229.36	0.32	2.10	74	255	251	58	87	80	7
	2	100	233.62	0.34	2.23	75	250	250	59	89	81	7
		105	238.01	0.32	2.10	75	253	250	60	90	83	7
	3	110	242.33	0.32	2.10	76	251	250	60	90	84	7
		115	246.62	0.28	1.84	75	248	249	61	92	85	7
1409		120	250.645									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	10
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.05
Source ID =	Vent Fume	Static Pres. (in WC) =	0.80
Run No =	VF29-3	Nozzle Dia (in WC) =	0.277
Date =	5/11/2023	Meter dH @ =	1.9156
Run Time =	1433-1636	Meter Yd =	1.0068
Sample Duration (min) =	120	H2O Mass (ml/g) =	58.2

Moisture		
Initial	Final	Change
705.3	735.4	30.1
691.6	701.3	9.7
602.3	602.9	0.6
716.2	717.9	1.7
710.2	711.2	1.0
852.7	867.8	15.1
4278.3	4336.5	

Sum

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
W1	250.815	4.225	0.31	0.557	2.04	1.428	74.0	87.0	89.0	88.0	33.9	26.11	26.20
	255.040	4.190	0.30	0.548	1.97	1.404	75.0	88.0	87.0	87.5	33.3	26.11	26.19
2	259.230	4.260	0.32	0.566	2.10	1.449	75.0	89.0	86.0	87.5	34.4	26.11	26.20
	263.490	4.360	0.33	0.574	2.17	1.473	76.0	89.0	86.0	87.5	35.0	26.11	26.21
3	267.850	4.240	0.31	0.557	2.04	1.428	77.0	90.0	86.0	88.0	33.9	26.11	26.20
	272.090	4.272	0.32	0.566	2.10	1.449	77.0	89.0	84.0	86.5	34.5	26.11	26.20
N1	276.362	4.288	0.34	0.583	2.23	1.493	78.0	88.0	84.0	86.0	35.6	26.11	26.21
	280.65	4.120	0.30	0.548	1.97	1.404	78.0	89.0	84.0	86.5	33.4	26.11	26.19
2	284.770	4.230	0.31	0.557	2.04	1.428	78.0	89.0	83.0	86.0	34.0	26.11	26.20
	289.000	4.270	0.32	0.566	2.10	1.449	77.0	89.0	83.0	86.0	34.5	26.11	26.20
3	293.270	4.310	0.32	0.566	2.10	1.449	77.0	90.0	84.0	87.0	34.5	26.11	26.20
	297.580	4.055	0.28	0.529	1.84	1.356	77.0	90.0	84.0	87.0	32.3	26.11	26.19
E1	301.635	4.095	0.29	0.539	1.91	1.382	77.0	89.0	83.0	86.0	32.8	26.11	26.19
	305.730	4.160	0.30	0.548	1.97	1.404	77.0	90.0	83.0	86.5	33.4	26.11	26.19
2	309.890	4.300	0.32	0.566	2.10	1.449	76.0	91.0	84.0	87.5	34.5	26.11	26.20
	314.190	4.270	0.31	0.557	2.04	1.428	76.0	91.0	84.0	87.5	33.9	26.11	26.20
3	318.460	4.370	0.33	0.574	2.17	1.473	76.0	91.0	84.0	87.5	35.0	26.11	26.21
	322.830	4.184	0.30	0.548	1.97	1.404	76.0	91.0	84.0	87.5	33.4	26.11	26.19
S1	327.014	4.106	0.29	0.539	1.91	1.382	74.0	89.0	84.0	86.5	32.7	26.11	26.19
	331.120	4.220	0.31	0.557	2.04	1.428	75.0	90.0	84.0	87.0	33.9	26.11	26.20
2	335.340	4.280	0.32	0.566	2.10	1.449	76.0	91.0	84.0	87.5	34.5	26.11	26.20
	339.620	4.310	0.32	0.566	2.10	1.449	77.0	91.0	84.0	87.5	34.5	26.11	26.20
3	343.930	4.190	0.30	0.548	1.97	1.404	77.0	91.0	84.0	87.5	33.4	26.11	26.19
	348.120	4.165	0.30	0.548	1.97	1.404	78.0	91.0	84.0	87.5	33.4	26.11	26.19
	352.285												
	101.470		0.31	0.557	2.04	1.428	76.4	89.7	84.4	87.1	33.9	26.11	26.20

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	Emmi	Filter ID:	D9
Location:	Claypool, AZ	Ambient Temp. (°F):	75
Source I.D.:	Vent Fume	Baro. Press. (in. Hg):	26.05
Date:	5/11/23	Static Press. (in H_2O):	0.80
Flow Traverse Time:	NA	O_2 (%):	20.9
Run No.:	VF29-3	CO_2 (%):	00
Operators:	DB, CS	Duct Dia. (in):	159.5
Meter Box I.D.:	Blackhawk	B_{ws} (assumed):	0.03
Meter Y:	1.0068	Nozzle Dia. (in):	0.277
Meter Delta H@:	1.9156	K Factor:	6.57
Probe I.D./ Impinger outlet I.D.:	419 / yellow	Leak Check:	
Probe Length/Type:	4ft RMS TFE	Pre: 0.000 acf	10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.000 acf	8 in. Hg Vac.

Moisture Train: 2

Imp.	Initial	Final
1	705.3	735.4
2	691.6	701.3
3	662.3	602.9
4	716.2	717.9
5	710.2	711.2
6	852.7	867.8
	Net Gain	

Pitot: Impact Pre: 0.0 Post: 0.0 | Static Pre: 0.0 Post: 0.0 in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1433	W 1	0	250.815	0.31	2.04	74	250	244	61	87	89	5
		5	255.04	0.30	1.97	75	262	257	41	88	87	5
	2	10	259.23	0.32	2.10	75	257	254	42	89	86	5
		15	263.49	0.33	2.17	76	252	252	44	89	86	5
	3	20	267.85	0.31	2.04	77	251	250	45	90	86	6
		25	272.09	0.32	2.10	77	249	250	46	89	84	6
1503/1504	N 1	30	276.262	0.34	2.23	78	252	251	47	88	84	6
		35	280.65	0.30	1.97	78	252	251	48	89	84	6
	2	40	284.77	0.31	2.04	78	251	250	49	89	83	6
		45	289.00	0.32	2.10	77	249	250	48	89	83	6
	3	50	293.27	0.32	2.10	77	244	249	49	90	84	6
		55	297.58	0.28	1.84	77	245	248	49	90	84	6
1534/1535	E 1	60	301.635	0.29	1.91	77	254	250	50	89	83	5
		65	305.73	0.30	1.97	77	258	250	49	90	83	5
	2	70	309.89	0.32	2.10	76	253	250	49	91	84	6
		75	314.19	0.31	2.04	76	251	251	48	91	84	6
	3	80	318.46	0.33	2.17	76	251	250	49	91	84	6
		85	322.83	0.30	1.97	76	244	247	50	91	84	6
1605/1606	S 1	90	327.014	0.29	1.91	74	251	248	51	89	84	5
		95	331.12	0.31	2.04	75	246	250	52	90	84	5
	2	100	335.34	0.32	2.10	76	251	250	54	91	84	5
		105	339.62	0.32	2.10	77	250	248	55	91	84	6
	3	110	343.93	0.30	1.97	77	251	250	56	91	84	6
		115	348.12	0.30	1.97	78	249	250	57	91	84	6
1636		120	352.285									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Method 4 Moisture Gravimetric Form

SLR

Cold Box # W2 Run # VF5202-1

Imp.	Initial	Final
1	389.8	389.6
2	598.9	598.7
3	710.7	725.8
4	873.7	884.1
5		
6		
Net Gain		

Cold Box # _____ Run # _____

Imp.	Initial	Final
1	389.6	
2	598.7	
3	725.8	
4	884.1	
5		
6		
Net Gain		

Cold Box # W2 Run # VF5202-3

Imp.	Initial	Final
1	391.2	391.1
2	601.3	601.1
3	725.8	737.4
4	884.1	894.5
5		
6		
Net Gain		

Cold Box # F1 Run # VF5202-2

Imp.	Initial	Final
1	351.6	365.3
2	601.0	600.9
3	709.5	722.6
841.0 4	880.7	859.8
5		
6		
Net Gain		

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
Net Gain		

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
Net Gain		

Cold Box # 4 Run # _____

Imp.	Initial	Final
1	702.2	
2	681.4	
3	603.0	
4	880.7	
5		
6		
Net Gain		

Cold Box # 5 Run # VF29-2

Imp.	Initial	Final
1	708.5	730.6
2	690.1	702.6
3	582.7	585.1
4	715.8	714.5
5	714.0	714.0
6	907.2	925.4
Net Gain		

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
Net Gain		

Cold Box # 2 Run # VF29-1

Imp.	Initial	Final
1	702.1	728.1
2	688.6	700.1
3	598.0	598.9
4	713.6	712.8
5	708.4	710.2
6	894.0	911.1
Net Gain		

Cold Box # 2 Run # VF29-3

Imp.	Initial	Final
1	705.3	735.4
2	691.6	701.3
3	602.2	602.9
4	716.2	717.9
5	710.2	711.2
6	852.7	867.8
Net Gain		

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
Net Gain		

Daily Balance Calibration
Standard Weight = 500 grams

	Weight (g)
Date: 5/8/23	500.0
Date: 5/9/23	500.0
Date: 5/10/23	500.0

	Weight (g)
Date: _____	_____
Date: _____	_____
Date: _____	_____

Plant =	FMMI	Point Duration (min) =	10
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.35
Source ID =	Acid Plant Tail Gas	Static Pres. (in WC) =	0.31
Run No =	AP29-1	Nozzle Dia (in WC) =	0.276
Date =	10/31/2023	Meter dH @ =	1.7674
Run Time =	1317-1524	Meter Yd =	0.9932
Sample Duration (min) =	120	H2O Mass (ml/g) =	66.9

	Moisture		
	Initial	Final	Change
	709.6	744.1	34.5
	683.2	696.3	13.1
	597.9	600.2	2.3
	711.4	710.0	-1.4
	713.4	713.7	0.3
	852.1	870.2	18.1
Sum	4267.6	4334.5	

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
W1	124.334	4.096	0.32	0.566	1.87	1.367	81.8	68.0	69.0	68.5	34.7	26.37	26.49
	128.430	4.040	0.30	0.548	1.75	1.323	82.0	69.0	69.0	69.0	33.6	26.37	26.48
2	132.470	4.160	0.33	0.574	1.92	1.386	82.0	71.0	69.0	70.0	35.2	26.37	26.49
	136.630	4.130	0.32	0.566	1.87	1.369	81.0	73.0	69.0	71.0	34.6	26.37	26.49
3	140.760	5.110	0.34	0.583	1.98	1.407	82.0	74.0	69.0	71.5	35.7	26.37	26.50
	145.870	3.273	0.33	0.574	1.92	1.386	81.0	75.0	70.0	72.5	35.2	26.37	26.49
S1	149.143	4.317	0.36	0.600	2.10	1.449	81.0	75.0	71.0	73.0	36.7	26.37	26.50
	153.460	4.380	0.36	0.600	2.10	1.449	82.0	78.0	71.0	74.5	36.8	26.37	26.50
2	157.840	4.250	0.34	0.583	1.98	1.407	81.0	79.0	73.0	76.0	35.7	26.37	26.50
	162.090	4.270	0.34	0.583	1.98	1.407	81.0	80.0	73.0	76.5	35.7	26.37	26.50
3	166.360	4.230	0.34	0.583	1.98	1.407	81.0	79.0	73.0	76.0	35.7	26.37	26.50
	170.590	4.156	0.31	0.557	1.81	1.345	81.0	79.0	74.0	76.5	34.1	26.37	26.48
E1	174.746	4.094	0.31	0.557	1.81	1.345	82.0	78.0	74.0	76.0	34.1	26.37	26.48
	178.840	4.080	0.31	0.557	1.81	1.345	81.0	80.0	74.0	77.0	34.1	26.37	26.48
2	182.920	4.370	0.36	0.600	2.10	1.449	81.0	80.0	74.0	77.0	36.7	26.37	26.50
	187.290	4.240	0.34	0.583	1.98	1.407	81.0	81.0	74.0	77.5	35.7	26.37	26.50
3	191.530	4.090	0.31	0.557	1.81	1.345	81.0	82.0	74.0	78.0	34.1	26.37	26.48
	195.620	4.075	0.31	0.557	1.81	1.345	82.0	82.0	74.0	78.0	34.1	26.37	26.48
N1	199.695	4.105	0.31	0.557	1.81	1.345	82.0	80.0	76.0	78.0	34.1	26.37	26.48
	203.800	4.300	0.31	0.557	1.81	1.345	82.0	83.0	76.0	79.5	34.1	26.37	26.48
2	208.100	3.820	0.30	0.548	1.75	1.323	82.0	83.0	77.0	80.0	33.6	26.37	26.48
	211.920	4.100	0.31	0.557	1.81	1.345	82.0	84.0	77.0	80.5	34.1	26.37	26.48
3	216.020	4.100	0.31	0.557	1.81	1.345	82.0	85.0	78.0	81.5	34.1	26.37	26.48
	220.120	4.162	0.32	0.566	1.87	1.367	83.0	84.0	78.0	81.0	34.7	26.37	26.49
	224.282												
	99.948		0.32	0.569	1.89	1.375	81.6	78.4	73.2	75.8	34.9	26.37	26.49

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	Fmm1	Filter ID:	G-1
Location:	Claypool, AZ	Ambient Temp. (°F):	65
Source I.D.:	AP26	Baro. Press. (in. Hg):	26.35
Date:	10/31/23	Static Press. (in H_2O):	0.31
Flow Traverse Time:	NA	O_2 (%):	~10
Run No.:	AP29-1	CO_2 (%):	~7
Operators:	DB, CS, JR	Duct Dia. (in):	125.5
Meter Box I.D.:	HawKeye	B_{ws} (assumed):	0.03
Meter Y:	0.9932	Nozzle Dia. (in):	0.277, 0.277, 0.275 = 0.2763
Meter Delta H@:	1.7674	K Factor:	583
Probe I.D./ Impinger outlet I.D.:	419 / RED	Leak Check:	
Probe Length/Type:	4ft RM5	Pre:	0.001 acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post:	0.000 acf 10 in. Hg Vac.

Moisture Train: 1

Imp.	Initial	Final
1	709.6	744.1
2	683.2	696.3
3	597.9	600.2
4	711.4	710.0
5	713.4	713.7
6	852.1	870.2
	Net Gain	

	Pitot:	Impact	Static	
Pre:		0.0	0.0	in. H_2O/15 sec.
Post:		0.0	0.0	in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)		DH (in. H_2O)	Stack Temp. (°F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1317	W 1	0	124.334	0.32	1.87	1.87	81	764	235	64	68	69	7
		5	128.43	0.30		1.75	82	262	238	60	69	69	7
	2	10	132.47	0.33		1.92	82	255	250	56	71	69	7
		15	136.63	0.32		1.87	81	251	252	55	73	69	7
	3	20	140.76	0.34		1.98	82	248	249	55	74	69	7
		25	145.87	0.33		1.92	81	248	249	55	75	70	8
1347/1350	S 1	30	149.143	0.36		2.10	81	247	250	56	75	71	8
		35	153.46	0.36		2.10	82	243	249	53	78	71	8
	2	40	157.84	0.34		1.98	81	254	250	53	79	73	8
		45	162.09	0.34		1.98	81	255	250	55	80	73	8
	3	50	166.36	0.34		1.98	81	246	246	55	79	73	8
		55	170.59	0.31		1.81	81	249	250	56	79	74	8
1420/1422	E 1	60	174.746	0.31		1.81	82	254	252	58	78	74	7
		65	178.84	0.31		1.81	81	258	253	56	80	74	7
	2	70	182.92	0.36		2.10	81	253	251	56	80	74	8
		75	187.29	0.34		1.98	81	253	252	56	81	74	8
	3	80	191.53	0.31		1.81	81	252	250	57	82	74	8
		85	195.62	0.31		1.81	82	251	251	58	82	74	8
1452/1454	N 1	90	199.695	0.31		1.81	82	241	249	58	80	76	7
		95	203.80	0.31		1.81	82	243	247	56	83	76	7
	2	100	208.10	0.30		1.75	82	251	250	56	83	77	7
		105	211.92	0.31		1.81	82	252	249	56	84	77	7
	3	110	216.02	0.31		1.81	82	249	250	56	85	78	7
		115	220.12	0.32		1.87	83	246	248	56	84	78	7
1524		120	224.282										

Total Time	DGM Volume	Avg. DP		Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	10		Moisture
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.35	Initial	Final Change
Source ID =	Acid Plant Tail Gas	Static Pres. (in WC) =	0.32	713.4	756.6 43.2
Run No =	AP29-2	Nozzle Dia (in WC) =	0.276	689.3	700.8 11.5
Date =	11/1/2023	Meter dH @ =	1.7674	602.7	604.3 1.6
Run Time =	1203-1408	Meter Yd =	0.9932	712.1	711.6 -0.5
Sample Duration (min) =	120	H2O Mass (ml/g) =	74.6	712.2	713.0 0.8
				833.7	851.7 18.0
			Sum	4263.4	4338.0

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
S12	225.087	4.353	0.36	0.600	2.10	1.449	81.0	67.0	65.0	66.0	36.7	26.37	26.50
	229.440	4.200	0.35	0.592	2.04	1.428	81.0	69.0	65.0	67.0	36.2	26.37	26.50
2	233.640	4.330	0.35	0.592	2.04	1.428	82.0	72.0	66.0	69.0	36.2	26.37	26.50
	237.970	4.330	0.36	0.600	2.10	1.449	82.0	74.0	67.0	70.5	36.8	26.37	26.50
3	242.300	3.990	0.29	0.539	1.69	1.300	82.0	75.0	68.0	71.5	33.0	26.37	26.47
	246.290	4.157	0.33	0.574	1.92	1.386	81.0	76.0	69.0	72.5	35.2	26.37	26.49
W1	250.447	4.263	0.34	0.583	1.98	1.407	82.0	76.0	70.0	73.0	35.7	26.37	26.50
	254.710	4.260	0.34	0.583	1.98	1.407	81.0	79.0	71.0	75.0	35.7	26.37	26.50
2	258.970	4.210	0.33	0.574	1.92	1.386	81.0	80.0	72.0	76.0	35.2	26.37	26.49
	263.180	4.300	0.34	0.583	1.98	1.407	81.0	81.0	73.0	77.0	35.7	26.37	26.50
3	267.480	4.310	0.34	0.583	1.98	1.407	81.0	82.0	74.0	78.0	35.7	26.37	26.50
	271.790	4.096	0.30	0.548	1.75	1.323	81.0	83.0	75.0	79.0	33.5	26.37	26.48
N1	275.886	3.974	0.30	0.548	1.75	1.323	81.0	82.0	76.0	79.0	33.5	26.37	26.48
	279.860	3.960	0.30	0.548	1.75	1.323	82.0	84.0	78.0	81.0	33.6	26.37	26.48
2	283.820	4.250	0.34	0.583	1.98	1.407	82.0	86.0	78.0	82.0	35.7	26.37	26.50
	288.070	4.140	0.31	0.557	1.81	1.345	82.0	87.0	80.0	83.5	34.1	26.37	26.48
3	292.210	4.050	0.30	0.548	1.75	1.323	82.0	87.0	80.0	83.5	33.6	26.37	26.48
	296.260	4.030	0.30	0.548	1.75	1.323	81.0	88.0	81.0	84.5	33.5	26.37	26.48
E1	300.290	4.080	0.31	0.557	1.81	1.345	82.0	86.0	82.0	84.0	34.1	26.37	26.48
	304.370	4.240	0.33	0.574	1.92	1.386	82.0	88.0	82.0	85.0	35.2	26.37	26.49
2	308.610	4.430	0.36	0.600	2.10	1.449	82.0	89.0	82.0	85.5	36.8	26.37	26.50
	313.040	4.010	0.30	0.548	1.75	1.323	81.0	89.0	83.0	86.0	33.5	26.37	26.48
3	317.050	4.200	0.33	0.574	1.92	1.386	81.0	88.0	83.0	85.5	35.2	26.37	26.49
	321.250	4.217	0.33	0.574	1.92	1.386	81.0	89.0	82.0	85.5	35.2	26.37	26.49
	325.467												
	100.380		0.327	0.571	1.90	1.379	81.5	81.5	75.1	78.3	35.0	26.37	26.49

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	FMMI	Filter ID:	G-2
Location:	Claypool, AZ	Ambient Temp. (°F):	63
Source I.D.:	APTG	Baro. Press. (in. Hg):	26.35
Date:	11/1/23	Static Press. (in H_2O):	0.32
Flow Traverse Time:	N.A	O_2 (%):	~10
Run No.:	AP 29-2	CO_2 (%):	~7
Operators:	DB, CJ, JR	Duct Dia. (in):	125.5
Meter Box I.D.:	Hawkeye	B_{ws} (assumed):	0.03
Meter Y:	0.993	Nozzle Dia. (in):	0.2763
Meter Delta H@:	1.767	K Factor:	5.87
Probe I.D./ Impinger outlet I.D.:	419 / 12ED	Leak Check:	
Probe Length/Type:	4ft RM5	Pre: 0.001	acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.001	acf 9 in. Hg Vac.

Moisture Train: 1

Imp.	Initial	Final
1	713.4	756.6
2	689.3	700.8
3	602.7	604.3
4	712.1	711.6
5	712.2	713.0
6	833.7	851.7
	Net Gain	

Pitot:	Impact	Static	
Pre:	0.0	0.0	in. H_2O/15 sec.
Post:	0.0	0.0	in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
1203	S 1	0	225.087	0.36	2.10	81	250	241	54	67	65	7
		5	229.44	0.35	2.04	81	254	258	51	69	65	7
	2	10	233.64	0.35	2.04	82	257	249	52	72	66	7
		15	237.97	0.36	2.10	82	246	254	52	74	67	7
	3	20	242.30	0.29	1.69	82	250	251	52	75	69	6
		25	246.29	0.33	1.92	81	255	251	53	76	69	6
1233/1235	W 1	30	250.447	0.34	1.98	82	258	252	56	76	70	6
		35	254.71	0.34	1.98	81	252	261	53	79	71	6
	2	40	258.97	0.33	1.92	81	254	252	54	80	72	6
		45	263.18	0.34	1.98	81	250	252	55	81	73	6
	3	50	267.48	0.34	1.98	81	249	250	56	82	74	6
		55	271.79	0.30	1.75	81	248	248	57	83	75	6
1305/1306	N 1	60	275.886	0.30	1.75	81	247	247	57	82	76	6
		65	279.86	0.30	1.75	82	240	246	55	84	78	6
	2	70	283.82	0.34	1.98	82	246	249	55	86	78	6
		75	288.07	0.31	1.81	82	243	249	55	87	80	6
	3	80	292.21	0.30	1.75	82	250	247	56	87	80	6
		85	296.26	0.30	1.75	81	249	254	55	88	81	6
1336/1338	E 1	90	300.290	0.31	1.81	82	259	257	58	86	82	6
		95	304.77	0.33	1.92	82	258	253	56	88	82	6
	2	100	308.161	0.36	2.10	82	250	255	59	89	82	6
		105	313.04	0.30	1.75	81	248	252	59	89	83	6
	3	110	317.05	0.33	1.92	81	249	252	60	88	83	7
		115	321.25	0.33	1.92	81	250	252	60	89	82	7
1408		120	325.467									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Plant =	FMMI	Point Duration (min) =	10		Moisture
Plant Location =	Claypool, AZ	Bar. Pres. (in Hg) =	26.40	Initial	Final Change
Source ID =	Acid Plant Tail Gas	Static Pres. (in WC) =	0.31	716.8	755.7 38.9
Run No =	AP29-3	Nozzle Dia (in WC) =	0.276	686.8	695.4 8.6
Date =	11/2/2023	Meter dH @ =	1.7674	600.5	602.0 1.5
Run Time =	0959-1205	Meter Yd =	0.9932	714.3	713.7 -0.6
Sample Duration (min) =	120	H2O Mass (ml/g) =	62.8	714.1	714.9 0.8
				847.9	861.5 13.6
			Sum	4280.4	4343.2

Point No.	DGM Reading (acf)	Sample Volume (acf)	dP (in WC)	dP1/2 (in WC)1/2	dH (in WC)	dH1/2 (in WC)1/2	Stack T (F)	DGM Inlet (F)	DGM Outlet (F)	DGM Ave (F)	Velocity (ft/s)	Stack Pres (in Hg)	Meter Pres. (in Hg)
W1	325.633	3.827	0.28	0.529	1.63	1.277	80.0	58.0	60.0	59.0	32.3	26.42	26.52
	329.460	3.830	0.28	0.529	1.63	1.277	80.0	60.0	58.0	59.0	32.3	26.42	26.52
2	333.290	3.730	0.27	0.520	1.57	1.253	80.0	63.0	59.0	61.0	31.8	26.42	26.52
	337.020	3.090	0.17	0.412	0.99	0.995	80.0	65.0	60.0	62.5	25.2	26.42	26.47
3	340.110	3.120	0.14	0.374	0.82	0.906	81.0	66.0	60.0	63.0	22.9	26.42	26.46
	343.230	2.784	0.20	0.447	1.17	1.082	80.0	68.0	61.0	64.5	27.3	26.42	26.49
S1	346.014	3.766	0.28	0.529	1.63	1.277	80.0	68.0	62.0	65.0	32.3	26.42	26.52
	349.78	3.820	0.28	0.529	1.63	1.277	80.0	71.0	65.0	68.0	32.3	26.42	26.52
2	353.600	3.740	0.27	0.520	1.57	1.253	80.0	73.0	64.0	68.5	31.8	26.42	26.52
	357.340	3.740	0.27	0.520	1.57	1.253	80.0	74.0	65.0	69.5	31.8	26.42	26.52
3	361.080	3.740	0.25	0.500	1.46	1.208	80.0	74.0	65.0	69.5	30.6	26.42	26.51
	364.820	3.607	0.25	0.500	1.46	1.208	80.0	75.0	66.0	70.5	30.6	26.42	26.51
E1	368.427	3.853	0.28	0.529	1.63	1.277	80.0	73.0	67.0	70.0	32.3	26.42	26.52
	372.280	3.010	0.16	0.400	0.93	0.964	80.0	76.0	68.0	72.0	24.4	26.42	26.47
2	375.290	3.110	0.18	0.424	1.05	1.025	80.0	76.0	68.0	72.0	25.9	26.42	26.48
	378.400	3.580	0.25	0.500	1.46	1.208	80.0	77.0	69.0	73.0	30.6	26.42	26.51
3	381.980	3.610	0.25	0.500	1.46	1.208	80.0	79.0	69.0	74.0	30.6	26.42	26.51
	385.590	3.788	0.27	0.520	1.57	1.253	80.0	80.0	70.0	75.0	31.8	26.42	26.52
N1	389.378	3.962	0.30	0.548	1.75	1.323	80.0	78.0	71.0	74.5	33.5	26.42	26.53
	393.340	4.000	0.30	0.548	1.75	1.323	80.0	82.0	73.0	77.5	33.5	26.42	26.53
2	397.340	4.110	0.32	0.566	1.87	1.367	81.0	83.0	74.0	78.5	34.6	26.42	26.54
	401.450	3.990	0.30	0.548	1.75	1.323	80.0	85.0	75.0	80.0	33.5	26.42	26.53
3	405.440	2.340	0.08	0.283	0.47	0.686	80.0	86.0	76.0	81.0	17.3	26.42	26.43
	407.780	2.885	0.17	0.412	0.99	0.995	81.0	84.0	76.0	80.0	25.2	26.42	26.47
	410.665												
	85.032		0.242	0.487	1.409	1.176	80.1	73.9	66.7	70.3	29.8	26.42	26.50

SLR

ISOKINETIC SAMPLE DATA FORM

Plant:	FMM1	Filter ID:	G7
Location:	Clay pool, AZ	Ambient Temp. (°F):	60
Source I.D.:	APTG	Baro. Press. (in. Hg):	26.40
Date:	11/2/23	Static Press. (in H_2O):	0.31
Flow Traverse Time:	NA	O_2 (%):	~10
Run No.:	AP29-3	CO_2 (%):	~1
Operators:	DB, CS, JR	Duct Dia. (in):	125.5
Meter Box I.D.:	Hawkeye	B_{ws} (assumed):	0.03
Meter Y:	0.9932	Nozzle Dia. (in):	0.27163
Meter Delta H@:	1.7674	K Factor:	5.83
Probe I.D./ Impinger outlet I.D.:	419 / 1250	Leak Check:	
Probe Length/Type:	4ft 2MS	Pre: 0.002	acf 10 in. Hg Vac.
Pitot Coeff. (Cp):	0.84	Post: 0.001	acf 8 in. Hg Vac.

Moisture Train: 1

Imp.	Initial	Final
1	716.8	755.7
2	686.8	695.4
3	600.5	603.0
4	714.3	713.7
5	714.1	714.9
6	847.9	861.5
Net Gain		

Pitot: Impact Pre: 0.0 Post: 0.0 | Static Pre: 0.0 Post: 0.0 in. H_2O/15 sec.

DGM Clock Time	Port/Point I.D.	Sample Time (min.)	DGM Reading (DACF)	DP (in. H_2O)	DH (in. H_2O)	Stack Temp. (F)	Probe Temp. (°F)	Filter Temp. (°F)	Imp. Outlet Temp. (°F)	DGM Temp. (°F)		Vacuum (in. Hg)
959	W 1	0	325.637	0.28	1.63	80	259	258	59	58	60	6
		5	329.46	0.28	1.63	80	259	256	55	60	58	6
	2	10	333.29	0.27	1.57	80	251	254	50	63	59	6
		15	337.02	0.17	0.99	80	250	252	49	65	60	5
	3	20	340.11	0.14	0.82	81	252	252	49	66	60	5
		25	343.23	0.20	1.17	80	252	253	50	68	61	5
1029/1030	S 1	30	346.014	0.28	1.63	80	245	243	51	68	62	6
		35	349.78	0.28	1.63	80	242	243	51	71	65	6
	2	40	353.60	0.27	1.57	80	245	246	52	73	64	6
		45	357.34	0.27	1.57	80	247	250	53	74	65	6
	3	50	361.08	0.25	1.46	80	255	252	54	74	65	6
		55	364.82	0.25	1.46	80	255	251	55	75	66	6
1100/1103	E 1	60	368.427	0.28	1.63	80	251	249	56	73	67	6
		65	372.28	0.16	0.93	80	252	252	55	76	68	6
	2	70	375.29	0.18	1.05	80	252	249	56	76	68	5
		75	378.40	0.25	1.46	80	252	250	57	77	69	5
	3	80	381.98	0.25	1.46	80	251	249	56	79	69	5
		85	385.59	0.27	1.57	80	250	249	56	80	70	6
1133/1135	N 1	90	389.378	0.30	1.75	80	240	251	57	78	71	6
		95	393.34	0.30	1.75	80	245	249	54	82	73	7
	2	100	397.34	0.32	1.87	81	247	245	54	83	74	7
		105	401.45	0.30	1.75	80	250	255	54	85	75	7
	3	110	405.44	0.08	0.47	80	256	253	55	86	76	4
		115	407.70	0.17	0.99	81	251	249	58	84	76	5
1205		120	410.665									

Total Time	Vol. (DACF)	Avg. DP	Avg. DH	Avg. t_s

Average DGM Temp.	Max. Vac.

Method 4 Moisture Gravimetric Form

SLR

Cold Box # 3 Run # _____

Imp.	Initial	Final
1	701.1	*
2	684.2	
3	608.2	
4	910.0	
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Cold Box # 1 Run # AP29-1

Imp.	Initial	Final
1	709.6	754.1
2	683.2	696.3
3	597.9	600.2
4	711.4	710.0
5	713.4	713.7
6	852.1	870.2
	Net Gain	

Cold Box # 1 Run # AP29-2

Imp.	Initial	Final
1	713.4	756.6
2	689.3	700.8
3	602.7	604.3
4	712.1	711.6
5	712.2	713.0
6	839.7	851.7
	Net Gain	

Cold Box # 1 Run # AP29-3

Imp.	Initial	Final
1	716.8	755.7
2	686.8	695.4
3	600.5	602.0
4	714.3	713.7
5	714.1	714.9
6	847.9	861.5
	Net Gain	

Cold Box # F2 Run # AP5202-1

Imp.	Initial	Final
1	378.1	378.2
2	596.0	596.2
3	714.7	741.1
4	828.6	838.8
5		
6		
	Net Gain	

Cold Box # F2 Run # AP5202-3

Imp.	Initial	Final
1	380.1	~~598.8~~ 380.8
2	598.1	598.6
3	727.9	746.9
4	838.8	848.5
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Cold Box # F1 Run # Field proof blank

Imp.	Initial	Final
1	376.7	
2	601.6	
3	696.6	
4	810.8	
5		
6		
	Net Gain	

Cold Box # F1 Run # AP5202-2

Imp.	Initial	Final
1	377.5	377.7
2	603.8	602.2
3	696.6	708.6
4	810.8	820.8
5		
6		
	Net Gain	

Cold Box # _____ Run # _____

Imp.	Initial	Final
1		
2		
3		
4		
5		
6		
	Net Gain	

Daily Balance Calibration
Standard Weight = 500 grams

	Weight (g)
Date: 10/31/23	499.8
Date: 11/1/23	499.8
Date: 11/2/23	499.8
Date: 11/4/23	499.8
Date: _____	_____

	Weight (g)
Date: _____	_____
Date: _____	_____
Date: _____	_____
Date: _____	_____
Date: _____	_____

RM 3
MOLECULAR WEIGHT DETERMINATION

Client: FMMI
Plant Location: Claypool, AZ
Test Location: APTG

Operator: C. Johnson
Ambient Temperature: 60°F

Sample Type (circle one): (Bag) (Integrated) Continuous Other _____
Has Orsat or Fyrite unit been successfully leak checked? YES/NO (NA)

Date	Bag ID/Run Number	% O_2			% CO_2		
		Actual Readings		Average	Actual Readings		Average
10/31/2023	AP5B-1,			10.0			1.0
10/31/2023	AP29-1			11.0			0.5
11/1/2023	AP5B-2			10.0			0.0
11/1/2023	AP29-2			11.0			1.0
11/2/2023	AP5B-3			10.0			0.5
11/2/2023	AP29-3			10.0			0.5
11/2/2023	AP5202-1			11.0			1.00
11/4/2023	AP5202-2			11.0			0.5
11/4/2023	AP5202-3			11.0			0.5

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Doug Bopray
SLR International Corp
1612 Specht Point Road, Suite 119
Fort Collins CO 80525

Generated 5/15/2023 4:46 PM

JOB DESCRIPTION

FMMI - M29

JOB NUMBER

140-31634-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

myEOL

Eurofins Knoxville

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
5/15/2023 4:46 PM

Authorized for release by
Courtney M Adkins, Project Manager II
Courtney.Adkins@et.eurofinsus.com
Designee for
Kevin S Woodcock, Senior Project Manager
Kevin.Woodcock@et.eurofinsus.com
865 291-3082

Table of Contents

Table of Contents

Definitions/Glossary

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Method	Method Description	Protocol	Laboratory
29/6010C	Metals (ICP), Stationary Source	EPA	EET KNX
29/7470A	Mercury (CVAA), Stationary Source	EPA	EET KNX
Air Train Vol.	Air Train Volume	None	EET KNX
AT Prep (BH)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (BH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (Empty)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (FH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (HCl)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (KMnO4)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep FH	Preparation, Mercury (Stationary Source) FH	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-31634-1	AS29-1,CONTAINER 1,3	Air	04/12/23 00:00	05/01/23 09:30
140-31634-2	AS29-1,CONTAINER 4	Air	04/12/23 00:00	05/01/23 09:30
140-31634-3	AS29-1,CONTAINER 5A	Air	04/12/23 00:00	05/01/23 09:30
140-31634-4	AS29-1,CONTAINER 5B	Air	04/12/23 00:00	05/01/23 09:30
140-31634-5	AS29-1,CONTAINER 5C	Air	04/12/23 00:00	05/01/23 09:30
140-31634-6	AS29-2,CONTAINER 1,3	Air	04/15/23 00:00	05/01/23 09:30
140-31634-7	AS29-2,CONTAINER 4	Air	04/15/23 00:00	05/01/23 09:30
140-31634-8	AS29-2,CONTAINER 5A	Air	04/15/23 00:00	05/01/23 09:30
140-31634-9	AS29-2,CONTAINER 5B	Air	04/15/23 00:00	05/01/23 09:30
140-31634-10	AS29-2,CONTAINER 5C	Air	04/15/23 00:00	05/01/23 09:30
140-31634-11	AS29-2,CONTAINER 1,3	Air	04/17/23 00:00	05/01/23 09:30
140-31634-12	AS29-2,CONTAINER 4	Air	04/17/23 00:00	05/01/23 09:30
140-31634-13	AS29-2,CONTAINER 5A	Air	04/17/23 00:00	05/01/23 09:30
140-31634-14	AS29-2,CONTAINER 5B	Air	04/17/23 00:00	05/01/23 09:30
140-31634-15	AS29-2,CONTAINER 5C	Air	04/17/23 00:00	05/01/23 09:30
140-31634-16	BLANK,CONTAINER 12	Air	04/12/23 00:00	05/01/23 09:30
140-31634-17	BLANK,CONTAINER 8A	Air	04/12/23 00:00	05/01/23 09:30
140-31634-18	BLANK,CONTAINER 8B	Air	04/12/23 00:00	05/01/23 09:30
140-31634-19	BLANK,CONTAINER 9	Air	04/12/23 00:00	05/01/23 09:30
140-31634-20	BLANK,CONTAINER 10	Air	04/12/23 00:00	05/01/23 09:30
140-31634-21	BLANK,CONTAINER 11	Air	04/12/23 00:00	05/01/23 09:30

Job Narrative
140-31634-1

Receipt

The samples were received on 5/1/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 18.5º C and 19.5º C.

Receipt Exceptions

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): AS29-2,CONTAINER 5A (140-31634-13). The container labels list Container 5A, while the COC lists Container 5B. Loggged per container label.

Metals

Multi-Metals Train Preparation and Analysis

These stack gas samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0006 which is based on EPA SW-846 Method 0060, “Determination of Metals in Stack Emissions” and Method 29, “Determination of Metals Emissions from Stationary Sources”. SW-846 Methods 6010C and 7470A as incorporated in Eurofins TestAmerica Knoxville standard operating procedures KNOX-MT-0007 and KNOX-MT-0009 were used to perform the final instrument analysis.

Acid digestion was performed on the front half particulate filter and the nitric acid probe rinse fractions separately using HNO3 and HF. After digestion, these two fractions were combined, and the HF was sequestered using H3BO3 followed by another heating cycle. This digestate was adjusted to final volume and analyzed by ICP. A portion of the ICP digestate was prepared for CVAA analysis in order to determine the particle-bound mercury. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L) x (Final Volume Hg Digestate, mL / Volume ICP Digestate Used, mL)

The 5%HNO3/10%H2O2 impinger samples were reduced in volume to 100 mL. A 20 milliliter portion of the concentrated sample was removed and processed for mercury. The remaining 80 mL of concentrated sample was digested using HNO3 and H2O2, adjusted to a final volume of 80 mL, and analyzed by ICP. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume ICP Digestate, mL / Volume Conc. Sample Digested, mL)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume Hg Digestate, mL / Volume Conc. Sample Digested, mL)

For the 0.1N HNO3 rinse samples (empty impingers), a 2.5 milliliter portion of the sample as received was removed and processed for mercury.

The 4% KMnO4/10%H2SO4 impinger samples were filtered to remove MnO2, followed by removal of a 25 mL portion of filtrate for mercury processing. The filtered MnO2 residue was digested in HCl, combined with the HCl rinse sample and analyzed for mercury.

Results for the 0.1N HNO3 rinse samples and the KMnO4 filtrate were calculated using the following equation:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Results for the combined MnO2 residue HCl digestates and HCl rinse samples were calculated as follows:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L + MnO2 HCl Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Note: The total sample volume for the 5%HNO3/10%H2O2 impinger samples is the final volume of the concentrated sample. The total sample volume for the combined MnO2 residue HCl digestates and HCl rinse samples is equal to the total sample volume plus the MnO2 HCl volume.

Method 29/6010C: The following samples were diluted due to the presence of Silicon which interferes with Arsenic, Cobalt, Lead, Nickel, Selenium and Thallium: AS29-1,CONTAINER 1,3 (140-31634-1), AS29-2,CONTAINER 1,3 (140-31634-6), AS29-2,CONTAINER 1,3 (140-31634-11) and BLANK,CONTAINER 12 (140-31634-16). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Pre Prep Batch: 72915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-3	AS29-1,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31634-8	AS29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31634-13	AS29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
MB 140-72915/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-72915/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31634-8 MS	AS29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31634-8 MSD	AS29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 72916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-4	AS29-1,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31634-9	AS29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31634-14	AS29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31634-18	BLANK,CONTAINER 8B	Total/NA	Air	Air Train Vol.	
140-31634-20	BLANK,CONTAINER 10	Total/NA	Air	Air Train Vol.	
MB 140-72916/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-72916/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31634-9 MS	AS29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31634-9 MSD	AS29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 72917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-5	AS29-1,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31634-10	AS29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31634-15	AS29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31634-21	BLANK,CONTAINER 11	Total/NA	Air	Air Train Vol.	
MB 140-72917/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-72917/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31634-10 MS	AS29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31634-10 MSD	AS29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	

Prep Batch: 72920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-3	AS29-1,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	72915
140-31634-8	AS29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	72915
140-31634-13	AS29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	72915
MB 140-72915/1-B	Method Blank	Total/NA	Air	AT Prep (Empty)	72915
LCS 140-72915/2-B	Lab Control Sample	Total/NA	Air	AT Prep (Empty)	72915
140-31634-8 MS	AS29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	72915
140-31634-8 MSD	AS29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	72915

Prep Batch: 72927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-2	AS29-1,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31634-7	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31634-12	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31634-19	BLANK,CONTAINER 9	Total/NA	Air	AT Prep (BH)	
MB 140-72927/5-A	Method Blank	Total/NA	Air	AT Prep (BH)	
LCS 140-72927/6-A	Lab Control Sample	Total/NA	Air	AT Prep (BH)	
LCSD 140-72927/7-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (BH)	

Metals

Prep Batch: 72928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-1	AS29-1,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31634-6	AS29-2,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31634-11	AS29-2,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31634-16	BLANK,CONTAINER 12	Total/NA	Air	AT Prep (FH)	
140-31634-17	BLANK,CONTAINER 8A	Total/NA	Air	AT Prep (FH)	
MB 140-72928/6-A	Method Blank	Total/NA	Air	AT Prep (FH)	
MB 140-72928/6-B	Method Blank	Total/NA	Air	AT Prep (FH)	
LCS 140-72928/7-A	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCS 140-72928/7-B	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCSD 140-72928/8-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	
LCSD 140-72928/8-B	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	

Prep Batch: 72962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-4	AS29-1,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-9	AS29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-14	AS29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-18	BLANK,CONTAINER 8B	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-20	BLANK,CONTAINER 10	Total/NA	Air	AT Prep (KMnO4)	72916
MB 140-72916/1-B	Method Blank	Total/NA	Air	AT Prep (KMnO4)	72916
LCS 140-72916/2-B	Lab Control Sample	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-9 MS	AS29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	72916
140-31634-9 MSD	AS29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	72916

Prep Batch: 72963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-5	AS29-1,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	72917
140-31634-10	AS29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	72917
140-31634-15	AS29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	72917
140-31634-21	BLANK,CONTAINER 11	Total/NA	Air	AT Prep (HCl)	72917
MB 140-72917/1-B	Method Blank	Total/NA	Air	AT Prep (HCl)	72917
LCS 140-72917/2-B	Lab Control Sample	Total/NA	Air	AT Prep (HCl)	72917
140-31634-10 MS	AS29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	72917
140-31634-10 MSD	AS29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	72917

Pre Prep Batch: 72976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-2	AS29-1,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31634-7	AS29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31634-12	AS29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31634-19	BLANK,CONTAINER 9	Total/NA	Air	Air Train Vol.	
MB 140-72976/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-72976/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31634-7 MS	AS29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	

Metals (Continued)

Pre Prep Batch: 72976 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-7 MSD	AS29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	

Prep Batch: 72977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-2	AS29-1,CONTAINER 4	Total/NA	Air	AT Prep (BH)	72976
140-31634-7	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	72976
140-31634-12	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	72976
140-31634-19	BLANK,CONTAINER 9	Total/NA	Air	AT Prep (BH)	72976
MB 140-72976/1-B	Method Blank	Total/NA	Air	AT Prep (BH)	72976
LCS 140-72976/2-B	Lab Control Sample	Total/NA	Air	AT Prep (BH)	72976
140-31634-7 MS	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	72976
140-31634-7 MSD	AS29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	72976

Analysis Batch: 73011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-2	AS29-1,CONTAINER 4	Total/NA	Air	29/7470A	72977
140-31634-3	AS29-1,CONTAINER 5A	Total/NA	Air	29/7470A	72920
140-31634-4	AS29-1,CONTAINER 5B	Total/NA	Air	29/7470A	72962
140-31634-5	AS29-1,CONTAINER 5C	Total/NA	Air	29/7470A	72963
140-31634-7	AS29-2,CONTAINER 4	Total/NA	Air	29/7470A	72977
140-31634-8	AS29-2,CONTAINER 5A	Total/NA	Air	29/7470A	72920
140-31634-9	AS29-2,CONTAINER 5B	Total/NA	Air	29/7470A	72962
140-31634-10	AS29-2,CONTAINER 5C	Total/NA	Air	29/7470A	72963
140-31634-12	AS29-2,CONTAINER 4	Total/NA	Air	29/7470A	72977
140-31634-13	AS29-2,CONTAINER 5A	Total/NA	Air	29/7470A	72920
140-31634-14	AS29-2,CONTAINER 5B	Total/NA	Air	29/7470A	72962
140-31634-15	AS29-2,CONTAINER 5C	Total/NA	Air	29/7470A	72963
140-31634-18	BLANK,CONTAINER 8B	Total/NA	Air	29/7470A	72962
140-31634-19	BLANK,CONTAINER 9	Total/NA	Air	29/7470A	72977
140-31634-20	BLANK,CONTAINER 10	Total/NA	Air	29/7470A	72962
140-31634-21	BLANK,CONTAINER 11	Total/NA	Air	29/7470A	72963
MB 140-72915/1-B	Method Blank	Total/NA	Air	29/7470A	72920
MB 140-72916/1-B	Method Blank	Total/NA	Air	29/7470A	72962
MB 140-72917/1-B	Method Blank	Total/NA	Air	29/7470A	72963
MB 140-72976/1-B	Method Blank	Total/NA	Air	29/7470A	72977
LCS 140-72915/2-B	Lab Control Sample	Total/NA	Air	29/7470A	72920
LCS 140-72916/2-B	Lab Control Sample	Total/NA	Air	29/7470A	72962
LCS 140-72917/2-B	Lab Control Sample	Total/NA	Air	29/7470A	72963
LCS 140-72976/2-B	Lab Control Sample	Total/NA	Air	29/7470A	72977
140-31634-7 MS	AS29-2,CONTAINER 4	Total/NA	Air	29/7470A	72977
140-31634-7 MSD	AS29-2,CONTAINER 4	Total/NA	Air	29/7470A	72977
140-31634-8 MS	AS29-2,CONTAINER 5A	Total/NA	Air	29/7470A	72920
140-31634-8 MSD	AS29-2,CONTAINER 5A	Total/NA	Air	29/7470A	72920
140-31634-9 MS	AS29-2,CONTAINER 5B	Total/NA	Air	29/7470A	72962
140-31634-9 MSD	AS29-2,CONTAINER 5B	Total/NA	Air	29/7470A	72962
140-31634-10 MS	AS29-2,CONTAINER 5C	Total/NA	Air	29/7470A	72963
140-31634-10 MSD	AS29-2,CONTAINER 5C	Total/NA	Air	29/7470A	72963

Cleanup Batch: 73044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-1	AS29-1,CONTAINER 1,3	Total/NA	Air	AT Prep FH	72928

Metals (Continued)

Cleanup Batch: 73044 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-6	AS29-2,CONTAINER 1,3	Total/NA	Air	AT Prep FH	72928
140-31634-11	AS29-2,CONTAINER 1,3	Total/NA	Air	AT Prep FH	72928
140-31634-16	BLANK,CONTAINER 12	Total/NA	Air	AT Prep FH	72928
140-31634-17	BLANK,CONTAINER 8A	Total/NA	Air	AT Prep FH	72928
MB 140-72928/6-B	Method Blank	Total/NA	Air	AT Prep FH	72928
LCS 140-72928/7-B	Lab Control Sample	Total/NA	Air	AT Prep FH	72928
LCSD 140-72928/8-B	Lab Control Sample Dup	Total/NA	Air	AT Prep FH	72928

Analysis Batch: 73068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-1	AS29-1,CONTAINER 1,3	Total/NA	Air	29/7470A	73044
140-31634-6	AS29-2,CONTAINER 1,3	Total/NA	Air	29/7470A	73044
140-31634-11	AS29-2,CONTAINER 1,3	Total/NA	Air	29/7470A	73044
140-31634-16	BLANK,CONTAINER 12	Total/NA	Air	29/7470A	73044
140-31634-17	BLANK,CONTAINER 8A	Total/NA	Air	29/7470A	73044
MB 140-72928/6-B	Method Blank	Total/NA	Air	29/7470A	73044
LCS 140-72928/7-B	Lab Control Sample	Total/NA	Air	29/7470A	73044
LCSD 140-72928/8-B	Lab Control Sample Dup	Total/NA	Air	29/7470A	73044

Analysis Batch: 73123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31634-1	AS29-1,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-1	AS29-1,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-2	AS29-1,CONTAINER 4	Total/NA	Air	29/6010C	72927
140-31634-6	AS29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-6	AS29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-7	AS29-2,CONTAINER 4	Total/NA	Air	29/6010C	72927
140-31634-11	AS29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-11	AS29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	72928
140-31634-12	AS29-2,CONTAINER 4	Total/NA	Air	29/6010C	72927
140-31634-16	BLANK,CONTAINER 12	Total/NA	Air	29/6010C	72928
140-31634-16	BLANK,CONTAINER 12	Total/NA	Air	29/6010C	72928
140-31634-17	BLANK,CONTAINER 8A	Total/NA	Air	29/6010C	72928
140-31634-19	BLANK,CONTAINER 9	Total/NA	Air	29/6010C	72927
MB 140-72927/5-A	Method Blank	Total/NA	Air	29/6010C	72927
MB 140-72928/6-A	Method Blank	Total/NA	Air	29/6010C	72928
LCS 140-72927/6-A	Lab Control Sample	Total/NA	Air	29/6010C	72927
LCS 140-72928/7-A	Lab Control Sample	Total/NA	Air	29/6010C	72928
LCSD 140-72927/7-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	72927
LCSD 140-72928/8-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	72928

Client Sample ID: AS29-1,CONTAINER 1,3
Lab Sample ID: 140-31634-1

Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Petri/Filter

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**6.30**		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Arsenic	**30.9**		2.00	1.78	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Barium	**11.7**		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Cadmium	**5.36**		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Chromium	**3.33**		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Cobalt	ND		10.0	2.00	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Copper	**154**		2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Lead	**244**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Manganese	**2.75**		1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Nickel	**4.43**	**J**	8.00	0.500	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Selenium	**18.8**		2.00	1.32	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Silver	**0.459**	**J**	1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Thallium	**1.13**	**J**	2.00	0.960	ug/Sample		05/04/23 08:00	05/09/23 17:56	2
Vanadium	**0.103**	**J**	2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 15:22	1
Zinc	**160**		2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 15:22	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 15:04	1

Client Sample ID: AS29-1,CONTAINER 4
Lab Sample ID: 140-31634-2

Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Arsenic	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Barium	**1.82**		1.00	0.150	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Chromium	**0.541**	**J**	1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Cobalt	ND		5.00	0.100	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Copper	**22.5**		2.50	0.580	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Lead	**0.838**	**J**	1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Manganese	**1.33**	**J**	1.50	0.180	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Nickel	**0.674**	**J**	4.00	0.260	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Selenium	**26.8**		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Silver	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Thallium	ND		1.00	0.340	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Vanadium	ND		2.50	0.100	ug/Sample		05/04/23 08:00	05/09/23 14:32	1
Zinc	**2.35**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 14:32	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 12:36	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: AS29-1,CONTAINER 5A
Lab Sample ID: 140-31634-3
Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 11:25	1

Client Sample ID: AS29-1,CONTAINER 5B
Lab Sample ID: 140-31634-4

Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		05/05/23 10:20	05/06/23 11:43	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: AS29-1,CONTAINER 5C
Lab Sample ID: 140-31634-5
Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.85		0.280	0.123	ug/Sample		05/05/23 10:20	05/06/23 12:11	1

Client Sample ID: AS29-2,CONTAINER 1,3
Lab Sample ID: 140-31634-6

Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Petri/Filter

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**10.2**		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Arsenic	**23.2**		2.00	1.78	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Barium	**9.20**		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Cadmium	**5.85**		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Chromium	**2.88**		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Cobalt	ND		10.0	2.00	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Copper	**198**		2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Lead	**545**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Manganese	**1.53**		1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Nickel	**3.59**	**J**	8.00	0.500	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Selenium	**8.11**		2.00	1.32	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Silver	**0.352**	**J**	1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Thallium	ND		2.00	0.960	ug/Sample		05/04/23 08:00	05/09/23 18:01	2
Vanadium	**0.0970**	**J**	2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 15:27	1
Zinc	**482**		2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 15:27	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 15:07	1

Client Sample ID: AS29-2,CONTAINER 4
Lab Sample ID: 140-31634-7

Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Arsenic	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Barium	**1.90**		1.00	0.150	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Chromium	**0.580**	**J**	1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Cobalt	ND		5.00	0.100	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Copper	**10.6**		2.50	0.580	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Lead	**0.586**	**J**	1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Manganese	**0.616**	**J**	1.50	0.180	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Nickel	**0.424**	**J**	4.00	0.260	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Selenium	**14.3**		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Silver	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Thallium	ND		1.00	0.340	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Vanadium	ND		2.50	0.100	ug/Sample		05/04/23 08:00	05/09/23 14:37	1
Zinc	**1.69**	**J**	2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 14:37	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 12:39	1

Client Sample ID: AS29-2,CONTAINER 5A
Lab Sample ID: 140-31634-8

Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.380	0.114	ug/Sample		05/05/23 10:20	05/06/23 11:28	1

Client Sample ID: AS29-2,CONTAINER 5B
Lab Sample ID: 140-31634-9

Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		05/05/23 10:20	05/06/23 11:45	1

Client Sample ID: AS29-2,CONTAINER 5C
Lab Sample ID: 140-31634-10

Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.208	J	0.275	0.121	ug/Sample		05/05/23 10:20	05/06/23 12:13	1

Client Sample ID: AS29-2,CONTAINER 1,3
Lab Sample ID: 140-31634-11

Date Collected: 04/17/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Petri/Filter

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**7.93**		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Arsenic	**19.8**		2.00	1.78	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Barium	**13.8**		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Cadmium	**5.42**		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Chromium	**2.23**		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Cobalt	ND		10.0	2.00	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Copper	**100**		2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Lead	**331**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Manganese	**1.97**		1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Nickel	**2.76**	**J**	8.00	0.500	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Selenium	**17.9**		2.00	1.32	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Silver	**0.441**	**J**	1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Thallium	**1.21**	**J**	2.00	0.960	ug/Sample		05/04/23 08:00	05/09/23 18:16	2
Vanadium	ND		2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 15:42	1
Zinc	**246**		2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 15:42	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 15:15	1

Client Sample ID: AS29-2,CONTAINER 4
Lab Sample ID: 140-31634-12

Date Collected: 04/17/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Arsenic	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Barium	**2.58**		1.00	0.150	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Chromium	**0.541**	**J**	1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Cobalt	ND		5.00	0.100	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Copper	**9.62**		2.50	0.580	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Lead	**0.677**	**J**	1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Manganese	**0.918**	**J**	1.50	0.180	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Nickel	**0.777**	**J**	4.00	0.260	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Selenium	**28.2**		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Silver	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Thallium	ND		1.00	0.340	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Vanadium	ND		2.50	0.100	ug/Sample		05/04/23 08:00	05/09/23 15:12	1
Zinc	**2.63**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 15:12	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 12:46	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: AS29-2,CONTAINER 5A
Lab Sample ID: 140-31634-13
Date Collected: 04/17/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 11:35	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: AS29-2,CONTAINER 5B
Lab Sample ID: 140-31634-14
Date Collected: 04/17/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 500mL - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		05/05/23 10:20	05/06/23 11:58	1

Client Sample ID: AS29-2,CONTAINER 5C
Lab Sample ID: 140-31634-15

Date Collected: 04/17/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.303		0.290	0.128	ug/Sample		05/05/23 10:20	05/06/23 12:26	1

Client Sample ID: BLANK,CONTAINER 12
Lab Sample ID: 140-31634-16

Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Petri/Filter

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Arsenic	ND		2.00	1.78	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Barium	**2.05**		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Cadmium	ND		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Chromium	**1.39**		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Cobalt	ND		10.0	2.00	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Copper	**0.277**	**J**	2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Lead	**2.08**		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Manganese	**0.476**	**J**	1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Nickel	**1.77**	**J**	8.00	0.500	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Selenium	ND		2.00	1.32	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Silver	ND		1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Thallium	**1.03**	**J**	2.00	0.960	ug/Sample		05/04/23 08:00	05/09/23 18:36	2
Vanadium	ND		2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 15:47	1
Zinc	**1.46**	**J**	2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 15:47	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 15:17	1

Client Sample ID: BLANK,CONTAINER 8A
Lab Sample ID: 140-31634-17

Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Arsenic	ND		1.00	0.890	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Barium	ND		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Cadmium	ND		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Chromium	ND		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Cobalt	ND		5.00	1.00	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Copper	**0.479**	**J**	2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Lead	ND		1.00	0.470	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Manganese	ND		1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Nickel	ND		4.00	0.250	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Selenium	ND		1.00	0.660	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Silver	ND		1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Thallium	ND		1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Vanadium	ND		2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 15:52	1
Zinc	ND		2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 15:52	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 15:20	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: BLANK,CONTAINER 8B
Lab Sample ID: 140-31634-18
Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		05/05/23 10:20	05/06/23 12:01	1

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Client Sample ID: BLANK,CONTAINER 9

Lab Sample ID: 140-31634-19

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Arsenic	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Barium	ND		1.00	0.150	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Chromium	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Cobalt	ND		5.00	0.100	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Copper	ND		2.50	0.580	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Lead	ND		1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Manganese	ND		1.50	0.180	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Nickel	ND		4.00	0.260	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Selenium	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Silver	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Thallium	ND		1.00	0.340	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Vanadium	ND		2.50	0.100	ug/Sample		05/04/23 08:00	05/09/23 15:17	1
Zinc	ND		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 15:17	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 12:49	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: BLANK,CONTAINER 10
Lab Sample ID: 140-31634-20
Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		05/05/23 10:20	05/06/23 12:03	1

Client: SLR International Corp
Job ID: 140-31634-1
Project/Site: FMMI - M29

Client Sample ID: BLANK,CONTAINER 11
Lab Sample ID: 140-31634-21
Date Collected: 04/12/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30
Sample Container: Amber Glass 250ml - unpreserved

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0660	ug/Sample		05/05/23 10:20	05/06/23 12:29	1

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Antimony	6.00	0.840	ug/Sample
Arsenic	1.00	0.390	ug/Sample
Barium	1.00	0.150	ug/Sample
Beryllium	0.500	0.0470	ug/Sample
Cadmium	0.500	0.0530	ug/Sample
Chromium	1.00	0.350	ug/Sample
Cobalt	5.00	0.100	ug/Sample
Copper	2.50	0.580	ug/Sample
Lead	1.00	0.480	ug/Sample
Manganese	1.50	0.180	ug/Sample
Nickel	4.00	0.260	ug/Sample
Selenium	1.00	0.390	ug/Sample
Silver	1.00	0.350	ug/Sample
Thallium	1.00	0.340	ug/Sample
Vanadium	2.50	0.100	ug/Sample
Zinc	2.00	0.940	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Antimony	6.00	1.10	ug/Sample
Arsenic	1.00	0.890	ug/Sample
Barium	1.00	0.860	ug/Sample
Beryllium	0.500	0.0160	ug/Sample
Cadmium	0.500	0.280	ug/Sample
Chromium	1.00	0.360	ug/Sample
Cobalt	5.00	1.00	ug/Sample
Copper	2.50	0.210	ug/Sample
Lead	1.00	0.470	ug/Sample
Manganese	1.50	0.120	ug/Sample
Nickel	4.00	0.250	ug/Sample
Selenium	1.00	0.660	ug/Sample
Silver	1.00	0.0810	ug/Sample
Thallium	1.00	0.480	ug/Sample
Vanadium	2.50	0.0730	ug/Sample
Zinc	2.00	0.900	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Mercury	0.400	0.120	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (Empty)

Analyte	RL	MDL	Units
Mercury	0.200	0.0600	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Mercury	0.200	0.0840	ug/Sample

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (HCl)

Analyte	RL	MDL	Units
Mercury	0.0500	0.0220	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (KMnO4)

Analyte	RL	MDL	Units
Mercury	0.0200	0.00600	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source

Lab Sample ID: MB 140-72927/5-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72927

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Arsenic	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Barium	ND		1.00	0.150	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Chromium	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Cobalt	ND		5.00	0.100	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Copper	ND		2.50	0.580	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Lead	ND		1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Manganese	ND		1.50	0.180	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Nickel	ND		4.00	0.260	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Selenium	ND		1.00	0.390	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Silver	ND		1.00	0.350	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Thallium	ND		1.00	0.340	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Vanadium	ND		2.50	0.100	ug/Sample		05/04/23 08:00	05/09/23 12:38	1
Zinc	ND		2.00	0.940	ug/Sample		05/04/23 08:00	05/09/23 12:38	1

Lab Sample ID: LCS 140-72927/6-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72927

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	47.55		ug/Sample		95	80 - 120
Arsenic	10.0	9.636		ug/Sample		96	80 - 120
Barium	10.0	9.652		ug/Sample		97	80 - 120
Beryllium	5.00	5.219		ug/Sample		104	80 - 120
Cadmium	5.00	4.904		ug/Sample		98	80 - 120
Chromium	20.0	19.93		ug/Sample		100	80 - 120
Cobalt	10.0	10.09		ug/Sample		101	80 - 120
Copper	25.0	24.14		ug/Sample		97	80 - 120
Lead	10.0	9.751		ug/Sample		98	80 - 120
Manganese	10.0	9.821		ug/Sample		98	80 - 120
Nickel	50.0	50.11		ug/Sample		100	80 - 120
Selenium	15.0	13.90		ug/Sample		93	80 - 120
Silver	5.00	4.582		ug/Sample		92	80 - 120
Thallium	40.0	39.22		ug/Sample		98	80 - 120
Vanadium	20.0	19.73		ug/Sample		99	80 - 120
Zinc	50.0	49.44		ug/Sample		99	80 - 120

Lab Sample ID: LCSD 140-72927/7-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	47.91		ug/Sample		96	80 - 120	1	20
Arsenic	10.0	9.787		ug/Sample		98	80 - 120	2	20
Barium	10.0	9.781		ug/Sample		98	80 - 120	1	20
Beryllium	5.00	5.283		ug/Sample		106	80 - 120	1	20
Cadmium	5.00	4.984		ug/Sample		100	80 - 120	2	20

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCSD 140-72927/7-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72927

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	20.0	20.25		ug/Sample		101	80 - 120	2	20
Cobalt	10.0	10.22		ug/Sample		102	80 - 120	1	20
Copper	25.0	24.44		ug/Sample		98	80 - 120	1	20
Lead	10.0	9.725		ug/Sample		97	80 - 120	0	20
Manganese	10.0	9.939		ug/Sample		99	80 - 120	1	20
Nickel	50.0	50.73		ug/Sample		101	80 - 120	1	20
Selenium	15.0	13.96		ug/Sample		93	80 - 120	0	20
Silver	5.00	4.653		ug/Sample		93	80 - 120	2	20
Thallium	40.0	39.48		ug/Sample		99	80 - 120	1	20
Vanadium	20.0	20.02		ug/Sample		100	80 - 120	1	20
Zinc	50.0	50.01		ug/Sample		100	80 - 120	1	20

Lab Sample ID: MB 140-72928/6-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Arsenic	ND		1.00	0.890	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Barium	ND		1.00	0.860	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Cadmium	ND		0.500	0.280	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Chromium	ND		1.00	0.360	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Cobalt	ND		5.00	1.00	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Copper	ND		2.50	0.210	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Lead	ND		1.00	0.470	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Manganese	ND		1.50	0.120	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Nickel	ND		4.00	0.250	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Selenium	ND		1.00	0.660	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Silver	ND		1.00	0.0810	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Thallium	ND		1.00	0.480	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Vanadium	ND		2.50	0.0730	ug/Sample		05/04/23 08:00	05/09/23 12:52	1
Zinc	ND		2.00	0.900	ug/Sample		05/04/23 08:00	05/09/23 12:52	1

Lab Sample ID: LCS 140-72928/7-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	49.18		ug/Sample		98	80 - 120
Arsenic	10.0	10.51		ug/Sample		105	80 - 120
Barium	10.0	10.08		ug/Sample		101	80 - 120
Beryllium	5.00	5.108		ug/Sample		102	80 - 120
Cadmium	5.00	5.012		ug/Sample		100	80 - 120
Chromium	20.0	20.23		ug/Sample		101	80 - 120
Cobalt	10.0	10.31		ug/Sample		103	80 - 120
Copper	25.0	24.55		ug/Sample		98	80 - 120
Lead	10.0	10.01		ug/Sample		100	80 - 120
Manganese	10.0	9.971		ug/Sample		100	80 - 120

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCS 140-72928/7-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	50.0	51.26		ug/Sample		103	80 - 120
Selenium	15.0	14.40		ug/Sample		96	80 - 120
Silver	5.00	4.705		ug/Sample		94	80 - 120
Thallium	40.0	40.16		ug/Sample		100	80 - 120
Vanadium	20.0	20.07		ug/Sample		100	80 - 120
Zinc	50.0	51.15		ug/Sample		102	80 - 120

Lab Sample ID: LCSD 140-72928/8-A
Matrix: Air
Analysis Batch: 73123

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72928

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	49.13		ug/Sample		98	80 - 120	0	20
Arsenic	10.0	10.37		ug/Sample		104	80 - 120	1	20
Barium	10.0	9.766		ug/Sample		98	80 - 120	3	20
Beryllium	5.00	5.103		ug/Sample		102	80 - 120	0	20
Cadmium	5.00	5.018		ug/Sample		100	80 - 120	0	20
Chromium	20.0	20.30		ug/Sample		101	80 - 120	0	20
Cobalt	10.0	10.28		ug/Sample		103	80 - 120	0	20
Copper	25.0	24.99		ug/Sample		100	80 - 120	2	20
Lead	10.0	10.02		ug/Sample		100	80 - 120	0	20
Manganese	10.0	9.944		ug/Sample		99	80 - 120	0	20
Nickel	50.0	51.14		ug/Sample		102	80 - 120	0	20
Selenium	15.0	14.25		ug/Sample		95	80 - 120	1	20
Silver	5.00	4.586		ug/Sample		92	80 - 120	3	20
Thallium	40.0	39.81		ug/Sample		100	80 - 120	1	20
Vanadium	20.0	20.02		ug/Sample		100	80 - 120	0	20
Zinc	50.0	50.84		ug/Sample		102	80 - 120	1	20

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: MB 140-72915/1-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0600	ug/Sample		05/05/23 10:20	05/06/23 11:15	1

Lab Sample ID: LCS 140-72915/2-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.856		ug/Sample		97	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source (Continued)

Lab Sample ID: 140-31634-8 MS
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 72920

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.90	1.909		ug/Sample		100	80 - 120

Lab Sample ID: 140-31634-8 MSD
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 72920

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.90	1.799		ug/Sample		95	80 - 120	6	20

Lab Sample ID: MB 140-72928/6-B
Matrix: Air
Analysis Batch: 73068

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/04/23 08:00	05/08/23 14:57	1

Lab Sample ID: LCS 140-72928/7-B
Matrix: Air
Analysis Batch: 73068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.975		ug/Sample		100	80 - 120

Lab Sample ID: LCSD 140-72928/8-B
Matrix: Air
Analysis Batch: 73068

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72928

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	5.00	4.723		ug/Sample		94	80 - 120	5	20

Lab Sample ID: MB 140-72916/1-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72962

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0200	0.00600	ug/Sample		05/05/23 10:20	05/06/23 11:38	1

Lab Sample ID: LCS 140-72916/2-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72962

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.500	0.5080		ug/Sample		102	80 - 120

Lab Sample ID: 140-31634-9 MS
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 72962

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.800	0.7795		ug/Sample		97	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-31634-9 MSD
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 72962

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.800	0.8025		ug/Sample		100	80 - 120	3	20

Lab Sample ID: MB 140-72917/1-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72963

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	0.0220	ug/Sample		05/05/23 10:20	05/06/23 12:06	1

Lab Sample ID: LCS 140-72917/2-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.25	1.275		ug/Sample		102	80 - 120

Lab Sample ID: 140-31634-10 MS
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 72963

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.208	J	1.38	1.616		ug/Sample		102	80 - 120

Lab Sample ID: 140-31634-10 MSD
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 72963

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.208	J	1.38	1.620		ug/Sample		103	80 - 120	0	20

Lab Sample ID: MB 140-72976/1-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/05/23 10:20	05/06/23 12:31	1

Lab Sample ID: LCS 140-72976/2-B
Matrix: Air
Analysis Batch: 73011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	10.0	9.745		ug/Sample		97	80 - 120

Lab Sample ID: 140-31634-7 MS
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 4
Prep Type: Total/NA
Prep Batch: 72977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		2.00	1.998		ug/Sample		100	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-31634-7 MSD
Matrix: Air
Analysis Batch: 73011

Client Sample ID: AS29-2,CONTAINER 4
Prep Type: Total/NA
Prep Batch: 72977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		2.00	1.979		ug/Sample		99	80 - 120	1	20

Client Sample ID: AS29-1,CONTAINER 1,3

Lab Sample ID: 140-31634-1

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:22	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73123	05/09/23 17:56	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:04	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-1,CONTAINER 4

Lab Sample ID: 140-31634-2

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 14:32	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:36	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-1,CONTAINER 5A

Lab Sample ID: 140-31634-3

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:25	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-1,CONTAINER 5B

Lab Sample ID: 140-31634-4

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:43	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-1,CONTAINER 5C

Lab Sample ID: 140-31634-5

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:11	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 1,3

Lab Sample ID: 140-31634-6

Date Collected: 04/15/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:27	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73123	05/09/23 18:01	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:07	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 4

Lab Sample ID: 140-31634-7

Date Collected: 04/15/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 14:37	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:39	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5A

Lab Sample ID: 140-31634-8

Date Collected: 04/15/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:28	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5B

Lab Sample ID: 140-31634-9

Date Collected: 04/15/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:45	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5C

Lab Sample ID: 140-31634-10

Date Collected: 04/15/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:13	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 1,3

Lab Sample ID: 140-31634-11

Date Collected: 04/17/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:42	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73123	05/09/23 18:16	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:15	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 4

Lab Sample ID: 140-31634-12

Date Collected: 04/17/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:12	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:46	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5A

Lab Sample ID: 140-31634-13

Date Collected: 04/17/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:35	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5B

Lab Sample ID: 140-31634-14

Date Collected: 04/17/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:58	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5C

Lab Sample ID: 140-31634-15

Date Collected: 04/17/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	290 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:26	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 12

Lab Sample ID: 140-31634-16

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:47	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73123	05/09/23 18:36	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:17	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 8A

Lab Sample ID: 140-31634-17

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:52	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:20	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 8B

Lab Sample ID: 140-31634-18

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:01	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 9

Lab Sample ID: 140-31634-19

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 15:17	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:49	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 10

Lab Sample ID: 140-31634-20

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:03	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK,CONTAINER 11

Lab Sample ID: 140-31634-21

Date Collected: 04/12/23 00:00

Matrix: Air

Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	150 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:29	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-72915/1-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:15	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-72916/1-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:38	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-72917/1-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:06	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-72927/5-A

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 12:38	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-72928/6-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 12:52	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-72928/6-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 14:57	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-72976/1-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:31	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72915/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:17	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72916/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:40	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72917/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:08	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72927/6-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 12:43	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72928/7-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 13:07	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72928/7-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 14:59	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-72976/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:34	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-72927/7-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	72927	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 12:48	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-72928/8-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73123	05/09/23 13:12	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-72928/8-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	72928	05/04/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73044	05/08/23 10:00	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73068	05/08/23 15:02	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 4
Lab Sample ID: 140-31634-7 MS
Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:41	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 4
Lab Sample ID: 140-31634-7 MSD
Date Collected: 04/15/23 00:00
Matrix: Air
Date Received: 05/01/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	72976	05/05/23 08:20	WSK	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	72977	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:44	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5A
Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-8 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:30	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5A
Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-8 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	72915	05/03/23 13:55	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	72920	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:33	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5B
Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-9 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:48	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5B
Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-9 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	72916	05/04/23 07:30	WSK	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	72962	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 11:56	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5C
Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-10 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:16	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AS29-2,CONTAINER 5C

Date Collected: 04/15/23 00:00
Date Received: 05/01/23 09:30

Lab Sample ID: 140-31634-10 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	72917	05/04/23 09:15	WSK	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	72963	05/05/23 10:20	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73011	05/06/23 12:18	WSK	EET KNX
	Instrument ID: ADT									

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: SLR International Corp
Project/Site: FMMI - M29

Job ID: 140-31634-1

Laboratory: Eurofins Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-16-23
California	State	2423	06-30-23
Colorado	State	TN00009	02-29-24
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-23
Georgia (DW)	State	906	07-27-25
Hawaii	State	NA	07-27-23
Kansas	NELAP	E-10349	10-31-23
Kentucky (DW)	State	90101	12-31-23
Louisiana	NELAP	83979	06-30-23
Louisiana (All)	NELAP	83979	06-30-23
Louisiana (DW)	State	LA019	12-31-23
Maryland	State	277	03-31-24
Michigan	State	9933	07-27-25
Nevada	State	TN00009	07-31-23
New Hampshire	NELAP	2999	01-17-24
New Jersey	NELAP	TN001	06-30-23
New York	NELAP	10781	03-31-24
North Carolina (DW)	State	21705	07-31-23
North Carolina (WW/SW)	State	64	12-31-23
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-23
Oregon	NELAP	TNI0189	01-01-24
Pennsylvania	NELAP	68-00576	12-01-23
Tennessee	State	02014	07-27-25
Texas	NELAP	T104704380-22-17	08-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	525-22-279-18762	10-06-25
Utah	NELAP	TN00009	07-31-23
Virginia	NELAP	460176	09-14-23
Washington	State	C593	01-19-24
West Virginia (DW)	State	9955C	12-31-23
West Virginia DEP	State	345	04-30-24
Wisconsin	State	998044300	08-31-23

METALS

COVER PAGE
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG No.:

Project: FMMI - M29

Client Sample ID	Lab Sample ID
AS29-1,CONTAINER 1,3	140-31634-1
AS29-1,CONTAINER 4	140-31634-2
AS29-1,CONTAINER 5A	140-31634-3
AS29-1,CONTAINER 5B	140-31634-4
AS29-1,CONTAINER 5C	140-31634-5
AS29-2,CONTAINER 1,3	140-31634-6
AS29-2,CONTAINER 4	140-31634-7
AS29-2,CONTAINER 5A	140-31634-8
AS29-2,CONTAINER 5B	140-31634-9
AS29-2,CONTAINER 5C	140-31634-10
AS29-2,CONTAINER 1,3	140-31634-11
AS29-2,CONTAINER 4	140-31634-12
AS29-2,CONTAINER 5A	140-31634-13
AS29-2,CONTAINER 5B	140-31634-14
AS29-2,CONTAINER 5C	140-31634-15
BLANK,CONTAINER 12	140-31634-16
BLANK,CONTAINER 8A	140-31634-17
BLANK,CONTAINER 8B	140-31634-18
BLANK,CONTAINER 9	140-31634-19
BLANK,CONTAINER 10	140-31634-20
BLANK,CONTAINER 11	140-31634-21

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-1,CONTAINER 1,3 Lab Sample ID: 140-31634-1

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	6.30	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	30.9	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	11.7	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	5.36	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	3.33	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	154	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	244	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	2.75	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	4.43	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	18.8	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	0.459	1.00	0.0810	ug/Sample	J		1	29/6010C
7440-28-0	Thallium	1.13	2.00	0.960	ug/Sample	J		2	29/6010C
7440-62-2	Vanadium	0.103	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	160	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-1,CONTAINER 4 Lab Sample ID: 140-31634-2

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	1.82	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.541	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	22.5	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.838	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	1.33	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.674	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	26.8	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	2.35	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-1,CONTAINER 5A
Lab Sample ID: 140-31634-3
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/12/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-1,CONTAINER 5B
Lab Sample ID: 140-31634-4
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/12/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.160	0.0480	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-1,CONTAINER 5C
Lab Sample ID: 140-31634-5
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/12/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	3.85	0.280	0.123	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 1,3 Lab Sample ID: 140-31634-6

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/15/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	10.2	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	23.2	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	9.20	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	5.85	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	2.88	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	198	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	545	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	1.53	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	3.59	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	8.11	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	0.352	1.00	0.0810	ug/Sample	J		1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	0.0970	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	482	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 4 | Lab Sample ID: 140-31634-7

Lab Name: Eurofins Knoxville | Job No.: 140-31634-1

SDG ID.:

Matrix: Air | Date Sampled: 04/15/2023 00:00

Reporting Basis: WET | Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	1.90	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.580	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	10.6	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.586	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	0.616	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.424	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	14.3	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	1.69	2.00	0.940	ug/Sample	J		1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5A
Lab Sample ID: 140-31634-8
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/15/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.380	0.114	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5B
Lab Sample ID: 140-31634-9
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/15/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.160	0.0480	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5C
Lab Sample ID: 140-31634-10
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/15/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.208	0.275	0.121	ug/Sample	J		1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 1,3 Lab Sample ID: 140-31634-11

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/17/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	7.93	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	19.8	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	13.8	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	5.42	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	2.23	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	100	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	331	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	1.97	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	2.76	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	17.9	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	0.441	1.00	0.0810	ug/Sample	J		1	29/6010C
7440-28-0	Thallium	1.21	2.00	0.960	ug/Sample	J		2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	246	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 4 Lab Sample ID: 140-31634-12

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/17/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	2.58	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.541	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	9.62	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.677	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	0.918	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.777	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	28.2	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	2.63	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5A
Lab Sample ID: 140-31634-13
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/17/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5B
Lab Sample ID: 140-31634-14
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/17/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.160	0.0480	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AS29-2,CONTAINER 5C
Lab Sample ID: 140-31634-15
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/17/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.303	0.290	0.128	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 12 Lab Sample ID: 140-31634-16

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	2.05	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	1.39	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	0.277	2.50	0.210	ug/Sample	J		1	29/6010C
7439-92-1	Lead	2.08	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	0.476	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	1.77	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	ND	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	1.03	2.00	0.960	ug/Sample	J		2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	1.46	2.00	0.900	ug/Sample	J		1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 8A
Lab Sample ID: 140-31634-17
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/12/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.890	ug/Sample			1	29/6010C
7440-39-3	Barium	ND	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	1.00	ug/Sample			1	29/6010C
7440-50-8	Copper	0.479	2.50	0.210	ug/Sample	J		1	29/6010C
7439-92-1	Lead	ND	1.00	0.470	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	ND	4.00	0.250	ug/Sample			1	29/6010C
7782-49-2	Selenium	ND	1.00	0.660	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.480	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 8B
Lab Sample ID: 140-31634-18
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG ID.:
Matrix: Air
Date Sampled: 04/12/2023 00:00
Reporting Basis: WET
Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.0400	0.0120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 9 Lab Sample ID: 140-31634-19

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	ND	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	ND	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.180	ug/Sample			1	29/6010C
7440-02-0	Nickel	ND	4.00	0.260	ug/Sample			1	29/6010C
7782-49-2	Selenium	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 10 Lab Sample ID: 140-31634-20

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.0400	0.0120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK,CONTAINER 11 Lab Sample ID: 140-31634-21

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG ID.:

Matrix: Air Date Sampled: 04/12/2023 00:00

Reporting Basis: WET Date Received: 05/01/2023 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.150	0.0660	ug/Sample			1	29/7470A

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90XXICVS_00237 Concentration Units: ug/L

CCV Source: 90CVCCVP_01155

Analyte	ICV 140-73123/4 05/09/2023 11:34				CCV 140-73123/9 05/09/2023 11:58				CCV 140-73123/21 05/09/2023 12:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	237.8		250	95	482.9		500	97	491.9		500	98
Arsenic	247.9		250	99	488.1		500	98	493.0		500	99
Barium	975.9		1000	98	1940		2000	97	1952		2000	98
Beryllium	1017		1000	102	2042		2000	102	2028		2000	101
Cadmium	248.1		250	99	502.4		500	100	507.5		500	101
Chromium	1000		1000	100	2008		2000	100	1995		2000	100
Cobalt	997.3		1000	100	1991		2000	100	2005		2000	100
Copper	965.2		1000	97	1929		2000	96	1931		2000	97
Lead	247.2		250	99	506.4		500	101	506.9		500	101
Manganese	998.0		1000	100	2022		2000	101	2007		2000	100
Nickel	1014		1000	101	2000		2000	100	2007		2000	100
Selenium	242.0		250	97	488.3		500	98	499.3		500	100
Silver	471.5		500	94	963.2		1000	96	961.9		1000	96
Thallium	522.6		500	105	1010		1000	101	1016		1000	102
Vanadium	985.4		1000	99	1992		2000	100	1995		2000	100
Zinc	989.8		1000	99	1971		2000	99	1985		2000	99
Phosphorus	985.8		1000	99	1957		2000	98	1974		2000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90XXICVS_00237 Concentration Units: ug/L

CCV Source: 90CVCCVP_01155

Analyte	CCV 140-73123/33 05/09/2023 13:58				CCV 140-73123/45 05/09/2023 14:57				CCV 140-73123/59 05/09/2023 16:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	493.0		500	99	493.8		500	99	486.4		500	97
Arsenic	494.2		500	99	494.9		500	99	488.9		500	98
Barium	1940		2000	97	1947		2000	97	1917		2000	96
Beryllium	2046		2000	102	2059		2000	103	2047		2000	102
Cadmium	507.2		500	101	509.9		500	102	506.2		500	101
Chromium	1989		2000	99	2004		2000	100	1993		2000	100
Cobalt	2003		2000	100	2014		2000	101	1993		2000	100
Copper	1930		2000	97	1935		2000	97	1895		2000	95
Lead	504.8		500	101	510.0		500	102	511.0		500	102
Manganese	2007		2000	100	2023		2000	101	2001		2000	100
Nickel	2002		2000	100	2008		2000	100	1989		2000	99
Selenium	502.0		500	100	507.7		500	102	499.1		500	100
Silver	961.1		1000	96	964.3		1000	96	947.1		1000	95
Thallium	1014		1000	101	1022		1000	102	1007		1000	101
Vanadium	1993		2000	100	2010		2000	100	1990		2000	100
Zinc	1987		2000	99	1996		2000	100	1966		2000	98
Phosphorus	1971		2000	99	1976		2000	99	1956		2000	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90XXICVS_00237 Concentration Units: ug/L

CCV Source: 90CVCCVP_01155

Analyte	CCV 140-73123/71 05/09/2023 17:27				CCV 140-73123/83 05/09/2023 18:26				CCV 140-73123/87 05/09/2023 18:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	466.5		500	93	462.2		500	92	466.5		500	93
Arsenic	471.5		500	94	472.8		500	95	478.0		500	96
Barium	1874		2000	94	1879		2000	94	1887		2000	94
Beryllium	2010		2000	100	2023		2000	101	2063		2000	103
Cadmium	492.6		500	99	496.4		500	99	501.2		500	100
Chromium	1980		2000	99	2009		2000	100	2029		2000	101
Cobalt	1949		2000	97	1962		2000	98	1971		2000	99
Copper	1864		2000	93	1856		2000	93	1860		2000	93
Lead	498.5		500	100	509.9		500	102	514.4		500	103
Manganese	1987		2000	99	1989		2000	99	2024		2000	101
Nickel	1957		2000	98	1975		2000	99	1983		2000	99
Selenium	471.5		500	94	467.7		500	94	474.4		500	95
Silver	939.2		1000	94	937.6		1000	94	944.4		1000	94
Thallium	983.1		1000	98	990.4		1000	99	994.8		1000	99
Vanadium	1954		2000	98	1959		2000	98	1983		2000	99
Zinc	1916		2000	96	1914		2000	96	1927		2000	96
Phosphorus	1914		2000	96	1920		2000	96	1930		2000	96

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90XXICVS_00237 Concentration Units: ug/L

CCV Source: 90XXCCVLP_01128

Analyte	CCVL 140-73123/3 05/09/2023 11:29				ICV 140-73123/4 05/09/2023 11:34							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	247.4		250	99	237.8		250	95				
Arsenic	246.8		250	99	247.9		250	99				
Barium	987.1		1000	99	975.9		1000	98				
Beryllium	1040		1000	104	1017		1000	102				
Cadmium	256.5		250	103	248.1		250	99				
Chromium	1020		1000	102	1000		1000	100				
Cobalt	1019		1000	102	997.3		1000	100				
Copper	983.4		1000	98	965.2		1000	97				
Lead	255.3		250	102	247.2		250	99				
Manganese	1024		1000	102	998.0		1000	100				
Nickel	1027		1000	103	1014		1000	101				
Selenium	246.9		250	99	242.0		250	97				
Silver	487.2		500	97	471.5		500	94				
Thallium	517.9		500	104	522.6		500	105				
Vanadium	1010		1000	101	985.4		1000	99				
Zinc	1004		1000	100	989.8		1000	99				
Phosphorus	995.6		1000	100	985.8		1000	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90L1HGDayVER_00852 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00967

Analyte	ICV 140-72920/15-A 05/06/2023 10:22				CCV 140-72920/18-A 05/06/2023 10:49				CCV 140-72920/18-A 05/06/2023 11:20			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.505		2.50	100	5.121		5.00	102	5.070		5.00	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90L1HGDayVER_00852 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00967

Analyte	CCV 140-72920/18-A 05/06/2023 11:51				CCV 140-72920/18-A 05/06/2023 12:21				CCV 140-72920/18-A 05/06/2023 12:52			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.093		5.00	102	5.296		5.00	106	5.362		5.00	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

ICV Source: 90L1HGDayVER_00853 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00968

Analyte	ICV 140-73044/16-A 05/08/2023 14:44				CCV 140-73044/19-A 05/08/2023 14:52				CCV 140-73044/19-A 05/08/2023 15:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.696		2.50	108	5.106		5.00	102	5.467		5.00	109

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73123/8 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01158

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	57.55	J	96	50-150
Arsenic	10.0	9.950	J	100	50-150
Barium	10.0	9.630	J	96	50-150
Beryllium	5.00	5.330		107	50-150
Cadmium	5.00	5.090		102	50-150
Chromium	10.0	9.790	J	98	50-150
Cobalt	50.0	51.04		102	50-150
Copper	25.0	25.34		101	50-150
Lead	10.0	14.19		142	50-150
Manganese	15.0	14.99	J	100	50-150
Nickel	40.0	41.18		103	50-150
Selenium	10.0	8.260	J	83	50-150
Silver	10.0	9.060	J	91	50-150
Thallium	10.0	14.27		143	50-150
Vanadium	25.0	25.02		100	50-150
Zinc	20.0	20.38		102	50-150

Lab Sample ID: CRI 140-73123/58 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01158

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	62.13		104	50-150
Arsenic	10.0	10.39		104	50-150
Barium	10.0	9.520	J	95	50-150
Beryllium	5.00	5.340		107	50-150
Cadmium	5.00	5.150		103	50-150
Chromium	10.0	9.990	J	100	50-150
Cobalt	50.0	51.17		102	50-150
Copper	25.0	25.02		100	50-150
Lead	10.0	12.37		124	50-150
Manganese	15.0	15.41		103	50-150
Nickel	40.0	41.06		103	50-150
Selenium	10.0	8.570	J	86	50-150
Silver	10.0	9.500	J	95	50-150
Thallium	10.0	11.87		119	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73123/58 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01158

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	25.0	25.18		101	50-150
Zinc	20.0	21.44		107	50-150

Lab Sample ID: CRI 140-73123/86 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01158

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	54.67	J	91	50-150
Arsenic	10.0	10.47		105	50-150
Barium	10.0	9.380	J	94	50-150
Beryllium	5.00	5.420		108	50-150
Cadmium	5.00	4.990	J	100	50-150
Chromium	10.0	9.870	J	99	50-150
Cobalt	50.0	50.31		101	50-150
Copper	25.0	23.84	J	95	50-150
Lead	10.0	11.56		116	50-150
Manganese	15.0	15.05		100	50-150
Nickel	40.0	40.45		101	50-150
Selenium	10.0	6.920	J	69	50-150
Silver	10.0	8.410	J	84	50-150
Thallium	10.0	11.97		120	50-150
Vanadium	25.0	24.99	J	100	50-150
Zinc	20.0	19.69	J	98	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Method: 29/7470A Instrument ID: ADT

Lab Sample ID: CRA 140-72920/17-A Concentration Units: ug/L

CRQL Check Standard Source: 90L1HGDayCAL_00967

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.1772	J	89	70-130

Lab Sample ID: CRA 140-73044/18-A Concentration Units: ug/L

CRQL Check Standard Source: 90L1HGDayCAL_00968

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.1843	J	92	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-73123/5 05/09/2023 11:39		CCB 140-73123/10 05/09/2023 12:03		CCB 140-73123/22 05/09/2023 13:02		CCB 140-73123/34 05/09/2023 14:02	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		ND		ND		ND	
Lead	10.0	ND		ND		ND		ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73123/47 05/09/2023 15:07		CCB 140-73123/60 05/09/2023 16:12		CCB 140-73123/72 05/09/2023 17:32		CCB 140-73123/84 05/09/2023 18:31	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		ND		ND		ND	
Lead	10.0	ND		ND		3.110	J	ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73123/88 05/09/2023 18:51							
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND							
Arsenic	10.0	ND							
Barium	10.0	ND							
Beryllium	5.00	ND							
Cadmium	5.00	ND							
Chromium	10.0	ND							
Cobalt	50.0	ND							
Copper	25.0	ND							
Lead	10.0	ND							
Manganese	15.0	ND							
Nickel	40.0	ND							
Selenium	10.0	ND							
Silver	10.0	ND							
Thallium	10.0	ND							
Vanadium	25.0	ND							
Zinc	20.0	ND							
Phosphorus	300	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-72920/16-A 05/06/2023 10:25		CCB 140-72920/19-A 05/06/2023 10:52		CCB 140-72920/19-A 05/06/2023 11:23		CCB 140-72920/19-A 05/06/2023 11:53	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-72920/19-A 05/06/2023 12:24		CCB 140-72920/19-A 05/06/2023 12:54					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND					

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-73044/17-A 05/08/2023 14:47		CCB 140-73044/20-A 05/08/2023 14:54		CCB 140-73044/20-A 05/08/2023 15:25			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72927/5-A

Instrument Code: DUO Batch No.: 73123

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	ND			29_6010C
7440-41-7	Beryllium	ND			29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	ND			29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	ND			29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72928/6-A

Instrument Code: DUO Batch No.: 73123

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	ND			29_6010C
7440-41-7	Beryllium	ND			29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	ND			29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	ND			29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72915/1-B

Instrument Code: ADT Batch No.: 73011

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72916/1-B

Instrument Code: ADT Batch No.: 73011

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72917/1-B

Instrument Code: ADT Batch No.: 73011

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72976/1-B

Instrument Code: ADT Batch No.: 73011

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-72928/6-B

Instrument Code: ADT Batch No.: 73068

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Lab Sample ID: ICSA 140-73123/6 Instrument ID: DUO

Lab File ID: F050923.asc ICS Source: 90XXICSASiP_00075

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**5.09**	
Arsenic		**6.47**	
Barium		**2.51**	
Beryllium		**-0.310**	
Cadmium		**1.75**	
Chromium		**5.66**	
Cobalt		**-0.290**	
Copper		**0.0900**	
Lead		**11.8**	
Manganese		**0.120**	
Nickel		**-1.82**	
Selenium		**-8.98**	
Silver		**-1.53**	
Thallium		**6.04**	
Vanadium		**0.890**	
Zinc		**4.54**	
Aluminum	*500000*	*495320*	*99*
Boron		*1.48*	
Calcium	*500000*	*475410*	*95*
Iron	*200000*	*188740*	*94*
Lithium		*4.82*	
Magnesium	*500000*	*503460*	*101*
Molybdenum		*-0.380*	
Phosphorus		*-22.7*	
Potassium		*-8.46*	
Silicon	*900000*	*828490*	*92*
Sodium		*73.4*	
Strontium		*4.79*	
Tin		*0.610*	
Titanium		*14.3*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Lab Sample ID: ICSAB 140-73123/7 Instrument ID: DUO

Lab File ID: F050923.asc ICS Source: 90XXICSABP_00118

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**600**	**580**	**97**
Arsenic	**100**	**99.0**	**99**
Barium	**500**	**494**	**99**
Beryllium	**500**	**504**	**101**
Cadmium	**1000**	**926**	**93**
Chromium	**500**	**477**	**95**
Cobalt	**500**	**473**	**95**
Copper	**500**	**500**	**100**
Lead	**50.0**	**51.6**	**103**
Manganese	**500**	**486**	**97**
Nickel	**1000**	**940**	**94**
Selenium	**50.0**	**45.7**	**91**
Silver	**200**	**195**	**98**
Thallium	**100**	**97.2**	**97**
Vanadium	**500**	**485**	**97**
Zinc	**1000**	**975**	**98**
Aluminum	*250000*	*251990*	*101*
Boron	*1000*	*968*	*97*
Calcium	*250000*	*246550*	*99*
Iron	*100000*	*98520*	*99*
Lithium	*1000*	*1004*	*100*
Magnesium	*250000*	*254650*	*102*
Molybdenum	*1000*	*960*	*96*
Phosphorus	*1000*	*963*	*96*
Potassium	*10000*	*10526*	*105*
Sodium	*10000*	*10222*	*102*
Strontium	*1000*	*1008*	*101*
Tin	*1000*	*952*	*95*
Titanium	*1000*	*999*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 4 MS
Lab ID: 140-31634-7 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.998		ND		2.00	100	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5A MS
Lab ID: 140-31634-8 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.909		ND		1.90	100	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5B MS
Lab ID: 140-31634-9 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.7795		ND		0.800	97	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5C MS
Lab ID: 140-31634-10 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.616		0.208	J	1.38	102	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 4 MSD
Lab ID: 140-31634-7 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.979		2.00	99	80-120	1	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5A MSD
Lab ID: 140-31634-8 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.799		1.90	95	80-120	6	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5B MSD
Lab ID: 140-31634-9 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.8025		0.800	100	80-120	3	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 5C MSD
Lab ID: 140-31634-10 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31634-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.620		1.38	103	80-120	0	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 1,3 PDS | Lab ID: 140-31634-6 PDS

Lab Name: Eurofins Knoxville | Job No.: 140-31634-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	59.86		10.2		50.0	99	75-125		29/6010C
Arsenic	43.08		23.2		20.0	100	75-125		29/6010C
Barium	19.01		9.20		10.0	98	75-125		29/6010C
Beryllium	5.192		ND		5.00	104	75-125		29/6010C
Cadmium	10.66		5.85		5.00	96	75-125		29/6010C
Chromium	23.64		2.88		20.0	104	75-125		29/6010C
Cobalt	21.01		ND		20.0	105	75-125		29/6010C
Copper	218.9		198		25.0	82	75-125		29/6010C
Lead	542.7		545		20.0	NC	75-125		29/6010C
Manganese	11.64		1.53		10.0	101	75-125		29/6010C
Nickel	107.3		3.59	J	100	104	75-125		29/6010C
Selenium	35.50		8.11		30.0	91	75-125		29/6010C
Silver	5.191		0.352	J	5.00	97	75-125		29/6010C
Thallium	79.69		ND		80.0	100	75-125		29/6010C
Vanadium	20.74		0.0970	J	20.0	103	75-125		29/6010C
Zinc	520.2		482		50.0	77	75-125		29/6010C
Mercury	1.086		ND		1.00	109	75-125		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 4 PDS | Lab ID: 140-31634-7 PDS

Lab Name: Eurofins Knoxville | Job No.: 140-31634-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	49.05		ND		50.0	98	75-125		29/6010C
Arsenic	10.09		ND		10.0	101	75-125		29/6010C
Barium	11.79		1.90		10.0	99	75-125		29/6010C
Beryllium	5.374		ND		5.00	107	75-125		29/6010C
Cadmium	5.064		ND		5.00	101	75-125		29/6010C
Chromium	21.42		0.580	J	20.0	104	75-125		29/6010C
Cobalt	10.43		ND		10.0	104	75-125		29/6010C
Copper	35.58		10.6		25.0	100	75-125		29/6010C
Lead	10.22		0.586	J	10.0	96	75-125		29/6010C
Manganese	10.76		0.616	J	10.0	101	75-125		29/6010C
Nickel	51.91		0.424	J	50.0	103	75-125		29/6010C
Selenium	28.05		14.3		15.0	92	75-125		29/6010C
Silver	4.681		ND		5.00	94	75-125		29/6010C
Thallium	39.93		ND		40.0	100	75-125		29/6010C
Vanadium	20.73		ND		20.0	104	75-125		29/6010C
Zinc	51.83		1.69	J	50.0	100	75-125		29/6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 1,3 PDSD | Lab ID: 140-31634-6 PDSD

Lab Name: Eurofins Knoxville | Job No.: 140-31634-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	59.74		50.0	99	75-125	0.2			29/6010C
Arsenic	43.31		20.0	101	75-125	0.5			29/6010C
Barium	19.02		10.0	98	75-125	0.06			29/6010C
Beryllium	5.191		5.00	104	75-125	0			29/6010C
Cadmium	10.67		5.00	97	75-125	0.1			29/6010C
Chromium	23.73		20.0	104	75-125	0.4			29/6010C
Cobalt	21.09		20.0	105	75-125	0.4			29/6010C
Copper	218.5		25.0	80	75-125	0.2			29/6010C
Lead	546.0		20.0	NC	75-125	0.6			29/6010C
Manganese	11.65		10.0	101	75-125	0.07			29/6010C
Nickel	107.6		100	104	75-125	0.3			29/6010C
Selenium	35.68		30.0	92	75-125	0.5			29/6010C
Silver	5.240		5.00	98	75-125	0.9			29/6010C
Thallium	80.64		80.0	101	75-125	1			29/6010C
Vanadium	20.70		20.0	103	75-125	0.2			29/6010C
Zinc	520.1		50.0	77	75-125	0			29/6010C
Mercury	1.074		1.00	107	75-125	1			29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AS29-2,CONTAINER 4 PDSD | Lab ID: 140-31634-7 PDSD

Lab Name: Eurofins Knoxville | Job No.: 140-31634-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	49.26		50.0	99	75-125	0.4			29/6010C
Arsenic	10.06		10.0	101	75-125	0.4			29/6010C
Barium	11.92		10.0	100	75-125	1			29/6010C
Beryllium	5.372		5.00	107	75-125	0			29/6010C
Cadmium	5.112		5.00	102	75-125	0.9			29/6010C
Chromium	21.37		20.0	104	75-125	0.2			29/6010C
Cobalt	10.53		10.0	105	75-125	1			29/6010C
Copper	35.13		25.0	98	75-125	1			29/6010C
Lead	10.37		10.0	98	75-125	1			29/6010C
Manganese	10.75		10.0	101	75-125	0.2			29/6010C
Nickel	52.34		50.0	104	75-125	0.8			29/6010C
Selenium	28.54		15.0	95	75-125	2			29/6010C
Silver	4.695		5.00	94	75-125	0.3			29/6010C
Thallium	40.03		40.0	100	75-125	0.3			29/6010C
Vanadium	20.62		20.0	103	75-125	0.5			29/6010C
Zinc	52.30		50.0	101	75-125	0.9			29/6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72927/6-A

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	47.55		95	80	120		29/6010C
Arsenic	10.0	9.636		96	80	120		29/6010C
Barium	10.0	9.652		97	80	120		29/6010C
Beryllium	5.00	5.219		104	80	120		29/6010C
Cadmium	5.00	4.904		98	80	120		29/6010C
Chromium	20.0	19.93		100	80	120		29/6010C
Cobalt	10.0	10.09		101	80	120		29/6010C
Copper	25.0	24.14		97	80	120		29/6010C
Lead	10.0	9.751		98	80	120		29/6010C
Manganese	10.0	9.821		98	80	120		29/6010C
Nickel	50.0	50.11		100	80	120		29/6010C
Selenium	15.0	13.90		93	80	120		29/6010C
Silver	5.00	4.582		92	80	120		29/6010C
Thallium	40.0	39.22		98	80	120		29/6010C
Vanadium	20.0	19.73		99	80	120		29/6010C
Zinc	50.0	49.44		99	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-72927/7-A

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	47.91		50.0	96	80-120	1	20		29/6010C
Arsenic	9.787		10.0	98	80-120	2	20		29/6010C
Barium	9.781		10.0	98	80-120	1	20		29/6010C
Beryllium	5.283		5.00	106	80-120	1	20		29/6010C
Cadmium	4.984		5.00	100	80-120	2	20		29/6010C
Chromium	20.25		20.0	101	80-120	2	20		29/6010C
Cobalt	10.22		10.0	102	80-120	1	20		29/6010C
Copper	24.44		25.0	98	80-120	1	20		29/6010C
Lead	9.725		10.0	97	80-120	0	20		29/6010C
Manganese	9.939		10.0	99	80-120	1	20		29/6010C
Nickel	50.73		50.0	101	80-120	1	20		29/6010C
Selenium	13.96		15.0	93	80-120	0	20		29/6010C
Silver	4.653		5.00	93	80-120	2	20		29/6010C
Thallium	39.48		40.0	99	80-120	1	20		29/6010C
Vanadium	20.02		20.0	100	80-120	1	20		29/6010C
Zinc	50.01		50.0	100	80-120	1	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72928/7-A

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	49.18		98	80	120		29/6010C
Arsenic	10.0	10.51		105	80	120		29/6010C
Barium	10.0	10.08		101	80	120		29/6010C
Beryllium	5.00	5.108		102	80	120		29/6010C
Cadmium	5.00	5.012		100	80	120		29/6010C
Chromium	20.0	20.23		101	80	120		29/6010C
Cobalt	10.0	10.31		103	80	120		29/6010C
Copper	25.0	24.55		98	80	120		29/6010C
Lead	10.0	10.01		100	80	120		29/6010C
Manganese	10.0	9.971		100	80	120		29/6010C
Nickel	50.0	51.26		103	80	120		29/6010C
Selenium	15.0	14.40		96	80	120		29/6010C
Silver	5.00	4.705		94	80	120		29/6010C
Thallium	40.0	40.16		100	80	120		29/6010C
Vanadium	20.0	20.07		100	80	120		29/6010C
Zinc	50.0	51.15		102	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-72928/8-A

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	49.13		50.0	98	80-120	0	20		29/6010C
Arsenic	10.37		10.0	104	80-120	1	20		29/6010C
Barium	9.766		10.0	98	80-120	3	20		29/6010C
Beryllium	5.103		5.00	102	80-120	0	20		29/6010C
Cadmium	5.018		5.00	100	80-120	0	20		29/6010C
Chromium	20.30		20.0	101	80-120	0	20		29/6010C
Cobalt	10.28		10.0	103	80-120	0	20		29/6010C
Copper	24.99		25.0	100	80-120	2	20		29/6010C
Lead	10.02		10.0	100	80-120	0	20		29/6010C
Manganese	9.944		10.0	99	80-120	0	20		29/6010C
Nickel	51.14		50.0	102	80-120	0	20		29/6010C
Selenium	14.25		15.0	95	80-120	1	20		29/6010C
Silver	4.586		5.00	92	80-120	3	20		29/6010C
Thallium	39.81		40.0	100	80-120	1	20		29/6010C
Vanadium	20.02		20.0	100	80-120	0	20		29/6010C
Zinc	50.84		50.0	102	80-120	1	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72915/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00967

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.856		97	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72916/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00967

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.500	0.5080		102	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72917/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00967

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.25	1.275		102	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72976/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00967

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	10.0	9.745		97	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-72928/7-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00090

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.975		100	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-72928/8-B

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00090

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	4.723		5.00	94	80-120	5	20		29/7470A

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-31634-6

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-31634-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	10.2		10.07	J	NC		29/6010C
Arsenic	23.2		24.92		NC		29/6010C
Barium	9.20		9.175		NC		29/6010C
Beryllium	ND		ND		NC		29/6010C
Cadmium	5.85		6.165		NC		29/6010C
Chromium	2.88		2.835	J	NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	198		196.3		1.1		29/6010C
Lead	545		557.5		2.4		29/6010C
Manganese	1.53		1.580	J	NC		29/6010C
Nickel	3.59	J	3.740	J	NC		29/6010C
Selenium	8.11		8.340	J	NC		29/6010C
Silver	0.352	J	0.4800	J	NC		29/6010C
Thallium	ND		5.130	J	NC		29/6010C
Vanadium	0.0970	J	ND		NC		29/6010C
Zinc	482		503.4		4.5		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-31634-7

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-31634-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	ND		ND		NC		29/6010C
Arsenic	ND		ND		NC		29/6010C
Barium	1.90		1.825	J	NC		29/6010C
Beryllium	ND		ND		NC		29/6010C
Cadmium	ND		ND		NC		29/6010C
Chromium	0.580	J	ND		NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	10.6		10.58	J	NC		29/6010C
Lead	0.586	J	ND		NC		29/6010C
Manganese	0.616	J	ND		NC		29/6010C
Nickel	0.424	J	ND		NC		29/6010C
Selenium	14.3		13.87		NC		29/6010C
Silver	ND		ND		NC		29/6010C
Thallium	ND		ND		NC		29/6010C
Vanadium	ND		ND		NC		29/6010C
Zinc	1.69	J	ND		NC		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:04

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	0.84
Arsenic	189.042	1	0.39
Barium	455.403	1	0.15
Beryllium	313.042	0.5	0.047
Cadmium	226.502	0.5	0.053
Chromium	267.716	1	0.35
Cobalt	228.616	5	0.1
Copper	324.754	2.5	0.58
Lead	220.353	1	0.48
Manganese	257.610	1.5	0.18
Nickel	231.604	4	0.26
Selenium	196.090	1	0.39
Silver	328.068	1	0.35
Thallium	190.856	1	0.34
Vanadium	292.402	2.5	0.1
Zinc	213.856	2	0.94

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:11

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	1.1
Arsenic	189.042	1	0.89
Barium	455.403	1	0.86
Beryllium	313.042	0.5	0.016
Cadmium	226.502	0.5	0.28
Chromium	267.716	1	0.36
Cobalt	228.616	5	1
Copper	324.754	2.5	0.21
Lead	220.353	1	0.47
Manganese	257.61	1.5	0.12
Nickel	231.604	4	0.25
Selenium	196.09	1	0.66
Silver	328.068	1	0.081
Thallium	190.856	1	0.48
Vanadium	292.402	2.5	0.073
Zinc	213.856	2	0.9

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:47

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.4	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:48

Prep Method: AT Prep (Empty)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.06

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:36

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.084

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:37

Prep Method: AT Prep (HCl)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.05	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:51

Prep Method: AT Prep (KMnO4)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.02	0.006

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Aluminum	308.215														
Antimony	206.833									0.016177					
Arsenic	189.042									0		-0.000097			
Barium	455.403														
Beryllium	313.042														
Boron	249.678								0			0			
Cadmium	226.502											0.000077			
Chromium	267.716	0													
Cobalt	228.616														
Copper	324.754											-0.000081			
Lead	220.353	-0.000024							-0.000426		0	0.000014			
Manganese	257.610											0			0
Nickel	231.604											0			
Selenium	196.090											-0.000078			
Silicon	250.690								0.008472						
Silver	328.068														
Sodium	589.592														
Strontium	421.552						0								
Thallium	190.856								0.003758	0		0			
Titanium	334.941						0								
Tungsten	207.911														
Vanadium	292.402									-0.001247		0			
Zinc	213.856										0.000759	0.000102			

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V
Aluminum	308.215		0.028204												0.051626
Antimony	206.833										-0.002691		0		-0.002687
Arsenic	189.042		0							-0.000027					
Barium	455.403														
Beryllium	313.042														0.000266
Boron	249.678														
Cadmium	226.502				-0.000088										
Chromium	267.716	0													
Cobalt	228.616		-0.001775							-0.000008			0.002074		
Copper	324.754														
Lead	220.353		-0.001244							0.000093			0		
Manganese	257.610														
Nickel	231.604		0							-0.000012				0	
Selenium	196.090	0.000675								0.000010					
Silicon	250.690										0				
Silver	328.068														-0.000526
Sodium	589.592														
Strontium	421.552														
Thallium	190.856	-0.000836								-0.000014			-0.000803		0.001751
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402		0												
Zinc	213.856				0.006512										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31634-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	W	Zn												
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	249.678														
Cadmium	226.502														
Chromium	267.716														
Cobalt	228.616														
Copper	324.754														
Lead	220.353														
Manganese	257.610														
Nickel	231.604														
Selenium	196.090														
Silicon	250.690														
Silver	328.068														
Sodium	589.592														
Strontium	421.552														
Thallium	190.856														
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402														
Zinc	213.856														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Knoxville Job No: 140-31634-1

SDG No.:

Instrument ID: DUO Date: 03/21/2022 14:56

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		40000	29/6010C
Arsenic		30000	29/6010C
Barium		30000	29/6010C
Beryllium		4000	29/6010C
Cadmium		40000	29/6010C
Chromium		40000	29/6010C
Cobalt		40000	29/6010C
Copper		40000	29/6010C
Lead		90000	29/6010C
Manganese		20000	29/6010C
Nickel		80000	29/6010C
Selenium		30000	29/6010C
Silver		3000	29/6010C
Thallium		80000	29/6010C
Vanadium		20000	29/6010C
Zinc		10000	29/6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31634-2	05/04/2023 08:00	72927	1		100
140-31634-7	05/04/2023 08:00	72927	1		100
140-31634-12	05/04/2023 08:00	72927	1		100
140-31634-19	05/04/2023 08:00	72927	1		100
MB 140-72927/5-A	05/04/2023 08:00	72927	1		100
LCS 140-72927/6-A	05/04/2023 08:00	72927	1		100
LCSD 140-72927/7-A	05/04/2023 08:00	72927	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31634-1	05/04/2023 08:00	72928	1		100
140-31634-6	05/04/2023 08:00	72928	1		100
140-31634-11	05/04/2023 08:00	72928	1		100
140-31634-16	05/04/2023 08:00	72928	1		100
140-31634-17	05/04/2023 08:00	72928	1		100
MB 140-72928/6-A	05/04/2023 08:00	72928	1		100
LCS 140-72928/7-A	05/04/2023 08:00	72928	1		100
LCSD 140-72928/8-A	05/04/2023 08:00	72928	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (Empty)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-72915/1-B	05/05/2023 10:20	72920		2.5	50
LCS 140-72915/2-B	05/05/2023 10:20	72920		2.5	50
140-31634-3	05/05/2023 10:20	72920		2.5	50
140-31634-8	05/05/2023 10:20	72920		2.5	50
140-31634-8 MS	05/05/2023 10:20	72920		2.5	50
140-31634-8 MSD	05/05/2023 10:20	72920		2.5	50
140-31634-13	05/05/2023 10:20	72920		2.5	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31634-1	05/04/2023 08:00	72928	1		100
140-31634-6	05/04/2023 08:00	72928	1		100
140-31634-11	05/04/2023 08:00	72928	1		100
140-31634-16	05/04/2023 08:00	72928	1		100
140-31634-17	05/04/2023 08:00	72928	1		100
MB 140-72928/6-B	05/04/2023 08:00	72928	1		100
LCS 140-72928/7-B	05/04/2023 08:00	72928	1		100
LCSD 140-72928/8-B	05/04/2023 08:00	72928	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (KMnO4)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-72916/1-B	05/05/2023 10:20	72962		25	50
LCS 140-72916/2-B	05/05/2023 10:20	72962		25	50
140-31634-4	05/05/2023 10:20	72962		25	50
140-31634-9	05/05/2023 10:20	72962		25	50
140-31634-9 MS	05/05/2023 10:20	72962		25	50
140-31634-9 MSD	05/05/2023 10:20	72962		25	50
140-31634-14	05/05/2023 10:20	72962		25	50
140-31634-18	05/05/2023 10:20	72962		25	50
140-31634-20	05/05/2023 10:20	72962		25	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (HCl)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-72917/1-B	05/05/2023 10:20	72963		10	50
LCS 140-72917/2-B	05/05/2023 10:20	72963		10	50
140-31634-5	05/05/2023 10:20	72963		10	50
140-31634-10	05/05/2023 10:20	72963		10	50
140-31634-10 MS	05/05/2023 10:20	72963		10	50
140-31634-10 MSD	05/05/2023 10:20	72963		10	50
140-31634-15	05/05/2023 10:20	72963		10	50
140-31634-21	05/05/2023 10:20	72963		10	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-72976/1-B	05/05/2023 10:20	72977		2.5	50
LCS 140-72976/2-B	05/05/2023 10:20	72977		2.5	50
140-31634-2	05/05/2023 10:20	72977		2.5	50
140-31634-7	05/05/2023 10:20	72977		2.5	50
140-31634-7 MS	05/05/2023 10:20	72977		2.5	50
140-31634-7 MSD	05/05/2023 10:20	72977		2.5	50
140-31634-12	05/05/2023 10:20	72977		2.5	50
140-31634-19	05/05/2023 10:20	72977		2.5	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/09/2023 11:19 End Date: 05/09/2023 18:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn								
ICIS 140-73123/1	1		11:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			11:24																								
CCVL 140-73123/3	1		11:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 140-73123/4	1		11:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 140-73123/5	1		11:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSA 140-73123/6	1		11:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 140-73123/7	1		11:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 140-73123/8	1		11:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73123/9	1		11:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/10	1		12:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			12:08																								
ZZZZZZ			12:13																								
ZZZZZZ			12:18																								
ZZZZZZ			12:23																								
ZZZZZZ			12:28																								
ZZZZZZ			12:33																								
MB 140-72927/5-A	1	T	12:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 140-72927/6-A	1	T	12:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCSD 140-72927/7-A	1	T	12:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
MB 140-72928/6-A	1	T	12:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73123/21	1		12:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/22	1		13:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 140-72928/7-A	1	T	13:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCSD 140-72928/8-A	1	T	13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			13:17																								
ZZZZZZ			13:22																								
ZZZZZZ			13:28																								
ZZZZZZ			13:32																								
ZZZZZZ			13:37																								
ZZZZZZ			13:43																								
ZZZZZZ			13:47																								
ZZZZZZ			13:53																								
CCV 140-73123/33	1		13:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/34	1		14:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			14:07																								
ZZZZZZ			14:12																								
ZZZZZZ			14:17																								
ZZZZZZ			14:22																								
ZZZZZZ			14:28																								
140-31634-2	1	T	14:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-7	1	T	14:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-7 PDS	1	T	14:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/09/2023 11:19 End Date: 05/09/2023 18:51

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn								
140-31634-7 PDSD	1	T	14:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-7 SD	5	T	14:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73123/45	1		14:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			15:01																								
CCB 140-73123/47	1		15:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-12	1	T	15:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-19	1	T	15:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-1	1	T	15:22	X		X	X	X		X	X	X			X			X	X								
140-31634-6	1	T	15:27	X		X	X	X		X	X	X			X			X	X								
140-31634-6 PDS	1	T	15:32	X		X	X	X		X	X	X			X			X	X								
140-31634-6 PDSD	1	T	15:37	X		X	X	X		X	X	X			X			X	X								
140-31634-11	1	T	15:42	X		X	X	X		X	X	X			X			X	X								
140-31634-16	1	T	15:47	X		X	X	X		X	X	X			X			X	X								
140-31634-17	1	T	15:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31634-6 SD	5	T	15:57	X		X	X	X		X	X	X			X			X	X								
CRI 140-73123/58	1		16:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73123/59	1		16:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/60	1		16:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			16:38																								
ZZZZZZ			16:43																								
ZZZZZZ			16:48																								
ZZZZZZ			16:53																								
ZZZZZZ			16:58																								
ZZZZZZ			17:03																								
ZZZZZZ			17:08																								
ZZZZZZ			17:13																								
ZZZZZZ			17:17																								
ZZZZZZ			17:22																								
CCV 140-73123/71	1		17:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/72	1		17:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			17:37																								
ZZZZZZ			17:42																								
ZZZZZZ			17:46																								
ZZZZZZ			17:51																								
140-31634-1	2	T	17:56		X				X				X	X		X	X										
140-31634-6	2	T	18:01		X				X				X	X		X	X										
140-31634-6 PDS	2	T	18:06		X				X				X	X		X	X										
140-31634-6 PDSD	2	T	18:11		X				X				X	X		X	X										
140-31634-11	2	T	18:16		X				X				X	X		X	X										
140-31634-6 SD	10	T	18:21		X				X				X	X		X	X										
CCV 140-73123/83	1		18:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73123/84	1		18:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/09/2023 11:19 End Date: 05/09/2023 18:51

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn											
140-31634-16	2	T	18:36		X				X				X	X		X	X													
CRI 140-73123/86	1		18:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCV 140-73123/87	1		18:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
CCB 140-73123/88	1		18:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/06/2023 10:05 End Date: 05/06/2023 12:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			10:05																									
ZZZZZZ			10:07																									
ZZZZZZ			10:10																									
ZZZZZZ			10:12																									
ZZZZZZ			10:15																									
ZZZZZZ			10:17																									
ZZZZZZ			10:20																									
ICV 140-72920/15-A	1		10:22	X																								
ICB 140-72920/16-A	1		10:25	X																								
CRA 140-72920/17-A	1		10:27	X																								
CCV 140-72920/18-A			10:30																									
CCB 140-72920/19-A			10:47																									
CCV 140-72920/18-A	1		10:49	X																								
CCB 140-72920/19-A	1		10:52	X																								
ZZZZZZ			10:55																									
ZZZZZZ			10:57																									
ZZZZZZ			11:00																									
ZZZZZZ			11:02																									
ZZZZZZ			11:05																									
ZZZZZZ			11:07																									
ZZZZZZ			11:10																									
ZZZZZZ			11:12																									
MB 140-72915/1-B	1	T	11:15	X																								
LCS 140-72915/2-B	1	T	11:17	X																								
CCV 140-72920/18-A	1		11:20	X																								
CCB 140-72920/19-A	1		11:23	X																								
140-31634-3	1	T	11:25	X																								
140-31634-8	1	T	11:28	X																								
140-31634-8 MS	1	T	11:30	X																								
140-31634-8 MSD	1	T	11:33	X																								
140-31634-13	1	T	11:35	X																								
MB 140-72916/1-B	1	T	11:38	X																								
LCS 140-72916/2-B	1	T	11:40	X																								
140-31634-4	1	T	11:43	X																								
140-31634-9	1	T	11:45	X																								
140-31634-9 MS	1	T	11:48	X																								
CCV 140-72920/18-A	1		11:51	X																								
CCB 140-72920/19-A	1		11:53	X																								
140-31634-9 MSD	1	T	11:56	X																								
140-31634-14	1	T	11:58	X																								
140-31634-18	1	T	12:01	X																								
140-31634-20	1	T	12:03	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/06/2023 10:05 End Date: 05/06/2023 12:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
MB 140-72917/1-B	1	T	12:06	X																								
LCS 140-72917/2-B	1	T	12:08	X																								
140-31634-5	1	T	12:11	X																								
140-31634-10	1	T	12:13	X																								
140-31634-10 MS	1	T	12:16	X																								
140-31634-10 MSD	1	T	12:18	X																								
CCV 140-72920/18-A	1		12:21	X																								
CCB 140-72920/19-A	1		12:24	X																								
140-31634-15	1	T	12:26	X																								
140-31634-21	1	T	12:29	X																								
MB 140-72976/1-B	1	T	12:31	X																								
LCS 140-72976/2-B	1	T	12:34	X																								
140-31634-2	1	T	12:36	X																								
140-31634-7	1	T	12:39	X																								
140-31634-7 MS	1	T	12:41	X																								
140-31634-7 MSD	1	T	12:44	X																								
140-31634-12	1	T	12:46	X																								
140-31634-19	1	T	12:49	X																								
CCV 140-72920/18-A	1		12:52	X																								
CCB 140-72920/19-A	1		12:54	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/08/2023 14:26 End Date: 05/08/2023 15:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			14:26																									
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
ZZZZZZ			14:34																									
ZZZZZZ			14:36																									
ZZZZZZ			14:39																									
ZZZZZZ			14:41																									
ICV 140-73044/16-A	1		14:44	X																								
ICB 140-73044/17-A	1		14:47	X																								
CRA 140-73044/18-A	1		14:49	X																								
CCV 140-73044/19-A	1		14:52	X																								
CCB 140-73044/20-A	1		14:54	X																								
MB 140-72928/6-B	1	T	14:57	X																								
LCS 140-72928/7-B	1	T	14:59	X																								
LCSD 140-72928/8-B	1	T	15:02	X																								
140-31634-1	1	T	15:04	X																								
140-31634-6	1	T	15:07	X																								
140-31634-6 PDS	1	T	15:09	X																								
140-31634-6 PDSD	1	T	15:12	X																								
140-31634-11	1	T	15:15	X																								
140-31634-16	1	T	15:17	X																								
140-31634-17	1	T	15:20	X																								
CCV 140-73044/19-A	1		15:22	X																								
CCB 140-73044/20-A	1		15:25	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.: Analysis Batch No.: 73123

ICP Instrument ID: DUO Start Date: 05/09/2023 End Date: 05/09/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
ICIS 140-73123/1	11:19										
CCVL 140-73123/3	11:29	99		99							
ICV 140-73123/4	11:34	99		100							
ICB 140-73123/5	11:39	100		101							
ICSA 140-73123/6	11:44	96		95							
ICSAB 140-73123/7	11:49	96		96							
CRI 140-73123/8	11:54	99		99							
CCV 140-73123/9	11:58	98		97							
CCB 140-73123/10	12:03	100		99							
MB 140-72927/5-A	12:38	99		100							
LCS 140-72927/6-A	12:43	97		98							
LCSD 140-72927/7-A	12:48	97		97							
MB 140-72928/6-A	12:52	100		101							
CCV 140-73123/21	12:57	97		99							
CCB 140-73123/22	13:02	99		100							
LCS 140-72928/7-A	13:07	98		99							
LCSD 140-72928/8-A	13:12	98		99							
CCV 140-73123/33	13:58	97		99							
CCB 140-73123/34	14:02	99		99							
140-31634-2	14:32	96		98							
140-31634-7	14:37	96		97							
140-31634-7 PDS	14:42	95		96							
140-31634-7 PDSD	14:47	95		96							
140-31634-7 SD	14:52	100		101							
CCV 140-73123/45	14:57	97		98							
CCB 140-73123/47	15:07	99		100							
140-31634-12	15:12	95		97							
140-31634-19	15:17	105		104							
140-31634-1	15:22	100		101							
140-31634-6	15:27	99		101							
140-31634-6 PDS	15:32	97		99							
140-31634-6 PDSD	15:37	97		99							
140-31634-11	15:42	99		100							
140-31634-16	15:47	99		100							
140-31634-17	15:52	99		100							
140-31634-6 SD	15:57	99		99							
CRI 140-73123/58	16:02	99		99							
CCV 140-73123/59	16:07	98		98							
CCB 140-73123/60	16:12	100		100							
CCV 140-73123/71	17:27	99		97							
CCB 140-73123/72	17:32	101		99							
140-31634-1	17:56	102		100							

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.: Analysis Batch No.: 73123

ICP Instrument ID: DUO Start Date: 05/09/2023 End Date: 05/09/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
140-31634-6	18:01	102		100							
140-31634-6 PDS	18:06	101		99							
140-31634-6 PDSD	18:11	101		98							
140-31634-11	18:16	102		99							
140-31634-6 SD	18:21	102		100							
CCV 140-73123/83	18:26	101		98							
CCB 140-73123/84	18:31	103		99							
140-31634-16	18:36	103		99							
CRI 140-73123/86	18:41	103		99							
CCV 140-73123/87	18:46	101		98							
CCB 140-73123/88	18:51	104		100							
IS Name on Instrument											

15A-IN
ICP INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.: Analysis Batch No.: 73123

ICP Instrument ID: DUO Start Date: 05/09/2023 End Date: 05/09/2023

Analyte	Wavelength	Internal Standard Used:				
		Element Y 224.306	Element Y 371.030	Element Y 371.030	Element	Element
Antimony	206.833	X				
Arsenic	189.042	X				
Barium	455.403			X		
Beryllium	313.042		X			
Cadmium	226.502	X				
Chromium	267.716		X			
Cobalt	228.616	X				
Copper	324.754		X			
Lead	220.353		X			
Manganese	257.610		X			
Nickel	231.604	X				
Selenium	196.090	X				
Silver	328.068		X			
Thallium	190.856	X				
Vanadium	292.402		X			
Zinc	213.856	X				
Aluminum	308.215			X		
Boron	249.678		X			
Calcium	317.933			X		
Iron	259.940			X		
Lithium	670.784			X		
Magnesium	279.079			X		
Molybdenum	202.030	X				
Phosphorus	178.284	X				
Potassium	766.490			X		
Silicon	250.690			X		
Sodium	589.592			X		
Strontium	421.552			X		
Tin	189.989	X				
Titanium	334.941			X		
Internal Standard Name on Instrument		Y_2243A	Y_3710A	Y_3710R		

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72927 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	BH_pH	BH_IV	90SPKNX10P 00023	90SPKNX8P 00022
140-31634-A-2	AS29-1,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	310 mL		
140-31634-A-7	AS29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	350 mL		
140-31634-A-12	AS29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	345 mL		
140-31634-A-19	BLANK,CONTAINER 9	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	100 mL		
MB 140-72927/5		AT Prep (BH), 29/6010C		1 Sample	100 mL				
LCS 140-72927/6		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL
LCSD 140-72927/7		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00023					
140-31634-A-2	AS29-1,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31634-A-7	AS29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31634-A-12	AS29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31634-A-19	BLANK,CONTAINER 9	AT Prep (BH), 29/6010C	T						
MB 140-72927/5		AT Prep (BH), 29/6010C							
LCS 140-72927/6		AT Prep (BH), 29/6010C		1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72927 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00023					
LCSD 140-72927/7		AT Prep (BH), 29/6010C		1 mL					

Batch Notes	
Start date/time for BH digestion	05/04/2023 08:20
End date/time for BH digestion	05/05/2023 12:00
Nitric Acid ID	582657 16ml
Hydrogen Peroxide ID	569979 0.540ml
Hydrochloric Acid ID	580289 8ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	B
Oven, Bath or Block Temperature 1	5-4 95, 5-5 94 Degrees C
Thermometer ID	Metals 6
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72928 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00090	90SPKNX10P 00023
140-31634-A-1	AS29-1,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	110 mL	<2 SU		
140-31634-A-6	AS29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	110 mL	<2 SU		
140-31634-A-11	AS29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	115 mL	<2 SU		
140-31634-A-16	BLANK,CONTAINER 12	AT Prep (FH), 29/6010C	T	1 Sample	100 mL				
140-31634-A-17	BLANK,CONTAINER 8A	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-72928/6		AT Prep (FH), 29/6010C		1 Sample	100 mL				
LCS 140-72928/7		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-72928/8		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31634-A-1	AS29-1,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31634-A-6	AS29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31634-A-11	AS29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31634-A-16	BLANK,CONTAINER 12	AT Prep (FH), 29/6010C	T			Filter only			
140-31634-A-17	BLANK,CONTAINER 8A	AT Prep (FH), 29/6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72928 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
MB 140-72928/6		AT Prep (FH), 29/6010C							
LCS 140-72928/7		AT Prep (FH), 29/6010C		1 mL	1 mL				
LCSD 140-72928/8		AT Prep (FH), 29/6010C		1 mL	1 mL				

Batch Notes	
Microwave Oven ID	cem3
Program Name	pr+combo air1600W 800W filt 1600Wcombo
Start date/time for FH digestion	05/04/2023 08:25
End date/time for FH digestion	05/05/2023 11:15
Nitric Acid ID	579262 4ml
Hydrofluoric Acid ID	576265 3ml
Hydrochloric Acid ID	580289 5ml
0.1N HNO3 ID	577998 20ml
Boric Acid ID	554088 2ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	A
Oven, Bath or Block Temperature 1	92 Degrees C
Thermometer ID	Metals 15
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72915 Batch Start Date: 05/03/23 13:55 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/03/23 14:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-72915/1		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				
LCS 140-72915/2		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				
140-31634-A-3	AS29-1,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-8	AS29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	95 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-8 MS	AS29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	95 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-8 MSD	AS29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	95 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-13	AS29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72915 Batch Start Date: 05/03/23 13:55 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/03/23 14:20

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72916 Batch Start Date: 05/04/23 07:30 Batch Analyst: Kincaid, Whitney S

Batch Method: Air Train Vol. Batch End Date: 05/04/23 09:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-72916/1		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				
LCS 140-72916/2		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				
140-31634-A-4	AS29-1,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-9	AS29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-9 MS	AS29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-9 MSD	AS29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-14	AS29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS 4801.			
140-31634-A-18	BLANK,CONTAINER 8B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	100 mL	pH=6. pH strip lot # LRS 4801.			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72916 Batch Start Date: 05/04/23 07:30 Batch Analyst: Kincaid, Whitney S

Batch Method: Air Train Vol. Batch End Date: 05/04/23 09:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
140-31634-A-20	BLANK,CONTAINER 10	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72917 Batch Start Date: 05/04/23 09:15 Batch Analyst: Kincaid, Whitney S

Batch Method: Air Train Vol. Batch End Date: 05/05/23 10:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-72917/1		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				
LCS 140-72917/2		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				
140-31634-A-5	AS29-1,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	280 mL	pH<2 pH strip lot # LRS-4801			
140-31634-A-10	AS29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH<2 pH strip lot # LRS-4801			
140-31634-A-10 MS	AS29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH<2 pH strip lot # LRS-4801			
140-31634-A-10 MSD	AS29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH<2 pH strip lot # LRS-4801			
140-31634-A-15	AS29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	290 mL	pH<2 pH strip lot # LRS-4801			
140-31634-A-21	BLANK,CONTAINER 11	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	150 mL	pH<2 pH strip lot # LRS-4801			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72920 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (Empty) Batch End Date: 05/05/23 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00967	90L1HGDayVER 00852		
MB 140-72915/1-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL				
LCS 140-72915/2-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL	2.5 mL			
140-31634-A-3-A	AS29-1,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-31634-A-8-A	AS29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-31634-A-8-B MS	AS29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-31634-A-8-C MSD	AS29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-31634-A-13-A	AS29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
ICV 140-72920/15		AT Prep (Empty), 29/7470A		50 mL	50 mL		1.25 mL		
ICB 140-72920/16		AT Prep (Empty), 29/7470A		50 mL	50 mL				
CRA 140-72920/17		AT Prep (Empty), 29/7470A		50 mL	50 mL	0.1 mL			
CCV 140-72920/18		AT Prep (Empty), 29/7470A		50 mL	50 mL	2.5 mL			
CCB 140-72920/19		AT Prep (Empty), 29/7470A		50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72920 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (Empty) Batch End Date: 05/05/23 14:50

Batch Notes	
Uncorrected Temperature	90 In at 11:15 Celsius
Uncorrected Temperature 2	90 Out at 13:15 Celsius
Digestion Tube/Cup ID	022023
Hot Block ID	G
Thermometer ID	Metals 24
Lot # of Nitric Acid	575638 1.25mL
Lot # of hydrochloric acid	580285 2.0mL
Sulfuric Acid Lot Number	570624 2.5mL
Potassium Permanganate ID	582478 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	576708 3.0mL
Pipette/Syringe/Dispenser ID	MET015 MET016 P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72928 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00090	90SPKNX10P 00023
140-31634-A-1	AS29-1,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	110 mL	<2 SU		
140-31634-A-6	AS29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	110 mL	<2 SU		
140-31634-A-11	AS29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	115 mL	<2 SU		
140-31634-A-16	BLANK,CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL				
140-31634-A-17	BLANK,CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-72928/6		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL				
LCS 140-72928/7		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-72928/8		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31634-A-1	AS29-1,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72928 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/05/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31634-A-6	AS29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						
140-31634-A-11	AS29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						
140-31634-A-16	BLANK,CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T			Filter only			
140-31634-A-17	BLANK,CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T						
MB 140-72928/6		AT Prep (FH), AT Prep FH, 29/7470A							
LCS 140-72928/7		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				
LCSD 140-72928/8		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72928 Batch Start Date: 05/04/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/05/23 16:00

Batch Notes	
Microwave Oven ID	cem3
Program Name	pr+combo air1600W 800W filt 1600Wcombo
Start date/time for FH digestion	05/04/2023 08:25
End date/time for FH digestion	05/05/2023 11:15
Nitric Acid ID	579262 4ml
Hydrofluoric Acid ID	576265 3ml
Hydrochloric Acid ID	580289 5ml
0.1N HNO3 ID	577998 20ml
Boric Acid ID	554088 2ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	A
Oven, Bath or Block Temperature 1	92 Degrees C
Thermometer ID	Metals 15
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72962 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (KMnO4) Batch End Date: 05/05/23 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00967			
MB 140-72916/1-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL				
LCS 140-72916/2-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL	2.5 mL			
140-31634-A-4-A	AS29-1,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31634-A-9-A	AS29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31634-A-9-B MS	AS29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-31634-A-9-C MSD	AS29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-31634-A-14-A	AS29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31634-A-18-A	BLANK,CONTAINER 8B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31634-A-20-A	BLANK,CONTAINER 10	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72962 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (KMnO4) Batch End Date: 05/05/23 14:50

Batch Notes	
Uncorrected Temperature	94 In at 11:15 Degrees C
Uncorrected Temperature 2	94 Out at 13:15 Degrees C
Digestion Tube/Cup ID	022023
Hot Block ID	F
Thermometer ID	Metals 12
Temperature	94 Degrees C
Lot # of Nitric Acid	575638 1.25mL
Lot # of hydrochloric acid	580285 2.0mL
Sulfuric Acid Lot Number	570624 2.5mL
Potassium Permanganate ID	582478 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	576708 3.0mL
Pipette/Syringe/Dispenser ID	MET016 P-644
Filter ID	17589020

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72963 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (HCl) Batch End Date: 05/05/23 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	ImpingerVol	KMnO4_HCLRinse	InitialAmount	FinalAmount	90L1HGDayCAL 00967	
MB 140-72917/1-A		AT Prep (HCl), 29/7470A			50 mL	10 mL	50 mL		
LCS 140-72917/2-A		AT Prep (HCl), 29/7470A			50 mL	10 mL	50 mL	2.5 mL	
140-31634-A-5-A	AS29-1,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	230 mL	50 mL	10 mL	50 mL		
140-31634-A-10-A	AS29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL		
140-31634-A-10-B MS	AS29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL	0.5 mL	
140-31634-A-10-C MSD	AS29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL	0.5 mL	
140-31634-A-15-A	AS29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	240 mL	50 mL	10 mL	50 mL		
140-31634-A-21-A	BLANK,CONTAINER 11	AT Prep (HCl), 29/7470A	T	100 mL	50 mL	10 mL	50 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72963 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (HCl) Batch End Date: 05/05/23 14:50

Batch Notes	
Uncorrected Temperature	94 In at 11:15 Celsius
Uncorrected Temperature 2	94 Out at 13:15 Celsius
Hot Block ID	F
Thermometer ID	Metals 12
Temperature	94 Celsius
Lot # of Nitric Acid	575638 1.25mL
Lot # of hydrochloric acid	580285 2.0mL
Hydrochloric Acid ID	578838 50.0mL
Sulfuric Acid Lot Number	570624 2.5mL
Potassium Permanganate ID	582478 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	576708 3.0mL
Pipette/Syringe/Dispenser ID	MET016 MET017 P-644
Filter ID	17589020

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72976 Batch Start Date: 05/05/23 08:20 Batch Analyst: Kincaid, Whitney S

Batch Method: Air Train Vol. Batch End Date: 05/05/23 08:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 140-72976/1		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				
LCS 140-72976/2		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				
140-31634-A-2	AS29-1,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31634-A-7	AS29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31634-A-7 MS	AS29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31634-A-7 MSD	AS29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31634-A-12	AS29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31634-A-19	BLANK,CONTAINER 9	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72977 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (BH) Batch End Date: 05/05/23 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00967	AnalysisComment		
MB 140-72976/1-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL		7.5mL of extra Potassium Permanganant was added		
LCS 140-72976/2-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL	2.5 mL	7.5mL of extra Potassium Permanganant was added		
140-31634-A-2-B	AS29-1,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		7.5mL of extra Potassium Permanganant was added		
140-31634-A-7-B	AS29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		7.5mL of extra Potassium Permanganant was added		
140-31634-A-7-C MS	AS29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL	7.5mL of extra Potassium Permanganant was added		
140-31634-A-7-D MSD	AS29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL	7.5mL of extra Potassium Permanganant was added		
140-31634-A-12-B	AS29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		7.5mL of extra Potassium Permanganant was added		
140-31634-A-19-B	BLANK,CONTAINER 9	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		7.5mL of extra Potassium Permanganant was added		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 72977 Batch Start Date: 05/05/23 10:20 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep (BH) Batch End Date: 05/05/23 14:50

Batch Notes	
Uncorrected Temperature	94 In at 11:15 Celsius
Uncorrected Temperature 2	94 Out at 13:15 Celsius
Digestion Tube/Cup ID	022023
Hot Block ID	F
Thermometer ID	Metals 12
Temperature	94 Celsius
Lot # of Nitric Acid	575638 1.25mL
Lot # of hydrochloric acid	580285 2.0mL
Sulfuric Acid Lot Number	570624 2.5mL
Potassium Permanganate ID	582478 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	576708 3.0mL
Pipette/Syringe/Dispenser ID	MET016 P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 73044 Batch Start Date: 05/08/23 10:00 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep FH Batch End Date: 05/08/23 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00968	90L1HGDayVER 00853		
140-31634-A-1-A	AS29-1,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31634-A-6-A	AS29-2,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31634-A-11-A	AS29-2,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31634-A-16-A	BLANK,CONTAINER 12	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31634-A-17-A	BLANK,CONTAINER 8A	AT Prep FH, 29/7470A	T	5 mL	50 mL				
MB 140-72928/6-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCS 140-72928/7-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCSD 140-72928/8-A		AT Prep FH, 29/7470A		5 mL	50 mL				
ICV 140-73044/16		AT Prep FH, 29/7470A		50 mL	50 mL		1.25 mL		
ICB 140-73044/17		AT Prep FH, 29/7470A		50 mL	50 mL				
CRA 140-73044/18		AT Prep FH, 29/7470A		50 mL	50 mL	0.1 mL			
CCV 140-73044/19		AT Prep FH, 29/7470A		50 mL	50 mL	2.5 mL			
CCB 140-73044/20		AT Prep FH, 29/7470A		50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31634-1

SDG No.:

Batch Number: 73044 Batch Start Date: 05/08/23 10:00 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep FH Batch End Date: 05/08/23 13:30

Batch Notes	
Uncorrected Temperature	90 In at 10:50 Degrees C
Uncorrected Temperature 2	90 Out at 12:50 Degrees C
Digestion Tube/Cup ID	022023
Hot Block ID	G
Thermometer ID	Metals 24
Nitric Acid ID	575638 1.25mL
Hydrochloric Acid ID	583070 2.0mL
Sulfuric Acid ID	570624 2.5mL
Potassium Permanganate ID	582478 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	576708 3.0mL
Pipette/Syringe/Dispenser ID	MET015 MET016 P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-72548/4-a			
10	10	1	10	1	QC	lcs 140-72548/5-a			
11	11	1	11	1	QC	lcsd 140-72548/6-a			
12	12	1	12	1	Unk	mb 140-72685/5-a			
13	13	1	1	2	QC	lcs 140-72685/6-a			
14	14	1	2	2	QC	lcsd 140-72685/7-a			
15	15	1	3	2	Unk	mb 140-72927/5-a			
16	16	1	4	2	QC	lcs 140-72927/6-a			
17	17	1	5	2	QC	lcsd 140-72927/7-a			
18	18	1	6	2	Unk	mb 140-72928/6-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	QC	lcs 140-72928/7-a			
22	22	1	10	2	QC	lcsd 140-72928/8-a			
23	23	1	11	2	Unk	140-31425-a-1-a			
24	24	1	12	2	Unk	140-31425-a-6-a			
25	25	1	1	3	Unk	140-31425-a-6-a PDS			
26	26	1	2	3	Unk	140-31425-a-6-a PDSD			
27	27	1	3	3	Unk	140-31425-a-11-a			
28	28	1	4	3	Unk	140-31425-a-6-a SD@5	2ML TO 10ML		
29	29	1	5	3	Unk	140-31398-a-3-a			
30	30	1	6	3	Unk	140-31398-a-10-a			
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-31398-a-10-a PDS			
34	34	1	10	3	Unk	31398-a-10-a PDSD			
35	35	1	11	3	Unk	140-31398-a-17-a			
36	36	1	12	3	Unk	140-31398-a-29-a			
37	37	1	1	4	Unk	31398-a-10-a SD@5	2ML TO 10ML		
38	38	1	2	4	Unk	140-31634-a-2-a			
39	39	1	3	4	Unk	140-31634-a-7-a			
40	40	1	4	4	Unk	140-31634-a-7-a PDS			
41	41	1	5	4	Unk	140-31634-a-7-a PDSD			
42	42	1	6	4	Unk	140-31634-a-7-a SD@5	2ML TO 10ML		
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB			
45	45	1	9	4	Unk	140-31634-a-12-a			
46	46	1	10	4	Unk	140-31634-a-19-a			
47	47	1	11	4	Unk	140-31634-a-1-a			
48	48	1	12	4	Unk	140-31634-a-6-a			
49	49	1	1	5	Unk	140-31634-a-6-a PDS			
50	50	1	2	5	Unk	140-31634-a-6-a PDSD			
51	51	1	3	5	Unk	140-31634-a-11-a			
52	52	1	4	5	Unk	140-31634-a-16-a			
53	53	1	5	5	Unk	140-31634-a-17-a			
54	54	1	6	5	Unk	140-31634-a-6-a SD@5	2ML TO 10ML		
55	55	1	7	5	QC	CRI			
56	56	1	8	5	QC	CCV			
57	57	1	9	5	Unk	CCB			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	mb 140-72685/5-a			
59	59	1	11	5	Unk	140-31425-a-1-a @2	5ML TO 10ML		
60	60	1	12	5	Unk	140-31425-a-6-a @2	5ML TO 10ML (A)		
61	61	2	1	1	Unk	31425-a-6-a PDS@2	5ML TO 10ML		
62	62	2	2	1	Unk	31425-a-6-a PDSD@2	5ML TO 10ML		
63	63	2	3	1	Unk	140-31425-a-11-a @2	5ML TO 10ML		
64	64	2	4	1	Unk	140-31398-a-3-a @3	4ML TO 12ML		
65	65	2	5	1	Unk	140-31398-a-10-a @3	4ML TO 12ML (B)		
66	66	2	6	1	Unk	31398-a-10-a PDS@3	4ML TO 12ML		
67	67	2	7	1	Unk	31425-a-6-a SD@10	2ML (A) TO 10ML		
68	68	2	8	1	QC	CCV			
69	69	2	9	1	Unk	CCB			
70	70	2	10	1	Unk	31398-a-10-a PDSD@3	4ML TO 12ML		
71	71	2	11	1	Unk	140-31398-a-17-a @3	4ML TO 12ML		
72	72	2	12	1	Unk	140-31398-a-29-a @3	4ML TO 12ML		
73	73	2	1	2	Unk	31398-a-10-a SD@15	2ML (B) TO 10ML		
74	74	2	2	2	Unk	140-31634-a-1-a @2	5ML TO 10ML		
75	75	2	3	2	Unk	140-31634-a-6-a @2	5ML TO 10ML (C)		
76	76	2	4	2	Unk	31634-a-6-a PDS@2	5ML TO 10ML		
77	77	2	5	2	Unk	31634-a-6-a PDSD@2	5ML TO 10ML		
78	78	2	6	2	Unk	140-31634-a-11-a @2	5ML TO 10ML		
79	79	2	7	2	Unk	31634-a-6-a SD@10	2ML (C) TO 10ML		
80	80	2	8	2	QC	CCV			
81	81	2	9	2	Unk	CCB			
82	82	2	10	2	Unk	140-31634-a-16-a @2	5ML TO 10ML		
83	83	2	11	2	QC	CRI			
84	84	2	12	2	QC	CCV			
85	85	2	1	3	Unk	CCB			
86	86	2	2	3	Unk	Sample-66			
87	87	2	3	3	Unk	Sample-67			
88	88	2	4	3	Unk	Sample-68			
89	89	2	5	3	Unk	Sample-43			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-72548/4-a			
10	10	1	10	1	QC	lcs 140-72548/5-a			
11	11	1	11	1	QC	lcsd 140-72548/6-a			
12	12	1	12	1	Unk 1	mb 140-72685/5-a	Rev AL		
13	13	1	1	2	QC	lcs 140-72685/6-a			
14	14	1	2	2	QC	lcsd 140-72685/7-a			
15	15	1	3	2	Unk	mb 140-72927/5-a			
16	16	1	4	2	QC	lcs 140-72927/6-a			
17	17	1	5	2	QC	lcsd 140-72927/7-a			
18	18	1	6	2	Unk	mb 140-72928/6-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	QC	lcs 140-72928/7-a			
22	22	1	10	2	QC	lcsd 140-72928/8-a			
23	23	1	11	2	Unk 2	140-31425-a-1-a	S;↑e2- As,Co,Ni,Pb,Se		45555(
24	24	1	12	2	Unk 3	140-31425-a-6-a	S;↑e2		
25	25	1	1	3	Unk 4	140-31425-a-6-a PDS	e2		
26	26	1	2	3	Unk 5	140-31425-a-6-a PDSD	e2		
27	27	1	3	3	Unk 6	140-31425-a-11-a	S;↑e2		
28	28	1	4	3	Unk 10	140-31425-a-6-a SD@5	2ML TO 10ML e10		
29	29	1	5	3	Unk 7	140-31398-a-3-a	S;↑e3- As,Co,Ni,Pb,Se,TL		45555
30	30	1	6	3	Unk 8	140-31398-a-10-a	S;↑e3		
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk 9	140-31398-a-10-a PDS	e3		
34	34	1	10	3	Unk 11	31398-a-10-a PDSD	e3		
35	35	1	11	3	Unk 12	140-31398-a-17-a	S;↑e3		
36	36	1	12	3	Unk 13	140-31398-a-29-a	S;↑e3		
37	37	1	1	4	Unk 14	31398-a-10-a SD@5	2ML TO 10ML e15		
38	38	1	2	4	Unk	140-31634-a-2-a			
39	39	1	3	4	Unk	140-31634-a-7-a			
40	40	1	4	4	Unk	140-31634-a-7-a PDS			
41	41	1	5	4	Unk	140-31634-a-7-a PDSD			
42	42	1	6	4	Unk	140-31634-a-7-a SD@5	2ML TO 10ML		
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB	Fe-Rev		
45	45	1	9	4	Unk	140-31634-a-12-a			
46	46	1	10	4	Unk	140-31634-a-19-a			
47	47	1	11	4	Unk 15	140-31634-a-1-a	S;↑e2- As,Co,Ni,Pb,Se,TL		45552
48	48	1	12	4	Unk 16	140-31634-a-6-a	S;↑e2		
49	49	1	1	5	Unk 17	140-31634-a-6-a PDS	e2 >4X		
50	50	1	2	5	Unk 18	140-31634-a-6-a PDSD	e2		
51	51	1	3	5	Unk 19	140-31634-a-11-a	S;↑e2		
52	52	1	4	5	Unk 21	140-31634-a-16-a	S;↑e2		
53	53	1	5	5	Unk	140-31634-a-17-a ✓			
54	54	1	6	5	Unk 20	140-31634-a-6-a SD@5	2ML TO 10ML e10		
55	55	1	7	5	QC	CRI			
56	56	1	8	5	QC	CCV			
57	57	1	9	5	Unk	CCB			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	Sample-41			
59	59	1	11	5	Unk	Sample-42			
60	60	1	12	5	Unk	Sample-43			

FD50923

SI- 291

CCVL- 1128

ICV- 237

ICSA(Si)-75

ICSAB-118

CRI- 1158

CCV- 1155

Y- 162

H20- 55

√425 = As, Be, Cd, Co, Cr, Mn, Ni, Pb, Sb, Se
[Ag, Ba, Cu, (P), Tl, Zn]

√398 = Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe,
K, Li, Mg, Mn, Mo, Na, Ni, (P), Pb, Sb, Se
(Sn), (Sr), (Ti), Tl, V, Zn

634 = Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn,
Ni, Pb, Sb, Se, Tl, V, Zn
[(P)]

5037 3526 - 6548

97576 68303 - 126849

9472 6630 - 12314

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	mb 140-72685/5-a			
59	59	1	11	5	Unk	140-31425-a-1-a @2	5ML TO 10ML		
60	60	1	12	5	Unk	140-31425-a-6-a @2	5ML TO 10ML (A)		
61	61	2	1	1	Unk	31425-a-6-a PDS@2	5ML TO 10ML		
62	62	2	2	1	Unk	31425-a-6-a PDSD@2	5ML TO 10ML		
63	63	2	3	1	Unk	140-31425-a-11-a @2	5ML TO 10ML		
64	64	2	4	1	Unk	140-31398-a-3-a @3	4ML TO 12ML		
65	65	2	5	1	Unk	140-31398-a-10-a @3	4ML TO 12ML (B)		
66	66	2	6	1	Unk	31398-a-10-a PDS@3	4ML TO 12ML		
67	67	2	7	1	Unk	31425-a-6-a SD@10	2ML (A) TO 10ML		
68	68	2	8	1	QC	CCV			
69	69	2	9	1	Unk	CCB			
70	70	2	10	1	Unk	31398-a-10-a PDSD@3	4ML TO 12ML		
71	71	2	11	1	Unk	140-31398-a-17-a @3	4ML TO 12ML		
72	72	2	12	1	Unk	140-31398-a-29-a @3	4ML TO 12ML		
73	73	2	1	2	Unk	31398-a-10-a SD@15	2ML (B) TO 10ML		
74	74	2	2	2	Unk	140-31634-a-1-a @2	5ML TO 10ML		
75	75	2	3	2	Unk	140-31634-a-6-a @2	5ML TO 10ML (C)		
76	76	2	4	2	Unk	31634-a-6-a PDS@2	5ML TO 10ML		
77	77	2	5	2	Unk	31634-a-6-a PDSD@2	5ML TO 10ML		
78	78	2	6	2	Unk	140-31634-a-11-a @2	5ML TO 10ML		
79	79	2	7	2	Unk	31634-a-6-a SD@10	2ML (C) TO 10ML		
80	80	2	8	2	QC	CCV			
81	81	2	9	2	Unk	CCB			
82	82	2	10	2	Unk	140-31634-a-16-a @2	5ML TO 10ML		
83	83	2	11	2	QC	CRI			
84	84	2	12	2	QC	CCV			
85	85	2	1	3	Unk	CCB			
86	86	2	2	3	Unk	Sample-66			
87	87	2	3	3	Unk	Sample-67			
88	88	2	4	3	Unk	Sample-68			
89	89	2	5	3	Unk	Sample-43			

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72548 Analyst: Mcdevitt, Jenna D Batch Open: 4/24/2023 8:00:00AM

Batch End: 4/25/2023 5:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31425-A-1 (29_6010C)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-1-A
1	140-31425-A-1 (29_7470A)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-1-A
2	140-31425-A-6 (29_6010C)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-6-A
2	140-31425-A-6 (29_7470A)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-6-A
3	140-31425-A-11 (29_6010C)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-11-A
3	140-31425-A-11 (29_7470A)	N/A (140-31425-1)	Air Train Fro	1 Sample	100 mL	5/4/23	13_Days	4		140-31425-A-11-A
4	MB~140-72548/4 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-72548/4-A
5	LCS~140-72548/5 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-72548/5-A
6	LCSD~140-72548/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-72548/6-A

5/15/2023 4:46 PM

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72685

Analyst: Mcdevitt, Jenna D

Batch Open: 4/27/2023 10:48:00AM

Batch End: 4/28/2023 3:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
1	140-31398-A-3 (29_7470A)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-3-A
1	140-31398-A-3 (29_6010C)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-3-A
2	140-31398-A-10 (29_7470A)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-10-A
2	140-31398-A-10 (29_6010C)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-10-A
3	140-31398-A-17 (29_7470A)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-17-A
3	140-31398-A-17 (29_6010C)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-17-A
4	140-31398-A-29 (29_7470A)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-29-A
4	140-31398-A-29 (29_6010C)	N/A (140-31398-1)	Air Train Frc	1 Sample	100 mL	5/5/23	15_Days	4		140-31398-A-29-A
5	MB~140-72685/5 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-72685/5-A
6	LCS~140-72685/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-72685/6-A
7	LCSD~140-72685/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-72685/7-A

Page 190 of 568

5/15/2023 4:46 PM

29_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72927

Analyst: Collins, Kerry N

Batch Open: 5/4/2023 8:00:00AM

Batch End: 5/5/2023 4:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31634-A-2 (29_6010C)	N/A (140-31634-1)	Air Train Ba	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-2-A
2	140-31634-A-7 (29_6010C)	N/A (140-31634-1)	Air Train Ba	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-7-A
3	140-31634-A-12 (29_6010C)	N/A (140-31634-1)	Air Train Ba	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-12-A
4	140-31634-A-19 (29_6010C)	N/A (140-31634-1)	Air Train Ba	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-19-A
5	MB~140-72927/5 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-72927/5-A
6	LCS~140-72927/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-72927/6-A
7	LCSD~140-72927/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-72927/7-A

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72928

Analyst: Collins, Kerry N

Batch Open: 5/4/2023 8:00:00AM

Batch End: 5/5/2023 4:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31634-A-1 (29_6010C)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-1-A
1	140-31634-A-1 (29_7470A)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-1-A
2	140-31634-A-6 (29_6010C)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-6-A
	140-31634-A-6 (29_7470A)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-6-A
	140-31634-A-11 (29_6010C)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-11-A
3	140-31634-A-11 (29_7470A)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-11-A
4	140-31634-A-16 (29_6010C)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-16-A
4	140-31634-A-16 (29_7470A)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-16-A
5	140-31634-A-17 (29_6010C)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-17-A
5	140-31634-A-17 (29_7470A)	N/A (140-31634-1)	Air Train Frc	1 Sample	100 mL	5/11/23	8_Days	4		140-31634-A-17-A
6	MB~140-72928/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-72928/6-A
	LCS~140-72928/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-72928/7-A
	LCSD~140-72928/8 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-72928/8-A

Page 192 of 568

5/15/2023 4:46 PM

Sample Name: ICIS Acquired: 5/9/2023 11:19:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00016	.00089	-.00056	.00073	.01185	-.00048
Stddev	.00003	.00030	.00018	.00003	.00066	.00005
%RSD	21.887	33.544	32.566	4.2695	5.5304	10.302
#1	-.00015	.00056	-.00055	.00076	.01119	-.00053
#2	-.00012	.00113	-.00038	.00073	.01251	-.00045
#3	-.00019	.00099	-.00074	.00070	.01186	-.00044

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01377	-.00029	-.00053	.00019	.00232	.00148
Stddev	.00022	.00000	.00013	.00002	.00006	.00004
%RSD	1.6301	.98328	24.598	11.527	2.6500	2.6397
#1	.01397	-.00029	-.00052	.00021	.00239	.00148
#2	.01382	-.00029	-.00066	.00019	.00229	.00144
#3	.01353	-.00029	-.00040	.00016	.00229	.00151

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00120	.00142	-.00014	.00016	.00046	.00027
Stddev	.00067	.00145	.00024	.00005	.00011	.00044
%RSD	55.539	101.45	166.51	33.636	24.431	161.69
#1	.00151	-.00024	-.00004	.00022	.00059	.00046
#2	.00044	.00225	.00003	.00012	.00038	-.00023
#3	.00166	.00227	-.00041	.00013	.00042	.00058

Sample Name: ICIS Acquired: 5/9/2023 11:19:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00415	.00143	-.00001	-.00004	.00115	.00051
Stddev	.00088	.00015	.00004	.00001	.00011	.00018
%RSD	21.232	10.622	289.48	38.364	9.6727	36.169
#1	.00484	.00147	.00002	-.00003	.00115	.00048
#2	.00444	.00126	-.00000	-.00005	.00126	.00070
#3	.00316	.00156	-.00005	-.00003	.00104	.00034

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00037	.00056	.00061	-.00151	-.00034	-.00037
Stddev	.00010	.00008	.00010	.00030	.00047	.00003
%RSD	26.327	15.280	16.314	19.924	136.95	6.9327
#1	.00026	.00065	.00064	-.00171	-.00087	-.00039
#2	.00042	.00050	.00050	-.00116	.00003	-.00038
#3	.00044	.00052	.00069	-.00165	-.00019	-.00034

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	-.00012	.00755
Stddev	.00007	.00006
%RSD	58.822	.80981
#1	-.00004	.00748
#2	-.00016	.00756
#3	-.00015	.00760

Sample Name: ICIS Acquired: 5/9/2023 11:19:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5059.0	96920.	9393.5
Stddev	29.7	707.	19.0
%RSD	.58712	.72942	.20267
#1	5033.9	96234.	9411.0
#2	5051.3	96879.	9373.2
#3	5091.8	97646.	9396.2

Sample Name: S1 Acquired: 5/9/2023 11:24:38 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.22387	1.2924	.14201	.26574	19.077	21.305
Stddev	.00059	.0013	.00020	.00018	.063	.086
%RSD	.26542	.10346	.14423	.06611	.33054	.40599
#1	.22456	1.2937	.14189	.26583	19.149	21.209
#2	.22353	1.2910	.14225	.26585	19.036	21.329
#3	.22353	1.2925	.14190	.26554	19.044	21.377

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	24.602	3.1721	6.6338	.46286	.88085	4.6681
Stddev	.048	.0033	.0043	.00061	.00340	.0035
%RSD	.19652	.10312	.06492	.13247	.38608	.07563
#1	24.547	3.1739	6.6387	.46258	.88417	4.6719
#2	24.620	3.1740	6.6322	.46243	.88099	4.6674
#3	24.639	3.1683	6.6306	.46356	.87738	4.6650

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.0347	7.8399	1.9230	2.5850	3.5365	.05599
Stddev	.0242	.0561	.0068	.0083	.0008	.00028
%RSD	.40169	.71548	.35512	.31997	.02122	.49460
#1	6.0620	7.9045	1.9152	2.5935	3.5361	.05629
#2	6.0265	7.8041	1.9281	2.5770	3.5360	.05595
#3	6.0156	7.8110	1.9256	2.5845	3.5373	.05574

Sample Name: S1 Acquired: 5/9/2023 11:24:38 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	27.129	5.4168	.26608	.01195	.29739	.14092
Stddev	.153	.0045	.00033	.00003	.00043	.00013
%RSD	.56310	.08255	.12327	.26341	.14406	.08939
#1	27.306	5.4162	.26593	.01194	.29773	.14084
#2	27.038	5.4216	.26646	.01193	.29754	.14085
#3	27.044	5.4127	.26586	.01198	.29691	.14106

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.08435	.07053	1.1596	20.820	1.6868	.14186
Stddev	.00017	.00077	.0002	.302	.0025	.00014
%RSD	.20459	1.0984	.02058	1.4505	.14997	.10075
#1	.08454	.07140	1.1595	20.759	1.6896	.14176
#2	.08433	.06993	1.1594	21.147	1.6848	.14181
#3	.08419	.07025	1.1599	20.553	1.6860	.14203

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.89768	10.764
Stddev	.00103	.003
%RSD	.11489	.02558
#1	.89884	10.764
#2	.89687	10.761
#3	.89732	10.766

Sample Name: S1 Acquired: 5/9/2023 11:24:38 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4814.0	93213.	9127.1
Stddev	10.5	309.	23.4
%RSD	.21852	.33107	.25607
#1	4802.0	92974.	9153.9
#2	4818.6	93561.	9117.0
#3	4821.4	93104.	9110.6

Sample Name: CCVL Acquired: 5/9/2023 11:29:39 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48723	12.417	.24676	1.0033	.98712	1.0400
Stddev	.00095	.053	.00231	.0024	.00462	.0021
%RSD	.19455	.42298	.93516	.24410	.46810	.20456
#1	.48700	12.357	.24690	1.0005	.98184	1.0411
#2	.48827	12.452	.24900	1.0043	.99042	1.0412
#3	.48641	12.443	.24439	1.0050	.98909	1.0375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.149	.25654	1.0194	1.0200	.98339	12.755
Stddev	.074	.00032	.0019	.0036	.00040	.048
%RSD	.29254	.12474	.18253	.35648	.04077	.37740
#1	25.101	.25675	1.0199	1.0173	.98305	12.715
#2	25.112	.25669	1.0209	1.0185	.98329	12.741
#3	25.234	.25617	1.0173	1.0241	.98383	12.808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/9/2023 11:29:39 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.226	.98368	24.739	1.0241	1.0185	25.538
Stddev	.106	.00515	.117	.0023	.0020	.775
%RSD	.42071	.52315	.47156	.22858	.19477	3.0364
#1	25.111	.97775	24.756	1.0217	1.0177	25.563
#2	25.247	.98696	24.615	1.0243	1.0208	26.301
#3	25.320	.98633	24.846	1.0264	1.0170	24.751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.870	1.0272	.99561	.25526	.25540	.24744
Stddev	.066	.0018	.00449	.00196	.00067	.00226
%RSD	.26726	.17101	.45106	.76940	.26159	.91507
#1	24.793	1.0273	.99042	.25678	.25463	.25002
#2	24.904	1.0289	.99810	.25597	.25587	.24651
#3	24.912	1.0254	.99829	.25304	.25569	.24579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/9/2023 11:29:39 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24687	1.0210	1.0246	1.0102	1.0036	.51788
Stddev	.00117	.0235	.0012	.0047	.0030	.00136
%RSD	.47275	2.2994	.11298	.46913	.30113	.26329
#1	.24795	1.0021	1.0247	1.0048	1.0002	.51802
#2	.24564	1.0137	1.0256	1.0128	1.0056	.51645
#3	.24703	1.0473	1.0233	1.0131	1.0051	.51917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.0097	1.0035
Stddev	.0017	.0010
%RSD	.16799	.10391
#1	1.0077	1.0034
#2	1.0107	1.0046
#3	1.0106	1.0025
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCVL Acquired: 5/9/2023 11:29:39 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4997.5	96286.	9275.2
Stddev	11.8	97.	103.8
%RSD	.23679	.10022	1.1194
#1	4989.7	96331.	9199.7
#2	4991.6	96175.	9393.6
#3	5011.1	96352.	9232.4

Sample Name: ICV Acquired: 5/9/2023 11:34:28 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47149	12.036	.24788	1.0232	.97594	1.0171
Stddev	.00261	.031	.00046	.0051	.00176	.0084
%RSD	.55252	.25952	.18445	.49683	.18075	.82885
#1	.47104	12.022	.24840	1.0223	.97524	1.0191
#2	.47429	12.015	.24755	1.0287	.97794	1.0243
#3	.46913	12.072	.24770	1.0186	.97462	1.0078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.317	.24812	.99730	1.0002	.96520	12.247
Stddev	.030	.00071	.00180	.0035	.00267	.037
%RSD	.12470	.28660	.18005	.35108	.27647	.30060
#1	24.284	.24888	.99900	.99710	.96794	12.207
#2	24.344	.24748	.99542	1.0040	.96507	12.253
#3	24.322	.24799	.99747	.99954	.96261	12.280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/9/2023 11:34:28 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.539	.97703	23.676	.99803	.99339	23.511
Stddev	.008	.00117	.090	.00608	.00250	.222
%RSD	.03309	.11950	.37951	.60970	.25166	.94305
#1	24.534	.97711	23.582	.99621	.99625	23.766
#2	24.548	.97815	23.686	1.0048	.99235	23.404
#3	24.534	.97582	23.760	.99306	.99158	23.363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.102	1.0141	.98577	.24717	.24713	.23777
Stddev	.022	.0026	.00452	.00118	.00175	.00143
%RSD	.09056	.25279	.45897	.47620	.70616	.59946
#1	24.078	1.0164	.99084	.24583	.24905	.23940
#2	24.106	1.0113	.98432	.24802	.24668	.23711
#3	24.122	1.0146	.98214	.24766	.24565	.23679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/9/2023 11:34:28 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24197	1.0037	1.0114	.98572	1.0007	.52256
Stddev	.00299	.0087	.0029	.00175	.0020	.00100
%RSD	1.2339	.87119	.29211	.17750	.20433	.19206
#1	.24447	.99490	1.0126	.98403	1.0011	.52276
#2	.23867	1.0038	1.0081	.98752	.99846	.52345
#3	.24279	1.0124	1.0136	.98562	1.0025	.52147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.98540	.98978
Stddev	.00399	.00182
%RSD	.40478	.18357
#1	.98529	.99185
#2	.98945	.98847
#3	.98147	.98902
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: ICV Acquired: 5/9/2023 11:34:28 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4990.6	96845.	9455.1
Stddev	14.8	495.	9.1
%RSD	.29602	.51109	.09662
#1	4974.7	96654.	9454.0
#2	5004.0	96474.	9446.6
#3	4992.9	97407.	9464.8

Sample Name: ICB Acquired: 5/9/2023 11:39:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.02624	-.00020	.00295	-.00001	.00006
Stddev	.00002	.03036	.00109	.00169	.00020	.00003
%RSD	40.721	115.67	538.00	57.484	1732.8	55.731
#1	-.00005	.05036	-.00044	.00483	.00021	.00010
#2	-.00004	.03622	.00099	.00246	-.00016	.00005
#3	-.00002	-.00784	-.00115	.00155	-.00009	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00265	.00000	.00016	-.00001	-.00015	-.00032
Stddev	.00116	.00007	.00010	.00023	.00016	.00064
%RSD	43.661	3997.6	65.740	1970.4	109.93	200.35
#1	.00395	.00008	.00005	.00017	.00003	.00042
#2	.00173	-.00001	.00017	.00007	-.00019	-.00066
#3	.00228	-.00006	.00025	-.00027	-.00028	-.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/9/2023 11:39:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02292	.00024	.01594	.00010	.00015	F -.38261
Stddev	.01569	.00063	.00410	.00002	.00013	.90616
%RSD	68.459	260.71	25.721	17.506	86.441	236.84
#1	-.00521	-.00048	.01173	.00013	.00011	-.74679
#2	-.02847	.00070	.01992	.00010	.00005	-1.0500
#3	-.03509	.00051	.01617	.00009	.00030	.64899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00308	.00004	.00016	F .00239	-.00111	-.00023
Stddev	.00387	.00009	.00054	.00143	.00056	.00031
%RSD	125.44	244.09	345.62	59.859	50.532	134.40
#1	.00655	.00013	-.00039	.00269	-.00047	-.00035
#2	-.00109	.00002	.00016	.00366	-.00133	-.00045
#3	.00380	-.00004	.00070	.00084	-.00152	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: ICB Acquired: 5/9/2023 11:39:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	.00179	.00031	-.00017	.00042	.00320
Stddev	.00184	.00541	.00061	.00015	.00053	.00139
%RSD	358.28	301.50	199.18	87.997	126.14	43.527
#1	.00069	.00790	.00058	-.00001	.00093	.00184
#2	.00041	-.00238	.00074	-.00020	.00046	.00462
#3	-.00264	-.00014	-.00039	-.00031	-.00013	.00314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00002	.00004
Stddev	.00014	.00002
%RSD	798.88	41.622
#1	.00017	.00006
#2	-.00002	.00003
#3	-.00010	.00004
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICB Acquired: 5/9/2023 11:39:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5037.1	97576.	9472.3
Stddev	11.0	384.	71.3
%RSD	.21931	.39403	.75225
#1	5024.4	97151.	9553.9
#2	5044.1	97899.	9422.4
#3	5043.0	97677.	9440.6

Sample Name: ICSA Acquired: 5/9/2023 11:44:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00153	495.32	.00647	.00148	.00251	-.00031
Stddev	.00020	.79	.00139	.00052	.00014	.00001
%RSD	12.852	.15956	21.548	35.399	5.5397	1.9964
#1	-.00142	494.74	.00510	.00199	.00266	-.00030
#2	-.00142	496.22	.00642	.00095	.00240	-.00031
#3	-.00176	495.01	.00789	.00150	.00246	-.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	475.41	.00175	-.00029	.00566	.00009	188.74
Stddev	4.75	.00012	.00005	.00032	.00013	.53
%RSD	.99865	6.5903	19.122	5.6612	157.39	.27875
#1	480.06	.00162	-.00023	.00531	-.00005	188.55
#2	470.57	.00179	-.00034	.00574	.00010	189.34
#3	475.60	.00184	-.00028	.00594	.00021	188.34
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 5/9/2023 11:44:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00846	.00482	503.46	.00012	-.00038	-.85839
Stddev	.02099	.00090	1.23	.00010	.00006	.37443
%RSD	248.23	18.656	.24424	82.425	14.994	43.620
#1	-.03078	.00425	503.49	.00023	-.00033	-.62572
#2	.01088	.00586	504.68	.00005	-.00038	-.65915
#3	-.00547	.00435	502.22	.00007	-.00044	-1.2903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07339	-.00182	-.02273	.01184	F -.01929	.00509
Stddev	.00708	.00013	.00116	.00149	.00300	.00112
%RSD	9.6530	7.2439	5.1232	12.553	15.549	21.970
#1	.06579	-.00172	-.02406	.01112	-.01746	.00486
#2	.07456	-.00177	-.02220	.01085	-.01765	.00411
#3	.07982	-.00197	-.02191	.01355	-.02275	.00631
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					.01500	
Low Limit					-.01500	

Sample Name: ICSA Acquired: 5/9/2023 11:44:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00898	828.49	.00061	.00479	.01430	.00604
Stddev	.00166	3.86	.00080	.00008	.00103	.00256
%RSD	18.526	.46534	130.66	1.6411	7.1894	42.446
#1	-.00902	824.30	-.00030	.00475	.01514	.00792
#2	-.00729	831.89	.00097	.00473	.01459	.00709
#3	-.01062	829.27	.00116	.00488	.01315	.00312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00089	.00454
Stddev	.00035	.00014
%RSD	39.212	3.1780
#1	.00111	.00466
#2	.00108	.00438
#3	.00049	.00459
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSA Acquired: 5/9/2023 11:44:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4854.5	91636.	9009.8
Stddev	12.2	443.	78.9
%RSD	.25218	.48325	.87535
#1	4840.5	91437.	8931.7
#2	4859.4	91328.	9008.3
#3	4863.5	92144.	9089.4

Sample Name: ICSAB Acquired: 5/9/2023 11:49:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19542	251.99	.09902	.96780	.49414	.50420
Stddev	.00030	.17	.00077	.00521	.00169	.00222
%RSD	.15208	.06804	.78050	.53846	.34176	.43953
#1	.19508	252.12	.09986	.96292	.49219	.50239
#2	.19554	252.06	.09833	.96719	.49525	.50354
#3	.19564	251.80	.09887	.97329	.49497	.50667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	246.55	.92574	.47259	.47652	.50012	98.520
Stddev	.43	.00135	.00112	.00256	.00049	.106
%RSD	.17298	.14572	.23782	.53726	.09765	.10713
#1	246.09	.92577	.47291	.47553	.49963	98.642
#2	246.92	.92707	.47352	.47460	.50014	98.466
#3	246.65	.92437	.47134	.47943	.50060	98.452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/9/2023 11:49:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.526	1.0042	254.65	.48569	.96019	8.9308
Stddev	.026	.0045	.61	.00225	.00229	1.1463
%RSD	.24503	.44602	.23998	.46286	.23894	12.835
#1	10.549	1.0078	254.97	.48416	.95765	9.3692
#2	10.531	1.0058	253.95	.48463	.96212	7.6300
#3	10.498	.99919	255.04	.48827	.96079	9.7932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.222	.94026	.96296	.05155	.04777	.58040
Stddev	.034	.00146	.00273	.00075	.00079	.00211
%RSD	.32850	.15514	.28353	1.4542	1.6476	.36316
#1	10.242	.94039	.96000	.05133	.04714	.57985
#2	10.240	.94165	.96539	.05239	.04751	.57861
#3	10.183	.93874	.96348	.05094	.04865	.58272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/9/2023 11:49:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04569	F 2.0170	.95220	1.0083	.99912	.09721
Stddev	.00146	.2097	.00315	.0025	.00230	.00273
%RSD	3.2044	10.396	.33129	.24792	.23008	2.8054
#1	.04400	2.2468	.95302	1.0107	.99899	.10036
#2	.04654	1.9683	.95487	1.0085	.99689	.09570
#3	.04654	1.8360	.94872	1.0057	1.0015	.09558
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1.2049				
Low Limit		.79510				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.48532	.97513
Stddev	.00156	.00242
%RSD	.32046	.24829
#1	.48353	.97409
#2	.48610	.97790
#3	.48633	.97341
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSAB Acquired: 5/9/2023 11:49:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4867.3	93138.	9047.8
Stddev	2.1	396.	71.6
%RSD	.04382	.42482	.79141
#1	4868.2	93338.	8974.0
#2	4864.9	93395.	9117.0
#3	4868.9	92683.	9052.5

Sample Name: CRI Acquired: 5/9/2023 11:54:06 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00906	.22669	.00995	.20063	.00963	.00533
Stddev	.00058	.01825	.00042	.00093	.00009	.00003
%RSD	6.4310	8.0504	4.2554	.46400	.88941	.56501
#1	.00958	.24012	.01018	.20148	.00970	.00533
#2	.00916	.20591	.01021	.19964	.00954	.00530
#3	.00843	.23402	.00946	.20078	.00966	.00536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0839	.00509	.05104	.00979	.02534	.10848
Stddev	.0325	.00009	.00008	.00057	.00025	.00253
%RSD	.63918	1.7471	.15915	5.8546	.98073	2.3353
#1	5.0484	.00507	.05096	.01027	.02562	.11083
#2	5.0912	.00518	.05112	.00916	.02516	.10881
#3	5.1122	.00501	.05106	.00996	.02524	.10580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 11:54:06 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0867	.04694	4.8265	.01499	.03996	5.0045
Stddev	.0510	.00067	.0594	.00015	.00022	.1502
%RSD	1.0019	1.4376	1.2307	1.0071	.55097	3.0015
#1	5.0664	.04638	4.7605	.01514	.04009	4.8442
#2	5.1447	.04675	4.8432	.01484	.04009	5.0273
#3	5.0491	.04769	4.8757	.01500	.03971	5.1420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9950	.04118	.30084	.01419	.00919	.05755
Stddev	.0078	.00008	.00340	.00068	.00180	.00016
%RSD	.15579	.18319	1.1288	4.8171	19.634	.26983
#1	4.9883	.04109	.30466	.01380	.00790	.05752
#2	5.0035	.04121	.29816	.01498	.01125	.05741
#3	4.9931	.04123	.29970	.01379	.00842	.05772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 11:54:06 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00826	F .86297	.10063	.04917	.04745	.01427
Stddev	.00089	.04563	.00079	.00019	.00048	.00097
%RSD	10.774	5.2873	.78144	.37747	1.0058	6.8008
#1	.00814	.91287	.09973	.04910	.04791	.01446
#2	.00921	.85264	.10098	.04938	.04748	.01514
#3	.00744	.82339	.10117	.04903	.04696	.01322
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02502	.02038
Stddev	.00045	.00011
%RSD	1.7984	.54647
#1	.02552	.02044
#2	.02488	.02045
#3	.02465	.02025
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/9/2023 11:54:06 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5001.4	95581.	9275.0
Stddev	9.9	416.	101.3
%RSD	.19725	.43543	1.0918
#1	4995.8	95448.	9365.4
#2	4995.6	96048.	9165.5
#3	5012.8	95248.	9294.0

Sample Name: CCV Acquired: 5/9/2023 11:58:57 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96324	24.565	.48810	1.9668	1.9404	2.0424
Stddev	.00153	.114	.00242	.0093	.0035	.0176
%RSD	.15877	.46353	.49545	.47179	.18033	.86029
#1	.96305	24.464	.48719	1.9579	1.9418	2.0240
#2	.96181	24.543	.49085	1.9662	1.9430	2.0590
#3	.96485	24.689	.48628	1.9764	1.9364	2.0443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.905	.50236	1.9908	2.0078	1.9287	24.993
Stddev	.213	.00085	.0023	.0075	.0030	.078
%RSD	.42599	.17016	.11603	.37254	.15640	.31247
#1	49.747	.50146	1.9883	2.0001	1.9252	24.927
#2	49.821	.50316	1.9929	2.0083	1.9299	24.974
#3	50.146	.50247	1.9913	2.0150	1.9309	25.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 11:58:57 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.334	1.9200	49.766	2.0223	1.9953	49.122
Stddev	.071	.0029	.492	.0060	.0019	1.039
%RSD	.14389	.15097	.98892	.29649	.09523	2.1151
#1	49.261	1.9202	49.465	2.0161	1.9933	50.321
#2	49.338	1.9228	49.498	2.0228	1.9954	48.572
#3	49.402	1.9170	50.334	2.0280	1.9971	48.474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.929	1.9997	1.9571	.50642	.50027	.48293
Stddev	.046	.0026	.0064	.00273	.00228	.00241
%RSD	.09393	.13182	.32495	.53849	.45559	.49939
#1	48.970	1.9970	1.9541	.50394	.49793	.48381
#2	48.879	2.0022	1.9529	.50934	.50248	.48020
#3	48.937	2.0000	1.9644	.50599	.50039	.48477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 11:58:57 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48825	2.1594	1.9930	1.9838	1.9719	1.0102
Stddev	.00276	.0260	.0027	.0015	.0010	.0060
%RSD	.56564	1.2026	.13311	.07348	.04820	.59367
#1	.48825	2.1894	1.9913	1.9851	1.9708	1.0033
#2	.48548	2.1442	1.9961	1.9840	1.9725	1.0131
#3	.49101	2.1446	1.9917	1.9822	1.9723	1.0142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9917	1.9710
Stddev	.0065	.0016
%RSD	.32446	.07943
#1	1.9846	1.9692
#2	1.9935	1.9720
#3	1.9971	1.9719
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 11:58:57 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4946.8	94486.	9071.5
Stddev	5.9	188.	74.8
%RSD	.12010	.19890	.82456
#1	4940.3	94504.	9072.3
#2	4948.3	94290.	9145.9
#3	4951.9	94665.	8996.3

Sample Name: CCB Acquired: 5/9/2023 12:03:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00030	.01171	.00110	.00379	.00019	.00008
Stddev	.00042	.01328	.00143	.00183	.00018	.00005
%RSD	141.22	113.36	130.23	48.234	99.654	54.097
#1	-.00069	.02254	.00250	.00571	.00039	.00014
#2	-.00036	.01569	.00116	.00359	.00002	.00006
#3	.00015	-.00310	-.00036	.00207	.00015	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00744	.00005	.00024	-.00049	.00023	.00188
Stddev	.00354	.00006	.00011	.00044	.00033	.00268
%RSD	47.564	105.80	46.798	89.820	144.60	142.74
#1	.01152	.00002	.00032	-.00011	.00051	.00489
#2	.00563	.00002	.00011	-.00097	-.00013	.00101
#3	.00517	.00012	.00029	-.00038	.00030	-.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 12:03:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02051	-.00069	.01863	.00010	.00027	-.05373
Stddev	.01382	.00142	.01462	.00009	.00014	.53557
%RSD	67.399	206.28	78.466	92.652	51.335	996.78
#1	-.01147	-.00209	.00178	.00019	.00016	-.16434
#2	-.03642	.00075	.02618	.00011	.00043	.52851
#3	-.01363	-.00072	.02792	.00000	.00022	-.52536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00791	.00008	.00167	-.00084	-.00040	-.00094
Stddev	.01083	.00016	.00036	.00050	.00064	.00093
%RSD	136.92	189.45	21.639	59.168	157.99	99.562
#1	.01898	.00021	.00160	-.00088	-.00062	-.00007
#2	.00742	-.00009	.00135	-.00032	.00032	-.00192
#3	-.00267	.00013	.00206	-.00131	-.00091	-.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 12:03:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00164	F .10609	.00010	.00003	-.00011	.00353
Stddev	.00141	.02441	.00057	.00006	.00073	.00150
%RSD	86.037	23.008	566.63	241.27	670.23	42.456
#1	-.00074	.13261	.00008	.00009	.00068	.00309
#2	-.00326	.08456	-.00046	-.00003	-.00026	.00520
#3	-.00091	.10110	.00069	.00001	-.00075	.00230
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00018	.00002
Stddev	.00030	.00011
%RSD	168.77	431.99
#1	.00017	.00013
#2	-.00033	-.00009
#3	-.00037	.00003
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 12:03:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5056.8	95883.	9120.8
Stddev	39.7	1410.	113.7
%RSD	.78578	1.4709	1.2470
#1	5011.2	94286.	8989.5
#2	5075.1	96401.	9187.1
#3	5084.0	96960.	9185.9

Sample Name: mb 140-72548/4-a Acquired: 5/9/2023 12:08:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00115	.01794	.00375	F 138.05	.00128	.00002
Stddev	.00040	.00297	.00025	.25	.00002	.00001
%RSD	34.433	16.562	6.5462	.18174	1.7441	25.484
#1	-.00143	.01804	.00348	138.31	.00127	.00003
#2	-.00070	.02086	.00395	138.03	.00131	.00002
#3	-.00134	.01492	.00383	137.81	.00128	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.20000		
Low Limit				-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03851	-.00005	.00010	-.00021	-.00023	.00643
Stddev	.00325	.00003	.00004	.00030	.00008	.00414
%RSD	8.4357	66.530	35.596	145.41	33.439	64.368
#1	.03515	-.00005	.00014	-.00050	-.00025	.00725
#2	.03874	-.00008	.00007	.00011	-.00015	.00194
#3	.04164	-.00001	.00010	-.00023	-.00030	.01009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72548/4-a Acquired: 5/9/2023 12:08:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01861	-.00009	.00389	.00027	.00046	-.66195
Stddev	.01756	.00039	.01572	.00003	.00016	.81601
%RSD	94.401	421.28	404.54	10.030	34.418	123.27
#1	-.00332	-.00011	.00777	.00028	.00044	-1.5972
#2	-.03779	-.00048	-.01341	.00028	.00063	-.29374
#3	-.01470	.00031	.01731	.00024	.00032	-.09493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02429	.00022	-.00170	.00222	-.00244	.00047
Stddev	.00416	.00006	.00112	.00291	.00148	.00004
%RSD	17.118	26.791	65.866	131.29	60.780	8.8218
#1	.02852	.00017	-.00291	-.00027	-.00112	.00051
#2	.02021	.00028	-.00146	.00542	-.00216	.00043
#3	.02416	.00022	-.00072	.00150	-.00405	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72548/4-a Acquired: 5/9/2023 12:08:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00273	F 19.521	-.00020	.00016	-.00082	.00228
Stddev	.00183	11.085	.00038	.00005	.00042	.00113
%RSD	67.081	56.785	193.95	30.450	50.627	49.550
#1	-.00483	7.0931	-.00052	.00013	-.00129	.00316
#2	-.00178	23.083	.00023	.00014	-.00068	.00267
#3	-.00157	28.388	-.00030	.00022	-.00050	.00101
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00013	.00080
Stddev	.00029	.00000
%RSD	213.40	.25829
#1	-.00016	.00080
#2	.00041	.00080
#3	.00015	.00081
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-72548/4-a Acquired: 5/9/2023 12:08:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5047.1	96766.	9457.6
Stddev	6.2	143.	51.4
%RSD	.12260	.14729	.54296
#1	5040.1	96821.	9398.9
#2	5052.0	96872.	9494.3
#3	5049.1	96604.	9479.5

Sample Name: lcs 140-72548/5-a Acquired: 5/9/2023 12:13:51 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04817	2.3516	.10716	F 140.57	.10137	.05226
Stddev	.00017	.5274	.00035	1.29	.00057	.00018
%RSD	.34378	22.428	.32935	.91690	.55977	.33749
#1	.04831	1.9925	.10753	140.75	.10130	.05234
#2	.04799	2.9571	.10711	141.75	.10197	.05238
#3	.04821	2.1051	.10683	139.20	.10085	.05206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.632	.05124	.10543	.20923	.26466	1.0862
Stddev	.115	.00004	.00020	.00058	.00084	.0159
%RSD	.22701	.07361	.18824	.27821	.31831	1.4672
#1	50.636	.05122	.10544	.20883	.26563	1.0784
#2	50.745	.05128	.10523	.20989	.26414	1.1046
#3	50.515	.05121	.10563	.20895	.26421	1.0757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72548/5-a Acquired: 5/9/2023 12:13:51 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.117	.10100	10.053	.10301	.51293	51.806
Stddev	.197	.00254	.151	.00046	.00141	1.638
%RSD	.39336	2.5134	1.5002	.44248	.27522	3.1614
#1	50.314	.09939	9.9880	.10347	.51304	53.660
#2	50.117	.10393	10.225	.10302	.51148	51.204
#3	49.920	.09968	9.9455	.10256	.51429	50.555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.211	.52653	5.2178	.10313	.10060	.50401
Stddev	.288	.00068	.0098	.00286	.00077	.00306
%RSD	.57436	.12875	.18771	2.7690	.76926	.60689
#1	50.447	.52661	5.2159	.09983	.09971	.50688
#2	50.296	.52582	5.2091	.10471	.10102	.50079
#3	49.889	.52716	5.2284	.10485	.10107	.50434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72548/5-a Acquired: 5/9/2023 12:13:51 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14394	F 7.5027	.50990	.50324	.10391	.40946
Stddev	.00144	.4073	.00054	.00218	.00256	.00137
%RSD	1.0021	5.4286	.10622	.43362	2.4616	.33570
#1	.14450	7.7785	.51024	.50561	.10573	.41025
#2	.14230	7.6947	.50928	.50280	.10501	.41025
#3	.14502	7.0349	.51019	.50132	.10098	.40787
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20511	.53479
Stddev	.00067	.00063
%RSD	.32865	.11776
#1	.20589	.53476
#2	.20465	.53418
#3	.20481	.53544
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-72548/5-a Acquired: 5/9/2023 12:13:51 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4964.1	95664.	9456.3
Stddev	7.4	433.	31.2
%RSD	.14992	.45229	.32999
#1	4967.7	95498.	9429.0
#2	4969.0	95339.	9449.6
#3	4955.5	96155.	9490.3

Sample Name: lcsd 140-72548/6-a Acquired: 5/9/2023 12:18:43 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04824	2.0024	.10755	F 139.78	.10268	.05285
Stddev	.00046	.0200	.00062	.87	.00019	.00019
%RSD	.95894	.99729	.57543	.62414	.18740	.36587
#1	.04868	2.0246	.10777	139.49	.10247	.05288
#2	.04827	1.9966	.10685	140.76	.10271	.05303
#3	.04776	1.9859	.10803	139.08	.10285	.05265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.251	.05218	.10725	.21142	.25741	1.0862
Stddev	.109	.00011	.00012	.00075	.00094	.0034
%RSD	.21331	.20984	.11430	.35531	.36526	.31052
#1	51.327	.05229	.10736	.21079	.25735	1.0886
#2	51.301	.05207	.10727	.21225	.25650	1.0876
#3	51.126	.05218	.10711	.21123	.25838	1.0823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72548/6-a Acquired: 5/9/2023 12:18:43 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.503	.10050	10.068	.10391	.52187	51.075
Stddev	.124	.00077	.021	.00039	.00108	.254
%RSD	.24522	.76608	.20781	.37072	.20627	.49709
#1	50.631	.09969	10.089	.10400	.52298	51.062
#2	50.494	.10060	10.047	.10425	.52084	51.335
#3	50.384	.10122	10.068	.10349	.52178	50.828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.523	.53545	5.2926	.10258	.10001	.51255
Stddev	.136	.00147	.0168	.00121	.00052	.00272
%RSD	.26869	.27391	.31715	1.1806	.52033	.53138
#1	50.679	.53689	5.3091	.10390	.09950	.51485
#2	50.459	.53549	5.2933	.10152	.09997	.51325
#3	50.431	.53396	5.2756	.10233	.10054	.50954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72548/6-a Acquired: 5/9/2023 12:18:43 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14779	5.9770	.51352	.50800	.10440	.41464
Stddev	.00129	.0766	.00303	.00049	.00077	.00113
%RSD	.87281	1.2820	.59009	.09716	.73465	.27151
#1	.14813	6.0617	.51623	.50845	.10489	.41429
#2	.14637	5.9570	.51410	.50747	.10479	.41373
#3	.14888	5.9124	.51025	.50806	.10352	.41590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20777	.53148
Stddev	.00044	.00115
%RSD	.21047	.21594
#1	.20732	.53245
#2	.20819	.53178
#3	.20781	.53022
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-72548/6-a Acquired: 5/9/2023 12:18:43 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4869.6	94749.	9356.5
Stddev	11.3	453.	112.2
%RSD	.23162	.47789	1.1992
#1	4857.2	94786.	9233.9
#2	4872.0	94278.	9381.7
#3	4879.4	95182.	9454.0

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 12:23:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00072	F .20684	.00376	F 134.63	.00060	.00001
Stddev	.00042	.33413	.00054	1.18	.00013	.00001
%RSD	58.461	161.54	14.243	.87446	21.405	79.530
#1	-.00057	.02930	.00338	135.70	.00068	.00002
#2	-.00039	.59226	.00352	134.82	.00068	.00000
#3	-.00119	-.00104	.00437	133.37	.00046	.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.20000		.20000		
Low Limit		-.20000		-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07064	-.00009	.00001	-.00064	.00010	.01430
Stddev	.01684	.00005	.00006	.00018	.00051	.00320
%RSD	23.833	50.296	612.73	27.954	499.57	22.362
#1	.06273	-.00006	.00007	-.00084	.00067	.01258
#2	.08998	-.00015	-.00004	-.00049	-.00032	.01799
#3	.05922	-.00008	-.00000	-.00059	-.00004	.01233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 12:23:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01717	.00040	.06610	.00062	.00032	-.47005
Stddev	.00542	.00108	.07725	.00002	.00018	.64960
%RSD	31.563	270.14	116.87	3.7913	55.650	138.20
#1	.01869	-.00055	.00896	.00061	.00045	-1.2168
#2	.01116	.00157	.15400	.00060	.00012	-.15817
#3	.02167	.00018	.03535	.00064	.00041	-.03521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07153	.00012	.00067	.00237	-.00138	-.00074
Stddev	.05921	.00008	.00173	.00163	.00024	.00137
%RSD	82.778	64.887	258.80	68.917	17.150	185.84
#1	.03865	.00004	.00079	.00328	-.00110	.00057
#2	.13988	.00019	.00234	.00048	-.00150	-.00216
#3	.03605	.00012	-.00112	.00334	-.00152	-.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 12:23:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00232	F .90142	-.00016	.00026	.00087	.00175
Stddev	.00119	.02700	.00044	.00013	.00106	.00340
%RSD	51.068	2.9955	276.76	48.381	120.83	193.94
#1	-.00118	.93242	-.00059	.00037	.00196	.00553
#2	-.00355	.88888	-.00016	.00029	.00081	-.00108
#3	-.00224	.88297	.00028	.00012	-.00015	.00082
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00012	.00125
Stddev	.00027	.00004
%RSD	224.58	3.3693
#1	-.00017	.00128
#2	.00017	.00127
#3	-.00036	.00120
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 12:23:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4980.7	96783.	9526.1
Stddev	50.7	995.	82.0
%RSD	1.0174	1.0286	.86102
#1	4943.2	95773.	9450.7
#2	4960.4	96813.	9514.0
#3	5038.3	97763.	9613.5

Sample Name: lcs 140-72685/6-a Acquired: 5/9/2023 12:28:42 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04688	1.9408	.10389	F 134.72	.09948	.05088
Stddev	.00041	.0289	.00026	.39	.00021	.00011
%RSD	.87394	1.4911	.24991	.29157	.21379	.22174
#1	.04659	1.9287	.10364	134.43	.09930	.05100
#2	.04735	1.9739	.10386	135.17	.09972	.05078
#3	.04669	1.9200	.10416	134.56	.09943	.05088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.187	.04997	.10299	.20323	.24796	1.0000
Stddev	.083	.00006	.00032	.00067	.00086	.0037
%RSD	.16804	.11416	.31088	.33130	.34541	.37213
#1	49.223	.04998	.10295	.20266	.24887	.99708
#2	49.246	.04991	.10268	.20306	.24717	.99879
#3	49.092	.05002	.10332	.20397	.24786	1.0042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72685/6-a Acquired: 5/9/2023 12:28:42 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.925	.09637	9.7146	.09978	.50121	49.786
Stddev	.107	.00034	.0586	.00029	.00141	.696
%RSD	.21887	.35464	.60346	.28758	.28045	1.3981
#1	48.941	.09601	9.7100	.10011	.49960	50.461
#2	49.023	.09642	9.7754	.09962	.50180	49.824
#3	48.810	.09669	9.6584	.09960	.50222	49.071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.912	.51341	5.0774	.10114	.09647	.49589
Stddev	.119	.00088	.0137	.00184	.00036	.00325
%RSD	.24311	.17173	.27016	1.8154	.36866	.65531
#1	48.953	.51336	5.0650	.10011	.09688	.49548
#2	49.006	.51256	5.0752	.10005	.09627	.49287
#3	48.778	.51432	5.0921	.10326	.09626	.49933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72685/6-a Acquired: 5/9/2023 12:28:42 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14303	F 7.9752	.48817	.49079	.10018	.40098
Stddev	.00329	.0344	.00147	.00058	.00059	.00126
%RSD	2.2969	.43119	.30039	.11767	.58708	.31447
#1	.14284	8.0062	.48823	.49054	.09958	.40243
#2	.13985	7.9813	.48668	.49145	.10020	.40015
#3	.14641	7.9382	.48961	.49037	.10076	.40036
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20033	.51137
Stddev	.00097	.00076
%RSD	.48245	.14793
#1	.20041	.51075
#2	.19933	.51115
#3	.20126	.51221
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-72685/6-a Acquired: 5/9/2023 12:28:42 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4943.3	95920.	9485.5
Stddev	8.7	234.	87.1
%RSD	.17623	.24403	.91785
#1	4933.4	95665.	9392.0
#2	4946.4	95972.	9500.2
#3	4950.0	96124.	9564.2

Sample Name: lcsd 140-72685/7-a Acquired: 5/9/2023 12:33:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04770	1.9568	.10610	F 136.84	.10005	.05172
Stddev	.00057	.0507	.00066	.21	.00062	.00034
%RSD	1.2006	2.5918	.61767	.15557	.61577	.66374
#1	.04708	1.9071	.10566	136.59	.09935	.05135
#2	.04783	1.9547	.10686	136.94	.10047	.05202
#3	.04820	2.0085	.10579	136.98	.10034	.05178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.808	.05090	.10469	.20589	.25033	1.0154
Stddev	.242	.00011	.00013	.00179	.00067	.0031
%RSD	.48631	.21769	.12120	.86892	.26844	.30775
#1	49.528	.05082	.10466	.20390	.25105	1.0121
#2	49.959	.05102	.10483	.20738	.25020	1.0183
#3	49.935	.05085	.10459	.20638	.24972	1.0158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72685/7-a Acquired: 5/9/2023 12:33:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.190	.09764	9.7661	.10134	.51122	50.306
Stddev	.093	.00041	.0670	.00092	.00059	.663
%RSD	.19003	.42498	.68641	.90326	.11632	1.3173
#1	49.083	.09722	9.6892	.10033	.51086	49.974
#2	49.226	.09805	9.7976	.10212	.51191	49.875
#3	49.259	.09764	9.8117	.10156	.51089	51.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.255	.52203	5.1713	.09997	.09748	.50345
Stddev	.109	.00019	.0012	.00344	.00066	.00287
%RSD	.22172	.03625	.02325	3.4433	.67591	.57044
#1	49.145	.52181	5.1727	.10388	.09700	.50639
#2	49.363	.52216	5.1706	.09740	.09823	.50330
#3	49.258	.52212	5.1706	.09863	.09720	.50065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72685/7-a Acquired: 5/9/2023 12:33:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14479	5.2928	.49560	.49584	.10199	.40728
Stddev	.00136	.0381	.00038	.00167	.00067	.00125
%RSD	.94059	.72012	.07690	.33636	.65560	.30801
#1	.14453	5.3171	.49563	.49413	.10162	.40607
#2	.14359	5.3124	.49597	.49746	.10276	.40857
#3	.14627	5.2489	.49520	.49593	.10158	.40721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20393	.51931
Stddev	.00082	.00064
%RSD	.40249	.12299
#1	.20306	.51984
#2	.20468	.51949
#3	.20406	.51860
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-72685/7-a Acquired: 5/9/2023 12:33:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4873.7	94889.	9445.7
Stddev	8.4	694.	33.5
%RSD	.17247	.73138	.35508
#1	4870.5	95423.	9460.2
#2	4867.4	94104.	9469.5
#3	4883.2	95139.	9407.3

Sample Name: mb 140-72927/5-a Acquired: 5/9/2023 12:38:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.03169	-.00010	.03904	.00002	-.00000
Stddev	.00016	.01226	.00088	.00756	.00010	.00001
%RSD	79.761	38.701	916.71	19.355	539.71	511.51
#1	-.00039	.03422	-.00094	.03235	.00011	.00001
#2	-.00014	.04249	-.00018	.03752	.00005	-.00002
#3	-.00008	.01836	.00083	.04723	-.00009	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24678	.00001	.00015	.00014	.00108	.00563
Stddev	.00228	.00006	.00004	.00013	.00023	.00180
%RSD	.92211	909.37	30.235	90.613	21.427	31.983
#1	.24767	.00007	.00019	.00000	.00121	.00722
#2	.24848	-.00001	.00010	.00017	.00081	.00367
#3	.24420	-.00004	.00015	.00026	.00121	.00601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72927/5-a Acquired: 5/9/2023 12:38:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06477	-.00031	.01030	.00016	.00015	-.06916
Stddev	.01507	.00109	.00509	.00006	.00010	.45409
%RSD	23.268	350.61	49.435	37.731	63.609	656.55
#1	.05418	-.00033	.00828	.00022	.00020	-.31969
#2	.08202	-.00140	.00653	.00010	.00022	.45501
#3	.05811	.00079	.01610	.00016	.00004	-.34281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06027	.00045	.00461	.00134	-.00118	.00004
Stddev	.00089	.00009	.00105	.00146	.00067	.00113
%RSD	1.4766	20.370	22.685	108.81	56.623	2653.6
#1	.06067	.00037	.00573	-.00031	-.00073	.00125
#2	.06089	.00044	.00444	.00188	-.00195	-.00014
#3	.05925	.00055	.00366	.00246	-.00086	-.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72927/5-a Acquired: 5/9/2023 12:38:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	F 7.3194	.00466	.00001	-.00072	.00123
Stddev	.00272	1.0562	.00038	.00017	.00084	.00047
%RSD	2630.8	14.430	8.2595	1797.2	116.94	38.377
#1	-.00169	6.1667	.00491	.00020	-.00158	.00108
#2	-.00123	7.5507	.00422	-.00002	.00009	.00085
#3	.00323	8.2407	.00485	-.00015	-.00066	.00176
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00023	.00488
Stddev	.00019	.00007
%RSD	84.902	1.3984
#1	.00003	.00495
#2	.00041	.00489
#3	.00023	.00481
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-72927/5-a Acquired: 5/9/2023 12:38:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5007.0	97058.	9401.2
Stddev	39.1	629.	173.8
%RSD	.78110	.64795	1.8483
#1	4970.0	96894.	9272.4
#2	5003.0	96527.	9332.3
#3	5047.9	97753.	9598.9

Sample Name: lcs 140-72927/6-a Acquired: 5/9/2023 12:43:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04582	1.9460	.09636	1.0667	.09652	.05219
Stddev	.00101	.0108	.00037	.0113	.00016	.00023
%RSD	2.1990	.55372	.38371	1.0619	.16760	.43305
#1	.04518	1.9572	.09605	1.0615	.09634	.05240
#2	.04529	1.9450	.09677	1.0589	.09656	.05195
#3	.04698	1.9357	.09628	1.0797	.09666	.05221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.616	.04904	.10093	.19931	.24143	.99792
Stddev	.074	.00007	.00017	.00017	.00061	.00202
%RSD	.15149	.13695	.16740	.08713	.25278	.20277
#1	48.632	.04911	.10107	.19933	.24210	.99858
#2	48.680	.04904	.10074	.19913	.24091	.99565
#3	48.536	.04898	.10099	.19947	.24128	.99953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72927/6-a Acquired: 5/9/2023 12:43:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.168	.09480	9.5643	.09821	.49699	48.955
Stddev	.211	.00095	.0414	.00071	.00083	.458
%RSD	.44768	1.0012	.43313	.71938	.16609	.93571
#1	47.411	.09587	9.5586	.09868	.49780	48.823
#2	47.056	.09408	9.6083	.09740	.49615	49.465
#3	47.036	.09444	9.5260	.09855	.49703	48.578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.528	.50110	4.8588	.09751	.09563	.47552
Stddev	.311	.00138	.0137	.00181	.00078	.00178
%RSD	.65475	.27631	.28144	1.8562	.81389	.37510
#1	47.887	.50242	4.8744	.09671	.09644	.47758
#2	47.362	.49966	4.8528	.09624	.09555	.47441
#3	47.335	.50122	4.8491	.09958	.09489	.47458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72927/6-a Acquired: 5/9/2023 12:43:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13904	F 14.162	.47656	.48079	.10563	.39219
Stddev	.00337	.076	.00144	.00345	.00891	.00195
%RSD	2.4224	.53583	.30158	.71820	8.4345	.49669
#1	.14293	14.132	.47748	.48478	.10111	.39443
#2	.13702	14.248	.47730	.47878	.11589	.39123
#3	.13718	14.105	.47490	.47881	.09988	.39091
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19729	.49444
Stddev	.00066	.00058
%RSD	.33632	.11722
#1	.19791	.49511
#2	.19659	.49410
#3	.19737	.49412
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-72927/6-a Acquired: 5/9/2023 12:43:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4901.0	94873.	9250.1
Stddev	30.2	620.	95.9
%RSD	.61587	.65338	1.0368
#1	4866.2	94167.	9159.9
#2	4919.4	95125.	9239.5
#3	4917.4	95327.	9350.9

Sample Name: lcsd 140-72927/7-a Acquired: 5/9/2023 12:48:02 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04653	1.9634	.09787	1.1301	.09781	.05283
Stddev	.00008	.0171	.00163	.0061	.00046	.00004
%RSD	.16675	.87137	1.6649	.53807	.46612	.07073
#1	.04646	1.9678	.09889	1.1257	.09771	.05287
#2	.04650	1.9445	.09599	1.1276	.09741	.05279
#3	.04661	1.9778	.09872	1.1370	.09831	.05282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.404	.04984	.10218	.20248	.24443	.99924
Stddev	.282	.00018	.00029	.00126	.00068	.00611
%RSD	.57084	.35921	.28228	.62222	.27681	.61107
#1	49.118	.04988	.10240	.20223	.24521	.99409
#2	49.411	.04965	.10185	.20137	.24413	.99765
#3	49.682	.05000	.10228	.20385	.24396	1.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72927/7-a Acquired: 5/9/2023 12:48:02 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.560	.09559	9.6910	.09939	.50232	50.279
Stddev	.067	.00141	.0751	.00013	.00098	.343
%RSD	.14007	1.4756	.77547	.12911	.19465	.68292
#1	47.583	.09677	9.6081	.09954	.50344	50.014
#2	47.485	.09403	9.7102	.09933	.50162	50.156
#3	47.612	.09597	9.7547	.09930	.50190	50.667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.897	.50726	4.9007	.09725	.09418	.47910
Stddev	.048	.00169	.0105	.00231	.00035	.00309
%RSD	.09938	.33243	.21468	2.3721	.37273	.64478
#1	47.925	.50851	4.9124	.09743	.09432	.48118
#2	47.842	.50534	4.8921	.09946	.09443	.48058
#3	47.923	.50792	4.8976	.09485	.09378	.47555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72927/7-a Acquired: 5/9/2023 12:48:02 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13963	F 13.103	.48432	.48398	.10137	.39481
Stddev	.00168	.145	.00048	.00052	.00099	.00034
%RSD	1.2013	1.1088	.09944	.10826	.97602	.08505
#1	.13802	12.936	.48383	.48403	.10047	.39455
#2	.14137	13.172	.48433	.48344	.10243	.39519
#3	.13950	13.201	.48480	.48448	.10121	.39469
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20015	.50014
Stddev	.00053	.00135
%RSD	.26635	.27078
#1	.20052	.50165
#2	.19954	.49904
#3	.20039	.49973
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-72927/7-a Acquired: 5/9/2023 12:48:02 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4886.8	94141.	9159.9
Stddev	31.0	742.	15.7
%RSD	.63403	.78821	.17165
#1	4851.3	93286.	9159.6
#2	4908.2	94512.	9175.7
#3	4900.9	94624.	9144.3

Sample Name: mb 140-72928/6-a Acquired: 5/9/2023 12:52:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00065	.03297	.00370	F 133.66	.00061	-.00001
Stddev	.00031	.01422	.00125	.94	.00013	.00000
%RSD	46.653	43.137	33.640	.70285	21.483	24.450
#1	-.00030	.01670	.00374	133.51	.00061	-.00001
#2	-.00086	.04306	.00244	134.67	.00074	-.00001
#3	-.00080	.03914	.00493	132.81	.00048	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.20000		
Low Limit				-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02822	-.00006	.00008	-.00060	-.00005	.00256
Stddev	.00337	.00002	.00004	.00002	.00025	.00134
%RSD	11.926	27.406	45.832	2.5753	473.60	52.265
#1	.03210	-.00004	.00005	-.00061	.00021	.00271
#2	.02629	-.00007	.00007	-.00060	-.00008	.00115
#3	.02626	-.00008	.00013	-.00058	-.00028	.00382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72928/6-a Acquired: 5/9/2023 12:52:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00761	-.00081	.01022	.00016	.00029	.05845
Stddev	.00923	.00111	.01902	.00006	.00004	.33719
%RSD	121.18	136.96	186.01	40.763	14.832	576.93
#1	.00295	-.00176	.01361	.00016	.00028	-.22522
#2	.00165	.00041	.02732	.00009	.00033	-.03068
#3	.01824	-.00107	-.01026	.00021	.00025	.43124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03286	.00005	.00123	.00064	-.00208	.00136
Stddev	.00433	.00015	.00337	.00151	.00058	.00117
%RSD	13.179	287.42	273.88	235.63	27.855	86.423
#1	.03554	.00021	-.00082	.00036	-.00142	.00229
#2	.03517	.00004	-.00061	.00227	-.00231	.00175
#3	.02786	-.00009	.00512	-.00071	-.00251	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72928/6-a Acquired: 5/9/2023 12:52:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00308	F .62685	.00014	-.00005	-.00030	.00359
Stddev	.00148	.05617	.00041	.00006	.00076	.00250
%RSD	47.904	8.9610	287.93	141.69	252.91	69.665
#1	-.00360	.68387	-.00015	.00003	.00057	.00509
#2	-.00423	.62512	.00061	-.00006	-.00063	.00498
#3	-.00142	.57156	-.00003	-.00010	-.00085	.00070
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00009	.00035
Stddev	.00007	.00005
%RSD	75.079	13.041
#1	.00009	.00031
#2	.00002	.00034
#3	.00016	.00040
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-72928/6-a Acquired: 5/9/2023 12:52:44 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5059.2	97694.	9493.3
Stddev	5.9	258.	74.0
%RSD	.11572	.26402	.77974
#1	5064.6	97990.	9522.5
#2	5053.0	97576.	9409.1
#3	5060.0	97516.	9548.2

Sample Name: CCV Acquired: 5/9/2023 12:57:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96187	24.584	.49304	1.9856	1.9516	2.0278
Stddev	.00193	.130	.00179	.0203	.0104	.0062
%RSD	.20082	.53010	.36294	1.0212	.53093	.30551
#1	.96375	24.444	.49462	1.9693	1.9420	2.0211
#2	.96198	24.701	.49341	1.9791	1.9626	2.0333
#3	.95989	24.609	.49110	2.0083	1.9501	2.0291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.254	.50745	2.0050	1.9947	1.9306	25.067
Stddev	.186	.00065	.0017	.0043	.0018	.068
%RSD	.37009	.12902	.08447	.21765	.09261	.27213
#1	50.040	.50684	2.0036	1.9944	1.9321	25.001
#2	50.350	.50814	2.0069	1.9905	1.9311	25.137
#3	50.373	.50736	2.0047	1.9991	1.9286	25.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 12:57:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.276	1.9142	50.003	2.0074	2.0329	48.344
Stddev	.192	.0094	.136	.0046	.0002	.489
%RSD	.38865	.49074	.27251	.22977	.01164	1.0112
#1	49.127	1.9098	49.847	2.0123	2.0327	48.908
#2	49.492	1.9250	50.099	2.0032	2.0331	48.041
#3	49.208	1.9079	50.064	2.0066	2.0327	48.083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.194	2.0069	1.9739	.50689	.50300	.49193
Stddev	.181	.0010	.0040	.00257	.00228	.00252
%RSD	.36828	.04784	.20445	.50657	.45275	.51179
#1	49.167	2.0073	1.9776	.50961	.50223	.49263
#2	49.388	2.0076	1.9696	.50451	.50556	.49403
#3	49.028	2.0058	1.9747	.50656	.50121	.48914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 12:57:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49933	F 3.7639	1.9459	1.9748	1.9818	1.0156
Stddev	.00253	.5098	.0031	.0086	.0106	.0030
%RSD	.50571	13.544	.16003	.43517	.53578	.29422
#1	.49914	3.2456	1.9458	1.9710	1.9716	1.0131
#2	.50194	3.7812	1.9491	1.9847	1.9928	1.0189
#3	.49690	4.2648	1.9429	1.9688	1.9808	1.0147
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9946	1.9849
Stddev	.0023	.0022
%RSD	.11617	.10979
#1	1.9964	1.9861
#2	1.9920	1.9862
#3	1.9953	1.9823
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 12:57:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4924.7	95536.	9217.7
Stddev	10.9	388.	2.8
%RSD	.22096	.40642	.03008
#1	4920.0	95088.	9217.4
#2	4916.9	95755.	9220.7
#3	4937.1	95765.	9215.2

Sample Name: CCB Acquired: 5/9/2023 13:02:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.01017	.00024	F .12515	.00012	.00012
Stddev	.00028	.02288	.00078	.01018	.00014	.00013
%RSD	356.99	224.91	324.79	8.1368	121.58	107.31
#1	-.00034	.03266	-.00045	.11552	.00025	.00027
#2	.00021	-.01308	.00108	.12412	-.00003	.00006
#3	-.00011	.01095	.00009	.13581	.00014	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00781	.00007	.00029	-.00054	-.00001	.00244
Stddev	.00267	.00002	.00003	.00036	.00023	.00087
%RSD	34.197	34.835	9.5955	66.322	1698.9	35.598
#1	.01034	.00005	.00032	-.00081	-.00004	.00345
#2	.00808	.00009	.00026	-.00068	.00023	.00193
#3	.00501	.00006	.00029	-.00013	-.00023	.00196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 13:02:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00913	-.00090	.00209	.00016	.00028	.08822
Stddev	.01193	.00077	.00381	.00012	.00015	1.0162
%RSD	130.69	85.190	182.67	75.867	53.909	1151.9
#1	-.00840	-.00178	-.00194	.00029	.00018	.27557
#2	.00242	-.00037	.00565	.00013	.00020	.99774
#3	-.02141	-.00055	.00255	.00005	.00045	-1.0086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01555	.00036	.00036	.00178	-.00072	-.00103
Stddev	.00590	.00008	.00145	.00093	.00101	.00102
%RSD	37.927	21.945	397.69	52.012	140.51	98.881
#1	.02232	.00028	.00188	.00130	.00013	-.00181
#2	.01158	.00043	.00021	.00285	-.00183	.00012
#3	.01274	.00038	-.00100	.00119	-.00045	-.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 13:02:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	F 3.8464	-.00008	.00003	-.00072	.00232
Stddev	.00076	.2560	.00057	.00012	.00043	.00084
%RSD	5085.3	6.6562	745.58	378.09	59.778	36.153
#1	-.00067	3.5742	-.00013	.00016	-.00052	.00153
#2	.00083	3.8828	-.00062	-.00002	-.00122	.00320
#3	-.00012	4.0824	.00051	-.00005	-.00043	.00222
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00014	-.00002
Stddev	.00032	.00008
%RSD	226.15	424.30
#1	-.00017	.00006
#2	.00048	-.00003
#3	.00012	-.00009
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 13:02:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5030.6	97091.	9330.0
Stddev	18.1	462.	91.6
%RSD	.35899	.47633	.98187
#1	5013.9	96557.	9242.0
#2	5028.1	97350.	9323.1
#3	5049.7	97365.	9424.9

Sample Name: lcs 140-72928/7-a Acquired: 5/9/2023 13:07:38 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04705	1.9468	.10508	F 134.97	.10080	.05108
Stddev	.00050	.0065	.00072	.93	.00084	.00035
%RSD	1.0718	.33435	.68997	.69155	.83631	.68526
#1	.04671	1.9467	.10427	135.43	.09990	.05128
#2	.04763	1.9534	.10530	135.59	.10157	.05129
#3	.04682	1.9404	.10566	133.90	.10092	.05068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.148	.05012	.10310	.20231	.24546	1.0025
Stddev	.343	.00010	.00015	.00126	.00081	.0036
%RSD	.69690	.19824	.14371	.62112	.33022	.35962
#1	48.801	.05020	.10322	.20210	.24558	.99954
#2	49.486	.05001	.10293	.20366	.24620	1.0065
#3	49.157	.05017	.10313	.20117	.24459	1.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72928/7-a Acquired: 5/9/2023 13:07:38 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.345	.09574	9.7108	.09971	.50285	50.001
Stddev	.176	.00007	.0521	.00083	.00118	2.570
%RSD	.36377	.07818	.53609	.83097	.23395	5.1390
#1	48.283	.09567	9.6513	.10024	.50384	47.295
#2	48.544	.09582	9.7481	.10014	.50155	52.408
#3	48.209	.09574	9.7331	.09876	.50316	50.300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.601	.51263	5.0596	.10008	.09663	.49184
Stddev	.152	.00096	.0139	.00223	.00029	.00025
%RSD	.31249	.18664	.27425	2.2301	.29669	.05146
#1	48.575	.51261	5.0535	.09776	.09645	.49158
#2	48.765	.51169	5.0499	.10026	.09649	.49183
#3	48.464	.51360	5.0755	.10222	.09696	.49209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-72928/7-a Acquired: 5/9/2023 13:07:38 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14400	4.8508	.47819	.48751	.10034	.40156
Stddev	.00120	.0031	.00114	.00173	.00020	.00248
%RSD	.83659	.06422	.23797	.35576	.20329	.61688
#1	.14313	4.8544	.47872	.48687	.10043	.40427
#2	.14350	4.8487	.47688	.48948	.10011	.40099
#3	.14538	4.8492	.47897	.48619	.10049	.39942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20071	.51154
Stddev	.00131	.00026
%RSD	.65228	.05163
#1	.20140	.51170
#2	.20153	.51123
#3	.19920	.51168
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-72928/7-a Acquired: 5/9/2023 13:07:38 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4949.9	96077.	9554.1
Stddev	9.6	640.	54.0
%RSD	.19297	.66612	.56524
#1	4942.9	95479.	9604.1
#2	4960.8	96001.	9496.8
#3	4946.1	96752.	9561.3

Sample Name: lcsd 140-72928/8-a Acquired: 5/9/2023 13:12:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04586	1.9744	.10366	F 133.95	.09766	.05103
Stddev	.00071	.0466	.00136	.92	.00015	.00007
%RSD	1.5502	2.3587	1.3095	.68652	.15623	.13314
#1	.04573	2.0275	.10213	133.22	.09753	.05098
#2	.04523	1.9552	.10472	134.99	.09783	.05111
#3	.04663	1.9405	.10414	133.66	.09762	.05100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.319	.05018	.10281	.20297	.24991	1.0021
Stddev	.171	.00020	.00016	.00040	.00033	.0046
%RSD	.34729	.39255	.15144	.19688	.13312	.46384
#1	49.203	.04995	.10277	.20281	.24961	.99864
#2	49.516	.05027	.10267	.20342	.24986	1.0074
#3	49.237	.05031	.10297	.20267	.25027	1.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72928/8-a Acquired: 5/9/2023 13:12:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.368	.09593	9.7436	.09944	.50328	49.534
Stddev	.052	.00031	.0379	.00038	.00121	.175
%RSD	.10804	.32396	.38941	.37833	.24064	.35257
#1	48.312	.09584	9.7002	.09903	.50197	49.583
#2	48.416	.09567	9.7704	.09976	.50354	49.340
#3	48.376	.09627	9.7601	.09955	.50435	49.679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.546	.51136	5.0460	.10017	.09506	.49130
Stddev	.061	.00081	.0052	.00045	.00081	.00065
%RSD	.12541	.15796	.10363	.44856	.85478	.13180
#1	48.490	.51043	5.0459	.10038	.09415	.49092
#2	48.611	.51184	5.0408	.10047	.09530	.49205
#3	48.539	.51182	5.0513	.09965	.09572	.49094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-72928/8-a Acquired: 5/9/2023 13:12:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14247	4.9322	.47861	.48373	.10084	.39812
Stddev	.00201	.0192	.00096	.00166	.00149	.00195
%RSD	1.4094	.38929	.20070	.34335	1.4772	.48977
#1	.14472	4.9125	.47764	.48181	.10191	.39605
#2	.14086	4.9332	.47862	.48456	.10146	.39992
#3	.14182	4.9508	.47956	.48480	.09914	.39840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20022	.50840
Stddev	.00054	.00159
%RSD	.26900	.31302
#1	.20001	.50684
#2	.20083	.50834
#3	.19981	.51003
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-72928/8-a Acquired: 5/9/2023 13:12:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4950.7	95635.	9435.4
Stddev	12.6	237.	56.6
%RSD	.25372	.24820	.59985
#1	4962.4	95384.	9409.4
#2	4952.2	95664.	9396.4
#3	4937.5	95856.	9500.3

Sample Name: 140-31425-a-1-a Acquired: 5/9/2023 13:17:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	1.4132	.00442	F 125.12	.08028	.00008
Stddev	.00004	.0128	.00091	1.01	.00014	.00001
%RSD	15.209	.90424	20.559	.80669	.17454	11.021
#1	-.00028	1.3985	.00338	125.44	.08013	.00008
#2	-.00025	1.4198	.00508	123.98	.08029	.00007
#3	-.00020	1.4213	.00481	125.92	.08041	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.0654	.00219	.00192	.02953	.14600	1.7617
Stddev	.0087	.00007	.00019	.00024	.00010	.0055
%RSD	.28462	3.2205	10.043	.82583	.06843	.31434
#1	3.0562	.00211	.00201	.02925	.14610	1.7577
#2	3.0665	.00219	.00206	.02968	.14590	1.7680
#3	3.0735	.00225	.00170	.02965	.14601	1.7593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-1-a Acquired: 5/9/2023 13:17:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.71142	.00059	.50876	.05165	.12111	8.9895
Stddev	.03194	.00054	.01060	.00010	.00022	.4153
%RSD	4.4894	91.071	2.0827	.20244	.18214	4.6203
#1	.71213	.00021	.52055	.05155	.12129	9.3730
#2	.74300	.00121	.50002	.05164	.12086	9.0471
#3	.67913	.00036	.50572	.05176	.12116	8.5483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.5180	.04154	.01600	.05169	-.00230	.01133
Stddev	.0191	.00039	.00120	.00220	.00129	.00039
%RSD	.20018	.94122	7.4802	4.2628	56.202	3.4633
#1	9.5346	.04194	.01710	.04928	-.00305	.01178
#2	9.5222	.04154	.01616	.05360	-.00303	.01114
#3	9.4972	.04116	.01473	.05218	-.00081	.01107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-1-a Acquired: 5/9/2023 13:17:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	F 1664.9	.01876	.00999	.04729	.00669
Stddev	.00082	4.2	.00038	.00008	.00100	.00316
%RSD	215.82	.25463	2.0334	.76028	2.1173	47.294
#1	.00008	1669.2	.01852	.00990	.04827	.00852
#2	.00130	1664.6	.01920	.01002	.04733	.00851
#3	-.00024	1660.8	.01857	.01004	.04627	.00304
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00192	.42827
Stddev	.00012	.00012
%RSD	6.2220	.02749
#1	.00178	.42829
#2	.00196	.42838
#3	.00201	.42814
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-1-a Acquired: 5/9/2023 13:17:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5030.1	96451.	9400.9
Stddev	1.7	122.	38.5
%RSD	.03387	.12600	.40997
#1	5030.8	96516.	9423.8
#2	5028.1	96525.	9422.6
#3	5031.3	96311.	9356.4

Sample Name: 140-31425-a-6-a Acquired: 5/9/2023 13:22:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00016	1.1587	.00458	F 125.07	.06247	.00005
Stddev	.00040	.0085	.00110	.40	.00014	.00001
%RSD	249.05	.73169	24.037	.31729	.21719	21.627
#1	.00039	1.1500	.00389	125.10	.06260	.00006
#2	-.00030	1.1669	.00585	125.46	.06233	.00004
#3	.00039	1.1592	.00400	124.66	.06247	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4849	.00188	.00049	.02440	.05463	1.8776
Stddev	.0053	.00007	.00011	.00039	.00042	.0049
%RSD	.35411	3.8849	22.545	1.6072	.76992	.25976
#1	1.4790	.00191	.00043	.02484	.05472	1.8728
#2	1.4867	.00193	.00043	.02428	.05499	1.8825
#3	1.4890	.00179	.00062	.02408	.05417	1.8775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a Acquired: 5/9/2023 13:22:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34516	-.00018	.30930	.02942	.12200	9.9104
Stddev	.00792	.00031	.00940	.00010	.00028	.6769
%RSD	2.2939	177.61	3.0376	.34350	.22732	6.8302
#1	.34510	.00018	.31992	.02953	.12178	10.471
#2	.33727	-.00031	.30589	.02934	.12231	10.101
#3	.35310	-.00040	.30208	.02939	.12190	9.1584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.8451	.02963	-.00346	.03161	-.01815	.00681
Stddev	.0264	.00035	.00408	.00080	.00263	.00123
%RSD	.26816	1.1745	118.08	2.5309	14.483	17.985
#1	9.8246	.02927	.00046	.03072	-.01534	.00818
#2	9.8357	.02996	-.00314	.03228	-.02054	.00581
#3	9.8749	.02965	-.00769	.03182	-.01856	.00644
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a Acquired: 5/9/2023 13:22:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00386	F 1652.4	.02472	.00856	.03710	.00562
Stddev	.00144	20.8	.00073	.00005	.00077	.00248
%RSD	37.294	1.2598	2.9663	.53020	2.0715	44.131
#1	.00336	1629.4	.02554	.00853	.03672	.00387
#2	.00549	1670.0	.02447	.00861	.03660	.00453
#3	.00274	1657.8	.02414	.00854	.03799	.00846
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00148	.13922
Stddev	.00002	.00021
%RSD	1.6397	.15165
#1	.00151	.13933
#2	.00147	.13936
#3	.00147	.13898
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-6-a Acquired: 5/9/2023 13:22:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5013.8	96304.	9422.6
Stddev	15.7	230.	28.2
%RSD	.31391	.23900	.29939
#1	4997.9	96039.	9408.4
#2	5013.9	96430.	9455.1
#3	5029.4	96445.	9404.3

Sample Name: 140-31425-a-6-a PDS Acquired: 5/9/2023 13:28:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04722	3.0136	.10254	F 124.52	.15752	.05042
Stddev	.00188	.1122	.00341	.12	.00462	.00211
%RSD	3.9843	3.7214	3.3268	.09627	2.9318	4.1925
#1	.04525	2.8843	.09912	124.43	.15251	.04814
#2	.04742	3.0716	.10255	124.65	.15841	.05081
#3	.04900	3.0849	.10595	124.47	.16162	.05232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.511	.05046	.10107	.22743	.30263	2.8298
Stddev	1.012	.00173	.00383	.00872	.01017	.0493
%RSD	1.9266	3.4197	3.7932	3.8340	3.3599	1.7412
#1	53.595	.04866	.09697	.21807	.29155	2.7799
#2	52.349	.05065	.10165	.22889	.30482	2.8310
#3	51.591	.05209	.10457	.23532	.31153	2.8784
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a PDS Acquired: 5/9/2023 13:28:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.505	.09593	10.280	.12771	.63159	60.753
Stddev	1.092	.00460	.161	.00410	.01346	.349
%RSD	2.2062	4.7964	1.5700	3.2093	2.1319	.57404
#1	50.678	.09081	10.458	.12322	.61739	61.155
#2	49.321	.09725	10.237	.12866	.63320	60.575
#3	48.517	.09973	10.144	.13126	.64418	60.530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.033	.52623	5.1375	.12696	.07534	.49320
Stddev	1.200	.01811	.1449	.00514	.00289	.01374
%RSD	2.0330	3.4405	2.8200	4.0453	3.8420	2.7853
#1	60.298	.50678	4.9834	.12115	.07235	.47806
#2	58.890	.52931	5.1580	.12880	.07553	.49668
#3	57.910	.54260	5.2710	.13091	.07813	.50487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a PDS Acquired: 5/9/2023 13:28:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13752	F 1613.7	.48671	.49067	.13856	.38834
Stddev	.00632	7.8	.01260	.02191	.00308	.01124
%RSD	4.5976	.48536	2.5897	4.4662	2.2262	2.8956
#1	.13034	1605.5	.47304	.46696	.13523	.37587
#2	.13997	1614.4	.48922	.49487	.13915	.39143
#3	.14226	1621.1	.49787	.51018	.14131	.39771
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20212	.63359
Stddev	.00866	.01752
%RSD	4.2839	2.7645
#1	.19292	.61519
#2	.20331	.63553
#3	.21011	.65006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-6-a PDS Acquired: 5/9/2023 13:28:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4945.9	94875.	9343.3
Stddev	11.3	313.	45.7
%RSD	.22818	.32972	.48901
#1	4933.3	94780.	9359.8
#2	4955.0	94622.	9378.5
#3	4949.5	95225.	9291.7

Sample Name: 140-31425-a-6-a PDSD Acquired: 5/9/2023 13:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04875	3.1025	.10557	F 124.96	.16100	.05229
Stddev	.00234	.1069	.00631	.60	.00576	.00294
%RSD	4.7918	3.4441	5.9736	.48080	3.5780	5.6208
#1	.04636	2.9926	.09934	125.27	.15569	.04928
#2	.04886	3.1091	.10543	124.27	.16019	.05243
#3	.05103	3.2060	.11195	125.34	.16712	.05516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.619	.05209	.10491	.23424	.31226	2.8879
Stddev	.502	.00280	.00566	.01209	.01492	.0649
%RSD	.91927	5.3832	5.3926	5.1599	4.7780	2.2461
#1	55.153	.04905	.09891	.22161	.29686	2.8370
#2	54.549	.05264	.10568	.23541	.31327	2.8657
#3	54.156	.05457	.11014	.24570	.32665	2.9609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a PDSD Acquired: 5/9/2023 13:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.683	.09884	10.753	.13165	.63340	62.529
Stddev	.503	.00470	.127	.00583	.01951	.858
%RSD	.97269	4.7570	1.1793	4.4297	3.0800	1.3720
#1	52.197	.09507	10.896	.12565	.61231	62.425
#2	51.660	.09734	10.654	.13202	.63707	61.727
#3	51.193	.10411	10.708	.13729	.65081	63.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	61.295	.54277	5.1539	.13020	.07232	.49772
Stddev	.597	.02794	.1936	.00777	.00245	.01608
%RSD	.97422	5.1475	3.7558	5.9678	3.3905	3.2311
#1	61.938	.51269	4.9488	.12122	.06952	.48076
#2	61.189	.54771	5.1796	.13461	.07409	.49966
#3	60.758	.56791	5.3334	.13475	.07335	.51274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a PDSD Acquired: 5/9/2023 13:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14245	F 1660.3	.48892	.51135	.14119	.40046
Stddev	.00664	35.3	.01942	.02710	.00384	.02033
%RSD	4.6619	2.1274	3.9713	5.2989	2.7176	5.0771
#1	.13588	1643.6	.46765	.48659	.13747	.37859
#2	.14231	1636.4	.49343	.50718	.14095	.40401
#3	.14915	1700.9	.50569	.54029	.14514	.41878
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20957	.65111
Stddev	.01169	.02780
%RSD	5.5775	4.2700
#1	.19743	.62101
#2	.21053	.65650
#3	.22074	.67582
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-6-a PDSD Acquired: 5/9/2023 13:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4945.3	94742.	9267.9
Stddev	7.5	169.	85.3
%RSD	.15109	.17866	.92007
#1	4936.7	94559.	9231.3
#2	4950.5	94892.	9365.4
#3	4948.6	94775.	9207.1

Sample Name: 140-31425-a-11-a Acquired: 5/9/2023 13:37:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	1.2333	.00413	F 124.77	.06682	.00006
Stddev	.00009	.0045	.00053	.46	.00022	.00001
%RSD	36.801	.36824	12.752	.36618	.32757	26.384
#1	.00018	1.2367	.00434	124.87	.06703	.00007
#2	.00021	1.2281	.00453	124.28	.06683	.00005
#3	.00036	1.2351	.00354	125.17	.06659	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4302	.00224	.00114	.03186	.13925	1.3893
Stddev	.0103	.00001	.00003	.00038	.00055	.0034
%RSD	.42237	.66671	2.8058	1.1961	.39803	.24646
#1	2.4245	.00224	.00112	.03155	.13960	1.3864
#2	2.4420	.00225	.00118	.03173	.13861	1.3931
#3	2.4240	.00222	.00113	.03228	.13955	1.3883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-11-a Acquired: 5/9/2023 13:37:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99464	.00061	.41028	.05173	.11954	13.872
Stddev	.01681	.00097	.01055	.00010	.00041	.623
%RSD	1.6904	158.01	2.5704	.19720	.34125	4.4937
#1	1.0122	-.00049	.42233	.05163	.11999	14.496
#2	.97863	.00100	.40274	.05184	.11941	13.250
#3	.99313	.00132	.40576	.05173	.11921	13.871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.596	.04360	.03612	.05537	.00194	.00756
Stddev	.022	.00038	.00113	.00319	.00166	.00165
%RSD	.15884	.88038	3.1379	5.7558	85.936	21.767
#1	13.621	.04351	.03605	.05205	.00233	.00699
#2	13.579	.04402	.03502	.05565	.00011	.00628
#3	13.589	.04327	.03729	.05840	.00337	.00942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-11-a Acquired: 5/9/2023 13:37:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	F 1650.2	.02692	.00984	.03854	.00623
Stddev	.00091	13.4	.00033	.00007	.00099	.00209
%RSD	291.99	.81356	1.2166	.73189	2.5634	33.542
#1	.00035	1639.3	.02729	.00992	.03859	.00422
#2	-.00062	1665.2	.02680	.00978	.03753	.00839
#3	.00120	1646.2	.02667	.00983	.03950	.00608
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00221	.47976
Stddev	.00046	.00046
%RSD	20.656	.09509
#1	.00271	.48020
#2	.00209	.47929
#3	.00182	.47980
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-11-a Acquired: 5/9/2023 13:37:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5025.9	96056.	9423.9
Stddev	8.7	301.	27.4
%RSD	.17396	.31384	.29055
#1	5015.9	95733.	9442.8
#2	5030.2	96103.	9392.5
#3	5031.7	96331.	9436.3

Sample Name: 140-31425-a-6-a SD@5 Acquired: 5/9/2023 13:43:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00014	.24362	.00216	27.046	.01288	.00001
Stddev	.00031	.01165	.00045	.142	.00018	.00000
%RSD	218.04	4.7807	21.064	.52559	1.4175	50.783
#1	.00000	.25275	.00246	27.030	.01308	.00001
#2	-.00050	.23050	.00163	27.195	.01273	.00000
#3	.00007	.24762	.00237	26.912	.01284	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30973	.00040	.00030	.00436	.01074	.38397
Stddev	.00214	.00002	.00023	.00025	.00031	.00505
%RSD	.69064	5.1439	74.783	5.8160	2.8600	1.3163
#1	.31218	.00041	.00052	.00450	.01063	.37871
#2	.30825	.00038	.00033	.00407	.01109	.38439
#3	.30875	.00042	.00006	.00451	.01050	.38879
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a SD@5 Acquired: 5/9/2023 13:43:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07971	-.00053	.06607	.00592	.02482	2.9132
Stddev	.00682	.00038	.00078	.00009	.00019	.6356
%RSD	8.5567	71.862	1.1852	1.4806	.77823	21.817
#1	.07339	-.00066	.06669	.00595	.02503	2.2007
#2	.07880	-.00082	.06519	.00599	.02476	3.4218
#3	.08694	-.00010	.06634	.00582	.02465	3.1171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0205	.00670	.00166	.00553	-.00763	.00153
Stddev	.0133	.00008	.00162	.00162	.00088	.00160
%RSD	.65885	1.1754	97.388	29.370	11.575	104.60
#1	2.0066	.00676	-.00002	.00437	-.00828	.00029
#2	2.0331	.00672	.00320	.00738	-.00663	.00334
#3	2.0217	.00661	.00181	.00483	-.00798	.00096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a SD@5 Acquired: 5/9/2023 13:43:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	351.05	.00521	.00182	.00669	.00290
Stddev	.00186	1.43	.00031	.00015	.00074	.00073
%RSD	6659.0	.40619	5.8766	8.0812	11.070	25.084
#1	.00144	350.64	.00512	.00178	.00686	.00363
#2	.00073	352.64	.00555	.00199	.00588	.00288
#3	-.00209	349.87	.00495	.00170	.00733	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00045	.02892
Stddev	.00024	.00000
%RSD	53.012	.01423
#1	.00073	.02892
#2	.00029	.02892
#3	.00034	.02892
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-6-a SD@5 Acquired: 5/9/2023 13:43:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5005.4	96341.	9339.2
Stddev	6.4	713.	55.7
%RSD	.12735	.73962	.59597
#1	5012.5	95660.	9352.6
#2	5000.1	96281.	9278.0
#3	5003.6	97082.	9386.9

Sample Name: 140-31398-a-3-a Acquired: 5/9/2023 13:47:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01094	1.6487	.03974	F 122.23	.02251	.00005
Stddev	.00008	.0615	.00148	1.56	.00015	.00002
%RSD	.77057	3.7296	3.7294	1.2790	.65249	28.779
#1	.01093	1.6134	.04008	122.53	.02235	.00004
#2	.01086	1.6130	.04102	123.62	.02265	.00006
#3	.01103	1.7197	.03811	120.54	.02254	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.5663	.00611	.00400	1.6438	.03902	2.6915
Stddev	.0474	.00002	.00041	.0134	.00073	.0212
%RSD	.72182	.29552	10.257	.81228	1.8718	.78617
#1	6.5132	.00613	.00352	1.6439	.03930	2.6712
#2	6.5815	.00610	.00425	1.6571	.03957	2.6899
#3	6.6043	.00611	.00421	1.6304	.03819	2.7134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-3-a Acquired: 5/9/2023 13:47:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50469	.00246	.38814	.04919	.17328	1.6723
Stddev	.02418	.00045	.02312	.00046	.00048	.7274
%RSD	4.7901	18.481	5.9560	.93695	.27591	43.498
#1	.52950	.00273	.37626	.04946	.17362	1.1489
#2	.50337	.00193	.37339	.04945	.17348	2.5029
#3	.48120	.00271	.41479	.04866	.17273	1.3651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5816	.24635	.07050	.06940	.01149	.00486
Stddev	.0156	.00033	.00197	.00095	.00365	.00023
%RSD	.98593	.13573	2.7876	1.3711	31.744	4.6622
#1	1.5777	.24605	.07277	.06908	.01464	.00486
#2	1.5684	.24671	.06942	.06865	.00749	.00508
#3	1.5988	.24629	.06932	.07047	.01234	.00463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-3-a Acquired: 5/9/2023 13:47:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00276	F 1872.7	.00317	.01886	.03831	.00540
Stddev	.00081	16.7	.00149	.00007	.00028	.00173
%RSD	29.357	.89182	46.946	.39414	.72608	32.031
#1	.00287	1858.3	.00161	.01879	.03844	.00515
#2	.00190	1891.0	.00332	.01885	.03850	.00725
#3	.00351	1868.9	.00457	.01894	.03799	.00381
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.01171	.09465
Stddev	.00033	.00033
%RSD	2.8238	.35370
#1	.01188	.09499
#2	.01192	.09465
#3	.01133	.09432
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-3-a Acquired: 5/9/2023 13:47:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4837.2	93018.	9163.1
Stddev	49.1	1481.	16.4
%RSD	1.0160	1.5922	.17919
#1	4785.4	91823.	9145.5
#2	4843.2	92556.	9165.5
#3	4883.1	94675.	9178.1

Sample Name: 140-31398-a-10-a Acquired: 5/9/2023 13:53:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00273	1.4794	.05310	F 121.66	.01664	.00006
Stddev	.00039	.0256	.00071	.66	.00013	.00001
%RSD	14.312	1.7280	1.3372	.54314	.76897	16.702
#1	.00234	1.4533	.05348	121.32	.01662	.00006
#2	.00273	1.5044	.05228	122.42	.01652	.00005
#3	.00312	1.4803	.05354	121.23	.01677	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9770	.00708	.00376	2.0289	.03549	1.8925
Stddev	.0170	.00011	.00034	.0047	.00030	.0122
%RSD	.57168	1.5427	8.9419	.23151	.85764	.64654
#1	2.9574	.00712	.00351	2.0269	.03560	1.8788
#2	2.9881	.00717	.00363	2.0343	.03573	1.9022
#3	2.9856	.00696	.00414	2.0256	.03515	1.8965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a Acquired: 5/9/2023 13:53:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29114	.00339	.32921	.04734	.15896	1.7653
Stddev	.00524	.00091	.00527	.00026	.00240	.3774
%RSD	1.8013	26.822	1.6005	.54000	1.5074	21.378
#1	.29017	.00442	.33360	.04718	.16067	1.7337
#2	.29680	.00268	.33067	.04764	.15999	2.1576
#3	.28645	.00308	.32337	.04721	.15622	1.4048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6049	.26927	.07613	.07753	.02240	.00285
Stddev	.0122	.00418	.00320	.00505	.00298	.00264
%RSD	.75947	1.5519	4.2044	6.5145	13.321	92.618
#1	1.5922	.27218	.07483	.07261	.02431	.00386
#2	1.6061	.27116	.07977	.08270	.02394	.00485
#3	1.6165	.26449	.07378	.07727	.01896	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a Acquired: 5/9/2023 13:53:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00360	F 1837.0	.00480	.00748	.03392	.00611
Stddev	.00212	14.9	.00062	.00021	.00083	.00190
%RSD	59.077	.80877	12.822	2.8381	2.4593	31.008
#1	.00411	1820.0	.00548	.00733	.03302	.00409
#2	.00126	1843.2	.00429	.00772	.03409	.00641
#3	.00541	1847.7	.00462	.00738	.03466	.00784
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00902	.07386
Stddev	.00017	.00141
%RSD	1.8984	1.9094
#1	.00914	.07494
#2	.00883	.07437
#3	.00910	.07226
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-10-a Acquired: 5/9/2023 13:53:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4873.3	94202.	9193.6
Stddev	84.2	247.	103.1
%RSD	1.7280	.26272	1.1213
#1	4810.8	93995.	9312.2
#2	4840.0	94135.	9125.0
#3	4969.1	94476.	9143.7

Sample Name: CCV Acquired: 5/9/2023 13:58:07 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96106	24.685	.49418	2.1070	1.9399	2.0463
Stddev	.00289	.059	.00272	.0341	.0023	.0058
%RSD	.30047	.23721	.55056	1.6170	.11853	.28535
#1	.95818	24.618	.49685	2.0677	1.9376	2.0457
#2	.96395	24.715	.49142	2.1246	1.9399	2.0524
#3	.96105	24.723	.49427	2.1286	1.9422	2.0408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.105	.50722	2.0032	1.9889	1.9302	25.181
Stddev	.125	.00065	.0036	.0040	.0013	.093
%RSD	.24917	.12862	.17887	.19840	.06497	.37022
#1	49.968	.50647	1.9995	1.9843	1.9293	25.092
#2	50.212	.50766	2.0034	1.9910	1.9296	25.278
#3	50.136	.50753	2.0066	1.9912	1.9316	25.172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 13:58:07 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.170	1.9137	50.087	2.0066	2.0399	49.189
Stddev	.096	.0084	.241	.0073	.0037	1.090
%RSD	.19582	.44099	.48108	.36135	.18268	2.2160
#1	49.146	1.9152	49.842	2.0029	2.0382	50.437
#2	49.276	1.9212	50.323	2.0149	2.0373	48.706
#3	49.088	1.9045	50.097	2.0019	2.0442	48.423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.221	2.0020	1.9714	.50484	.50161	.49299
Stddev	.165	.0036	.0037	.00437	.00240	.00148
%RSD	.33487	.17930	.18949	.86649	.47889	.30034
#1	49.285	1.9981	1.9677	.49993	.50122	.49245
#2	49.344	2.0028	1.9752	.50625	.49943	.49186
#3	49.033	2.0051	1.9714	.50833	.50419	.49467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 13:58:07 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50198	F 19.252	1.9259	1.9728	1.9856	1.0141
Stddev	.00667	.407	.0079	.0051	.0031	.0017
%RSD	1.3278	2.1158	.40834	.26073	.15476	.16860
#1	.49829	19.600	1.9168	1.9703	1.9840	1.0138
#2	.49797	19.353	1.9312	1.9787	1.9836	1.0125
#3	.50967	18.804	1.9295	1.9694	1.9891	1.0159
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9932	1.9874
Stddev	.0048	.0023
%RSD	.24155	.11545
#1	1.9887	1.9856
#2	1.9983	1.9867
#3	1.9924	1.9900
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 13:58:07 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4929.5	95737.	9300.9
Stddev	11.9	74.	69.8
%RSD	.24061	.07767	.75094
#1	4917.3	95654.	9242.4
#2	4941.0	95797.	9282.2
#3	4930.3	95761.	9378.2

Sample Name: CCB Acquired: 5/9/2023 14:02:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	F .08111	.00016	F .20581	.00008	.00005
Stddev	.00012	.11743	.00079	.00257	.00032	.00005
%RSD	57.870	144.76	496.38	1.2499	427.09	103.55
#1	-.00031	.00678	.00092	.20307	-.00007	.00010
#2	-.00021	.02007	-.00065	.20817	.00045	.00003
#3	-.00008	.21649	.00021	.20621	-.00015	.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.05000		.03600		
Low Limit		-.05000		-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01355	.00005	.00006	-.00022	.00027	.00430
Stddev	.00588	.00005	.00008	.00026	.00044	.00150
%RSD	43.393	89.470	136.71	117.35	160.85	34.865
#1	.01122	.00009	.00001	-.00012	.00058	.00487
#2	.00919	.00008	.00014	-.00051	.00045	.00260
#3	.02023	-.00000	.00001	-.00002	-.00023	.00542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 14:02:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00265	-.00086	.01255	.00008	.00010	F .44539
Stddev	.03041	.00034	.01443	.00004	.00009	.85596
%RSD	1149.0	39.852	114.90	58.188	92.412	192.18
#1	-.03086	-.00125	.01932	.00012	.00010	1.3315
#2	.01031	-.00072	-.00401	.00007	.00019	-.37684
#3	.02850	-.00060	.02236	.00003	.00001	.38151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02319	.00022	.00157	F .00254	F -.00200	.00104
Stddev	.02067	.00009	.00052	.00252	.00095	.00114
%RSD	89.156	39.374	33.309	99.401	47.685	109.43
#1	.01015	.00025	.00123	-.00035	-.00111	.00058
#2	.01239	.00030	.00217	.00430	-.00189	.00235
#3	.04702	.00013	.00131	.00367	-.00301	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit				.00200	.00200	
Low Limit				-.00200	-.00200	

Sample Name: CCB Acquired: 5/9/2023 14:02:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	F 14.433	.00008	.00004	.00019	.00163
Stddev	.00068	.126	.00022	.00012	.00265	.00074
%RSD	98.937	.87474	285.73	300.08	1374.9	45.646
#1	-.00050	14.288	.00012	.00006	-.00202	.00084
#2	-.00012	14.512	.00027	-.00009	-.00053	.00172
#3	-.00144	14.500	-.00016	.00015	.00313	.00232
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00029	.00005
Stddev	.00027	.00005
%RSD	93.825	106.68
#1	.00059	.00004
#2	.00020	.00000
#3	.00007	.00010
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 14:02:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5010.8	96027.	9292.1
Stddev	15.5	476.	43.7
%RSD	.30914	.49519	.47053
#1	4993.6	95538.	9336.4
#2	5015.2	96053.	9291.0
#3	5023.7	96488.	9249.0

Sample Name: 140-31398-a-10-a PDS Acquired: 5/9/2023 14:07:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05085	3.3614	.15107	F 119.69	.11652	.05110
Stddev	.00207	.0883	.00345	.32	.00338	.00191
%RSD	4.0645	2.6281	2.2852	.26913	2.9010	3.7284
#1	.04863	3.2690	.14817	119.45	.11279	.04904
#2	.05118	3.3701	.15014	120.06	.11739	.05148
#3	.05272	3.4450	.15489	119.58	.11938	.05279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.117	.05661	.10645	2.1477	.29550	2.8356
Stddev	2.430	.00132	.00281	.0076	.00933	.0605
%RSD	4.5743	2.3386	2.6390	.35418	3.1584	2.1350
#1	50.428	.05511	.10329	2.1396	.28508	2.7674
#2	53.767	.05709	.10738	2.1487	.29832	2.8561
#3	55.155	.05762	.10867	2.1547	.30309	2.8832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a PDS Acquired: 5/9/2023 14:07:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.485	.10037	10.026	.14731	.67657	51.700
Stddev	2.099	.00368	.503	.00390	.01272	2.876
%RSD	4.3283	3.6710	5.0127	2.6467	1.8806	5.5632
#1	46.156	.09623	9.4647	.14314	.66235	48.398
#2	49.070	.10157	10.178	.14795	.68048	53.039
#3	50.228	.10329	10.435	.15086	.68688	53.662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.202	.76534	5.1976	.16792	.11764	.49302
Stddev	2.160	.01256	.1186	.00705	.00201	.01269
%RSD	4.3019	1.6415	2.2823	4.1979	1.7117	2.5730
#1	47.793	.75116	5.0632	.16473	.11588	.47928
#2	50.848	.76978	5.2417	.16304	.11720	.49549
#3	51.965	.77508	5.2878	.17601	.11983	.50429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a PDS Acquired: 5/9/2023 14:07:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14381	F 1752.5	.46496	.50312	.13633	.39180
Stddev	.00434	18.0	.01268	.02115	.00392	.00995
%RSD	3.0150	1.0298	2.7267	4.2035	2.8765	2.5398
#1	.13941	1738.2	.45125	.47944	.13185	.38034
#2	.14396	1746.4	.46738	.50975	.13800	.39693
#3	.14808	1772.8	.47626	.52015	.13915	.39815
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21536	.57909
Stddev	.00634	.01229
%RSD	2.9451	2.1220
#1	.20827	.56543
#2	.21735	.58262
#3	.22048	.58923
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-10-a PDS Acquired: 5/9/2023 14:07:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4769.5	92519.	9171.4
Stddev	17.8	241.	36.4
%RSD	.37368	.26063	.39644
#1	4749.2	92244.	9212.0
#2	4776.9	92619.	9141.8
#3	4782.5	92694.	9160.4

Sample Name: 31398-a-10-a PDSD Acquired: 5/9/2023 14:12:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05058	3.3652	.15107	F 119.07	.11572	.05068
Stddev	.00224	.0880	.00356	.50	.00533	.00230
%RSD	4.4301	2.6146	2.3544	.41884	4.6049	4.5390
#1	.04802	3.2665	.14705	119.14	.10981	.04814
#2	.05156	3.3937	.15381	118.54	.11721	.05128
#3	.05217	3.4354	.15235	119.53	.12015	.05262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.568	.05661	.10692	2.1363	.29523	2.8415
Stddev	1.850	.00193	.00388	.0086	.01263	.0634
%RSD	3.4530	3.4137	3.6277	.40410	4.2781	2.2323
#1	51.544	.05442	.10251	2.1341	.28098	2.7734
#2	53.987	.05735	.10848	2.1290	.29968	2.8522
#3	55.172	.05807	.10978	2.1459	.30503	2.8989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDSD Acquired: 5/9/2023 14:12:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.857	.10028	10.110	.14632	.67982	51.617
Stddev	1.551	.00579	.378	.00419	.01019	1.567
%RSD	3.1751	5.7764	3.7421	2.8639	1.4985	3.0365
#1	47.182	.09388	9.7052	.14161	.66843	50.160
#2	49.146	.10179	10.169	.14768	.68297	51.415
#3	50.244	.10516	10.455	.14965	.68806	53.276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.642	.76645	5.2390	.16742	.11551	.49785
Stddev	1.562	.01880	.1025	.00622	.00185	.00818
%RSD	3.0843	2.4529	1.9566	3.7162	1.6055	1.6422
#1	48.939	.74545	5.1219	.16157	.11369	.48949
#2	50.979	.77220	5.2830	.16674	.11544	.49822
#3	52.008	.78171	5.3122	.17396	.11740	.50583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDSD Acquired: 5/9/2023 14:12:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14333	F 1766.0	.46543	.50263	.13785	.39363
Stddev	.00381	18.7	.00797	.02550	.00202	.01323
%RSD	2.6596	1.0611	1.7114	5.0739	1.4680	3.3615
#1	.13936	1745.5	.45650	.47445	.13555	.37862
#2	.14365	1770.2	.46798	.50931	.13939	.39868
#3	.14697	1782.2	.47181	.52413	.13860	.40359
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21398	.58042
Stddev	.00994	.01902
%RSD	4.6464	3.2766
#1	.20300	.55904
#2	.21660	.58674
#3	.22236	.59547
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31398-a-10-a PDSD Acquired: 5/9/2023 14:12:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4774.5	93033.	9151.0
Stddev	8.9	631.	36.0
%RSD	.18565	.67787	.39388
#1	4765.1	92324.	9172.5
#2	4775.5	93531.	9171.0
#3	4782.8	93244.	9109.4

Sample Name: 140-31398-a-17-a Acquired: 5/9/2023 14:17:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00126	1.6154	.05161	F 120.88	.01686	.00005
Stddev	.00041	.0575	.00244	.11	.00019	.00001
%RSD	32.535	3.5612	4.7193	.09374	1.1057	20.567
#1	.00082	1.6336	.05266	120.98	.01669	.00004
#2	.00163	1.5510	.05334	120.89	.01684	.00006
#3	.00132	1.6617	.04883	120.76	.01706	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8361	.02780	.00355	1.9898	.03456	1.9388
Stddev	.0117	.00008	.00031	.0044	.00019	.0108
%RSD	.41391	.29223	8.7526	.22260	.55330	.55808
#1	2.8229	.02785	.00332	1.9896	.03462	1.9267
#2	2.8398	.02771	.00390	1.9944	.03471	1.9477
#3	2.8455	.02785	.00343	1.9855	.03434	1.9419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-17-a Acquired: 5/9/2023 14:17:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46731	.00350	.30592	.03887	.15589	1.6066
Stddev	.02063	.00039	.02307	.00002	.00047	.3324
%RSD	4.4146	11.063	7.5402	.03930	.30397	20.693
#1	.48352	.00314	.27940	.03886	.15634	1.8147
#2	.47432	.00344	.32135	.03889	.15593	1.7818
#3	.44409	.00391	.31701	.03886	.15540	1.2232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9236	.24465	.01827	.07605	.01933	.00568
Stddev	.0086	.00052	.00248	.00133	.00417	.00192
%RSD	.44739	.21384	13.550	1.7530	21.584	33.814
#1	1.9136	.24484	.02113	.07526	.02411	.00680
#2	1.9281	.24505	.01670	.07759	.01639	.00346
#3	1.9290	.24406	.01699	.07530	.01750	.00676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-17-a Acquired: 5/9/2023 14:17:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00419	F 1822.2	.00022	.00732	.03566	.00575
Stddev	.00064	24.5	.00062	.00012	.00107	.00130
%RSD	15.244	1.3460	276.38	1.6593	3.0133	22.609
#1	.00425	1804.8	.00094	.00746	.03591	.00592
#2	.00481	1850.2	-.00006	.00724	.03659	.00696
#3	.00353	1811.5	-.00020	.00725	.03449	.00438
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00913	.09388
Stddev	.00007	.00015
%RSD	.76780	.16028
#1	.00909	.09401
#2	.00909	.09371
#3	.00921	.09390
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-17-a Acquired: 5/9/2023 14:17:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4868.1	94383.	9285.6
Stddev	29.0	557.	26.9
%RSD	.59656	.58990	.28982
#1	4836.3	93998.	9316.1
#2	4874.8	94129.	9265.2
#3	4893.3	95021.	9275.5

Sample Name: 140-31398-a-29-a Acquired: 5/9/2023 14:22:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00062	.98888	.00395	F 124.89	.01137	.00005
Stddev	.00010	.01926	.00089	.87	.00012	.00001
%RSD	15.457	1.9473	22.589	.69825	1.0584	26.668
#1	-.00052	1.0107	.00365	125.72	.01125	.00005
#2	-.00070	.98151	.00324	123.98	.01139	.00007
#3	-.00063	.97440	.00495	124.97	.01149	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38597	.00223	.00032	.02004	.02295	.14830
Stddev	.00178	.00008	.00012	.00045	.00021	.00263
%RSD	.46235	3.4284	36.296	2.2627	.91535	1.7717
#1	.38559	.00228	.00035	.01951	.02314	.14846
#2	.38441	.00227	.00042	.02027	.02297	.14560
#3	.38792	.00214	.00019	.02032	.02272	.15084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-29-a Acquired: 5/9/2023 14:22:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06896	-.00040	.19755	.00699	.15030	-.13062
Stddev	.02252	.00080	.00918	.00004	.00034	.19900
%RSD	32.656	201.04	4.6486	.59718	.22293	152.35
#1	.04484	.00023	.19564	.00696	.15054	.07927
#2	.07261	-.00129	.18947	.00698	.15044	-.15456
#3	.08943	-.00013	.20754	.00704	.14992	-.31657
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22322	.06608	-.05114	.03233	-.02794	.00534
Stddev	.00169	.00033	.00250	.00321	.00206	.00242
%RSD	.75690	.49940	4.8825	9.9319	7.3663	45.370
#1	.22172	.06644	-.04836	.02934	-.02848	.00346
#2	.22290	.06580	-.05318	.03193	-.02967	.00808
#3	.22505	.06600	-.05190	.03573	-.02566	.00450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-29-a Acquired: 5/9/2023 14:22:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00255	F 1990.9	-.00352	.00260	.01460	.00844
Stddev	.00040	13.5	.00104	.00010	.00056	.00231
%RSD	15.839	.67861	29.456	3.7973	3.8268	27.374
#1	.00301	1997.7	-.00420	.00269	.01524	.01029
#2	.00238	1999.7	-.00232	.00250	.01422	.00585
#3	.00227	1975.4	-.00403	.00261	.01433	.00918
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00079	.01138
Stddev	.00013	.00014
%RSD	16.985	1.2083
#1	.00075	.01133
#2	.00068	.01154
#3	.00094	.01128
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-29-a Acquired: 5/9/2023 14:22:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5009.1	95505.	9353.4
Stddev	1.7	352.	3.6
%RSD	.03373	.36850	.03846
#1	5009.3	95115.	9357.3
#2	5010.6	95798.	9350.2
#3	5007.3	95602.	9352.6

Sample Name: 31398-a-10-a SD@5 Acquired: 5/9/2023 14:28:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	.33003	.01284	26.531	.00324	.00002
Stddev	.00046	.02223	.00070	.095	.00011	.00003
%RSD	87.144	6.7345	5.4593	.35703	3.4379	174.33
#1	.00005	.32295	.01287	26.551	.00324	-.00001
#2	.00096	.35493	.01213	26.614	.00313	.00001
#3	.00057	.31220	.01353	26.428	.00336	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.61099	.00154	.00121	.40982	.00709	.38183
Stddev	.00055	.00009	.00023	.00135	.00020	.00615
%RSD	.09032	5.9477	19.014	.32825	2.7858	1.6101
#1	.61108	.00164	.00141	.40837	.00732	.37682
#2	.61039	.00146	.00126	.41103	.00698	.38869
#3	.61148	.00152	.00096	.41005	.00698	.37998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a SD@5 Acquired: 5/9/2023 14:28:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05248	.00073	.07380	.00954	.03238	.12574
Stddev	.02162	.00063	.01232	.00005	.00010	1.2910
%RSD	41.193	86.782	16.689	.54579	.30013	1026.7
#1	.07558	.00027	.06074	.00958	.03248	-.95424
#2	.04915	.00145	.07545	.00955	.03229	1.5556
#3	.03273	.00047	.08521	.00948	.03235	-.22414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33924	.05710	.01667	.01536	.00178	-.00037
Stddev	.00892	.00005	.00141	.00135	.00154	.00080
%RSD	2.6308	.08850	8.4554	8.7843	86.386	215.11
#1	.32917	.05704	.01636	.01388	.00336	.00053
#2	.34233	.05714	.01821	.01568	.00171	-.00066
#3	.34620	.05710	.01545	.01652	.00028	-.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a SD@5 Acquired: 5/9/2023 14:28:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00031	392.01	.00098	.00142	.00656	.00247
Stddev	.00216	2.53	.00043	.00006	.00029	.00248
%RSD	694.06	.64528	44.398	3.9036	4.4062	100.49
#1	.00072	391.53	.00060	.00143	.00643	.00533
#2	-.00279	394.75	.00145	.00146	.00690	.00084
#3	.00114	389.76	.00088	.00136	.00637	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00195	.01535
Stddev	.00036	.00003
%RSD	18.645	.20022
#1	.00182	.01538
#2	.00166	.01533
#3	.00236	.01533
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31398-a-10-a SD@5 Acquired: 5/9/2023 14:28:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4951.0	95753.	9198.1
Stddev	18.8	269.	60.9
%RSD	.37919	.28086	.66164
#1	4936.4	95487.	9199.4
#2	4944.3	95747.	9136.6
#3	4972.2	96025.	9258.3

Sample Name: 140-31634-a-2-a Acquired: 5/9/2023 14:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.15283	.00376	.29678	.01820	-.00001
Stddev	.00009	.02360	.00084	.01350	.00050	.00001
%RSD	33.789	15.444	22.456	4.5487	2.7675	111.34
#1	.00034	.15744	.00323	.28204	.01874	-.00002
#2	.00017	.12726	.00331	.29975	.01813	.00000
#3	.00031	.17379	.00473	.30854	.01774	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91135	.00024	.00040	.00541	.22525	.32204
Stddev	.01349	.00001	.00003	.00028	.00248	.00535
%RSD	1.4799	2.4992	7.1948	5.1964	1.1017	1.6604
#1	.92684	.00025	.00039	.00568	.22793	.32812
#2	.90500	.00024	.00043	.00544	.22480	.31994
#3	.90221	.00024	.00038	.00512	.22303	.31806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-2-a Acquired: 5/9/2023 14:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46245	-.00054	.21944	.01334	.00317	1.3448
Stddev	.02706	.00032	.00841	.00008	.00024	.3160
%RSD	5.8523	59.440	3.8331	.59658	7.4902	23.500
#1	.48271	-.00025	.21476	.01337	.00328	1.1628
#2	.47292	-.00048	.21442	.01340	.00290	1.1618
#3	.43171	-.00088	.22916	.01325	.00334	1.7097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2808	.00674	.48806	.00838	.00519	.00263
Stddev	.0278	.00010	.00556	.00055	.00077	.00039
%RSD	2.1696	1.4871	1.1382	6.5992	14.874	14.805
#1	1.3120	.00663	.49368	.00853	.00545	.00306
#2	1.2716	.00682	.48794	.00777	.00432	.00253
#3	1.2587	.00678	.48257	.00885	.00580	.00231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-2-a Acquired: 5/9/2023 14:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26819	29.128	.17544	.00251	.00329	.00267
Stddev	.00458	.402	.00201	.00004	.00183	.00149
%RSD	1.7075	1.3807	1.1451	1.7297	55.727	55.974
#1	.27115	28.932	.17676	.00253	.00538	.00311
#2	.27049	29.591	.17643	.00254	.00200	.00100
#3	.26291	28.861	.17313	.00246	.00248	.00389
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00007	.02351
Stddev	.00009	.00018
%RSD	129.41	.78130
#1	.00017	.02367
#2	-.00001	.02355
#3	.00005	.02331
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-2-a Acquired: 5/9/2023 14:32:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4870.7	94982.	8892.5
Stddev	96.4	1777.	173.0
%RSD	1.9795	1.8710	1.9453
#1	4770.1	92975.	8739.1
#2	4879.7	95614.	8858.3
#3	4962.3	96357.	9080.0

Sample Name: 140-31634-a-7-a Acquired: 5/9/2023 14:37:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.14156	.00049	.34849	.01901	.00001
Stddev	.00018	.00724	.00096	.00785	.00032	.00002
%RSD	98.342	5.1147	196.64	2.2512	1.6869	319.27
#1	.00028	.13387	.00078	.34153	.01864	-.00001
#2	.00029	.14824	-.00058	.34694	.01923	-.00000
#3	-.00002	.14257	.00127	.35699	.01916	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90599	.00013	.00027	.00580	.10556	.18641
Stddev	.01038	.00003	.00015	.00007	.00121	.00387
%RSD	1.1463	25.938	54.869	1.2929	1.1419	2.0741
#1	.89405	.00016	.00043	.00583	.10690	.18239
#2	.91093	.00009	.00026	.00571	.10523	.18676
#3	.91297	.00014	.00013	.00586	.10456	.19010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a Acquired: 5/9/2023 14:37:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36271	-.00132	.20781	.00616	.00262	1.3770
Stddev	.00293	.00046	.01044	.00003	.00009	.5574
%RSD	.80773	35.320	5.0258	.44787	3.3445	40.482
#1	.36581	-.00085	.21965	.00617	.00270	.92704
#2	.36232	-.00178	.19990	.00613	.00262	1.2034
#3	.35999	-.00132	.20388	.00618	.00253	2.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0092	.00424	.48872	.00586	.00405	.00189
Stddev	.0101	.00024	.00497	.00261	.00167	.00099
%RSD	.99729	5.6498	1.0172	44.584	41.318	52.174
#1	.99962	.00446	.49446	.00364	.00590	.00146
#2	1.0083	.00427	.48571	.00874	.00363	.00302
#3	1.0197	.00398	.48599	.00519	.00263	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a Acquired: 5/9/2023 14:37:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14272	24.870	.18514	.00165	.00509	.00112
Stddev	.00115	1.322	.00173	.00009	.00044	.00108
%RSD	.80700	5.3138	.93446	5.5688	8.6047	96.324
#1	.14405	23.352	.18698	.00169	.00560	.00048
#2	.14202	25.500	.18355	.00155	.00487	.00052
#3	.14209	25.759	.18489	.00172	.00481	.00237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00030	.01688
Stddev	.00022	.00003
%RSD	71.867	.15063
#1	.00008	.01689
#2	.00032	.01685
#3	.00052	.01690
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-7-a Acquired: 5/9/2023 14:37:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4832.1	94496.	9003.8
Stddev	56.6	1392.	84.9
%RSD	1.1718	1.4731	.94346
#1	4767.2	92913.	8980.3
#2	4857.5	95052.	8933.0
#3	4871.5	95525.	9098.0

Sample Name: 140-31634-a-7-a PDS Acquired: 5/9/2023 14:42:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04681	2.1183	.10091	1.3018	.11789	.05374
Stddev	.00043	.0075	.00159	.0070	.00140	.00048
%RSD	.91846	.35520	1.5757	.54000	1.1918	.89981
#1	.04655	2.1120	.09921	1.3059	.11627	.05327
#2	.04658	2.1266	.10115	1.2937	.11885	.05372
#3	.04731	2.1162	.10236	1.3059	.11854	.05423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.233	.05064	.10426	.21415	.35582	1.1969
Stddev	.820	.00039	.00092	.00240	.00183	.0184
%RSD	1.6317	.77442	.88017	1.1188	.51397	1.5335
#1	49.297	.05027	.10348	.21169	.35402	1.1761
#2	50.578	.05060	.10403	.21430	.35578	1.2039
#3	50.824	.05105	.10527	.21647	.35768	1.2108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a PDS Acquired: 5/9/2023 14:42:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.529	.09592	9.8770	.10762	.52589	51.526
Stddev	.472	.00173	.1664	.00101	.00519	.462
%RSD	.99337	1.8069	1.6846	.93475	.98752	.89656
#1	46.985	.09393	9.6910	.10666	.52140	51.336
#2	47.773	.09705	9.9282	.10753	.52470	51.189
#3	47.830	.09680	10.012	.10867	.53158	52.052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.943	.51912	5.3451	.10219	.10129	.49052
Stddev	.408	.00476	.0381	.00303	.00141	.00430
%RSD	.83316	.91709	.71239	2.9663	1.3954	.87675
#1	48.475	.51557	5.3251	.09932	.09979	.48708
#2	49.130	.51725	5.3212	.10536	.10148	.48913
#3	49.224	.52453	5.3890	.10188	.10260	.49534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a PDS Acquired: 5/9/2023 14:42:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28053	24.740	.65187	.49632	.10800	.39931
Stddev	.00191	.895	.00576	.00415	.00129	.00331
%RSD	.68176	3.6184	.88340	.83569	1.1980	.82927
#1	.27869	23.734	.64743	.49158	.10654	.39704
#2	.28039	25.036	.64980	.49805	.10898	.39779
#3	.28251	25.450	.65837	.49931	.10849	.40311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20728	.51830
Stddev	.00217	.00471
%RSD	1.0461	.90819
#1	.20511	.51504
#2	.20728	.51616
#3	.20945	.52369
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-7-a PDS Acquired: 5/9/2023 14:42:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4807.0	92920.	9144.3
Stddev	39.6	923.	25.2
%RSD	.82275	.99303	.27582
#1	4762.6	91892.	9170.6
#2	4838.5	93676.	9120.3
#3	4819.9	93193.	9141.9

Sample Name: 140-31634-a-7-a PDSD Acquired: 5/9/2023 14:47:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04695	2.1473	.10055	1.2925	.11922	.05372
Stddev	.00020	.0224	.00103	.0106	.00039	.00046
%RSD	.42678	1.0431	1.0262	.82122	.32799	.84809
#1	.04710	2.1281	.10132	1.2851	.11924	.05324
#2	.04672	2.1420	.09938	1.2878	.11882	.05376
#3	.04703	2.1719	.10094	1.3047	.11960	.05415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.879	.05112	.10531	.21367	.35128	1.2104
Stddev	.309	.00037	.00087	.00153	.00133	.0056
%RSD	.58420	.72375	.82542	.71629	.37753	.46259
#1	52.562	.05085	.10444	.21268	.35013	1.2061
#2	52.896	.05097	.10531	.21290	.35098	1.2084
#3	53.179	.05154	.10618	.21543	.35273	1.2168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a PDSD Acquired: 5/9/2023 14:47:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.892	.09704	10.427	.10745	.52904	53.288
Stddev	.154	.00090	.118	.00116	.00248	.531
%RSD	.30961	.92778	1.1274	1.0756	.46813	.99583
#1	49.727	.09601	10.297	.10638	.52700	52.694
#2	49.915	.09740	10.460	.10730	.52832	53.454
#3	50.033	.09770	10.525	.10868	.53179	53.716
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.465	.52342	5.3665	.10368	.10123	.49260
Stddev	.037	.00347	.0180	.00328	.00044	.00241
%RSD	.07114	.66245	.33590	3.1611	.43389	.48900
#1	51.425	.52040	5.3637	.10066	.10121	.48999
#2	51.474	.52266	5.3500	.10322	.10080	.49310
#3	51.497	.52721	5.3857	.10717	.10168	.49473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a PDSD Acquired: 5/9/2023 14:47:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28539	22.640	.65239	.50201	.10978	.40034
Stddev	.00168	.444	.00224	.00164	.00162	.00638
%RSD	.58804	1.9591	.34380	.32671	1.4801	1.5947
#1	.28665	22.149	.65041	.50023	.11107	.39653
#2	.28348	22.758	.65195	.50236	.11031	.39677
#3	.28603	23.012	.65483	.50345	.10796	.40771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20619	.52295
Stddev	.00198	.00338
%RSD	.96268	.64661
#1	.20394	.51955
#2	.20698	.52299
#3	.20767	.52632
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-7-a PDSD Acquired: 5/9/2023 14:47:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4798.3	93467.	9062.8
Stddev	35.8	1348.	85.2
%RSD	.74611	1.4423	.94021
#1	4757.0	91912.	8966.5
#2	4820.7	94304.	9093.5
#3	4817.1	94184.	9128.5

Sample Name: 140-31634-a-7-a SD@5 Acquired: 5/9/2023 14:52:11 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	.02905	.00037	.22570	.00365	-.00001
Stddev	.00030	.00802	.00040	.00089	.00013	.00002
%RSD	538.64	27.588	106.92	.39650	3.6847	235.51
#1	.00026	.03742	-.00008	.22485	.00374	.00001
#2	-.00009	.02830	.00054	.22664	.00349	-.00002
#3	-.00034	.02144	.00066	.22561	.00371	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19348	.00010	.00007	.00059	.02115	.03955
Stddev	.00054	.00008	.00009	.00052	.00026	.00094
%RSD	.27963	83.420	126.79	87.655	1.2324	2.3893
#1	.19410	.00002	-.00003	.00033	.02115	.03846
#2	.19311	.00019	.00016	.00025	.02141	.04015
#3	.19323	.00008	.00009	.00118	.02089	.04003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a SD@5 Acquired: 5/9/2023 14:52:11 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06270	-.00115	.04911	.00134	.00061	.63672
Stddev	.00947	.00122	.00342	.00004	.00016	.65816
%RSD	15.098	106.01	6.9585	3.1574	26.512	103.37
#1	.06357	-.00074	.04877	.00129	.00075	1.3555
#2	.07170	-.00019	.05268	.00137	.00066	.49102
#3	.05283	-.00253	.04587	.00135	.00043	.06361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22058	.00106	.10280	.00277	-.00042	-.00028
Stddev	.00589	.00015	.00188	.00171	.00065	.00032
%RSD	2.6688	14.512	1.8296	61.738	154.05	113.48
#1	.22193	.00101	.10445	.00474	.00029	.00002
#2	.22568	.00093	.10321	.00189	-.00059	-.00062
#3	.21414	.00123	.10075	.00168	-.00097	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-7-a SD@5 Acquired: 5/9/2023 14:52:11 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02774	11.212	.03766	.00035	.00055	.00316
Stddev	.00182	.184	.00092	.00002	.00148	.00154
%RSD	6.5566	1.6403	2.4456	6.0631	266.36	48.658
#1	.02982	11.365	.03865	.00033	.00076	.00304
#2	.02693	11.264	.03683	.00038	-.00101	.00476
#3	.02647	11.008	.03751	.00036	.00192	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00002	.00344
Stddev	.00028	.00010
%RSD	1119.0	2.8752
#1	.00025	.00352
#2	-.00001	.00348
#3	-.00031	.00333
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-7-a SD@5 Acquired: 5/9/2023 14:52:11 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5060.1	97585.	9306.9
Stddev	4.0	186.	77.9
%RSD	.07894	.19033	.83745
#1	5055.7	97773.	9217.4
#2	5063.5	97402.	9359.3
#3	5061.0	97581.	9344.1

Sample Name: CCV Acquired: 5/9/2023 14:57:09 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96431	24.749	.49494	2.1692	1.9472	2.0586
Stddev	.00198	.136	.00069	.0054	.0097	.0036
%RSD	.20565	.54863	.13847	.24851	.49798	.17386
#1	.96586	24.603	.49573	2.1712	1.9370	2.0627
#2	.96207	24.773	.49462	2.1631	1.9482	2.0564
#3	.96499	24.871	.49447	2.1733	1.9563	2.0567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.609	.50993	2.0137	2.0035	1.9354	25.417
Stddev	.062	.00046	.0012	.0082	.0013	.075
%RSD	.12327	.09011	.06158	.40738	.06797	.29642
#1	50.537	.50941	2.0124	2.0043	1.9365	25.330
#2	50.635	.51026	2.0149	1.9950	1.9339	25.459
#3	50.653	.51013	2.0137	2.0112	1.9358	25.462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 14:57:09 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.315	1.9108	50.680	2.0231	2.0573	49.699
Stddev	.131	.0087	.084	.0062	.0016	.299
%RSD	.26572	.45675	.16658	.30552	.07625	.60191
#1	49.164	1.9010	50.775	2.0274	2.0589	49.490
#2	49.375	1.9179	50.613	2.0160	2.0557	50.042
#3	49.405	1.9133	50.653	2.0259	2.0573	49.565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.483	2.0079	1.9761	.51003	.50483	.49381
Stddev	.128	.0017	.0023	.00128	.00116	.00254
%RSD	.25953	.08498	.11858	.25007	.22928	.51405
#1	49.341	2.0061	1.9788	.51148	.50551	.49374
#2	49.590	2.0079	1.9750	.50908	.50349	.49639
#3	49.517	2.0096	1.9745	.50953	.50548	.49131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 14:57:09 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50774	F 10.036	1.9124	1.9810	1.9959	1.0218
Stddev	.00076	.146	.0038	.0098	.0092	.0017
%RSD	.14974	1.4526	.20035	.49198	.46267	.16738
#1	.50694	10.140	1.9085	1.9699	1.9857	1.0224
#2	.50784	10.099	1.9161	1.9845	1.9981	1.0199
#3	.50845	9.8697	1.9126	1.9884	2.0038	1.0232
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0095	1.9956
Stddev	.0040	.0025
%RSD	.20021	.12408
#1	2.0091	1.9936
#2	2.0057	1.9983
#3	2.0137	1.9948
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 14:57:09 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4919.9	95263.	9222.4
Stddev	5.1	570.	107.5
%RSD	.10306	.59797	1.1652
#1	4914.7	94665.	9101.9
#2	4920.1	95799.	9256.9
#3	4924.8	95325.	9308.4

Sample Name: CCB Acquired: 5/9/2023 15:01:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	.02791	.00007	F .18297	.00010	.00007
Stddev	.00024	.01092	.00027	.00281	.00019	.00004
%RSD	60.425	39.114	373.84	1.5364	197.47	62.054
#1	.00055	.03941	-.00023	.18581	.00030	.00011
#2	.00012	.01769	.00031	.18291	-.00008	.00006
#3	.00053	.02663	.00014	.18019	.00007	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00817	.00008	.00014	.00027	.00043	F .18904
Stddev	.00185	.00006	.00010	.00034	.00018	.00191
%RSD	22.697	80.692	68.977	126.53	41.616	1.0080
#1	.01031	.00004	.00025	-.00004	.00056	.19061
#2	.00710	.00004	.00011	.00021	.00023	.18692
#3	.00710	.00015	.00006	.00063	.00049	.18960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.06900
Low Limit						-.06900

Sample Name: CCB Acquired: 5/9/2023 15:01:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00478	-.00055	.00040	.00111	.00025	F -1.0399
Stddev	.00834	.00074	.00668	.00004	.00005	.7666
%RSD	174.46	134.57	1692.2	3.3627	18.903	73.721
#1	.00639	-.00135	.00567	.00115	.00022	-1.8092
#2	.01220	-.00042	-.00712	.00111	.00022	-.27602
#3	-.00425	.00012	.00264	.00107	.00030	-1.0344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01925	.00023	.00117	F .00368	-.00153	.00036
Stddev	.01301	.00016	.00178	.00153	.00038	.00073
%RSD	67.579	71.714	152.79	41.628	24.927	200.62
#1	.03270	.00010	-.00082	.00539	-.00123	-.00047
#2	.01833	.00018	.00263	.00245	-.00196	.00088
#3	.00673	.00041	.00169	.00320	-.00141	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/9/2023 15:01:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	F 6.9642	.00004	-.00004	-.00018	.00258
Stddev	.00019	.0777	.00027	.00010	.00080	.00185
%RSD	30.257	1.1158	734.84	253.75	442.93	71.585
#1	.00080	7.0530	.00034	.00007	.00067	.00323
#2	.00068	6.9089	-.00012	-.00009	-.00029	.00402
#3	.00042	6.9307	-.00011	-.00010	-.00091	.00050
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00012	-.00003
Stddev	.00023	.00013
%RSD	185.16	485.09
#1	-.00033	.00012
#2	-.00016	-.00009
#3	.00012	-.00011
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 15:01:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5032.8	97262.	9412.0
Stddev	11.1	263.	97.7
%RSD	.22041	.27010	1.0384
#1	5020.0	97011.	9324.3
#2	5038.7	97239.	9517.4
#3	5039.7	97535.	9394.3

Sample Name: CCB Acquired: 5/9/2023 15:07:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.01011	.00054	F .17828	-.00003	-.00000
Stddev	.00030	.00956	.00005	.00171	.00013	.00001
%RSD	68.695	94.570	8.6574	.95937	400.57	359.89
#1	.00022	.01568	.00057	.18020	-.00014	-.00000
#2	.00030	-.00093	.00055	.17691	.00011	.00001
#3	.00077	.01556	.00049	.17773	-.00007	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00451	.00007	.00014	-.00049	.00027	.00090
Stddev	.00136	.00005	.00013	.00031	.00009	.00282
%RSD	30.035	61.424	89.808	62.564	33.339	312.72
#1	.00352	.00010	.00009	-.00018	.00022	.00361
#2	.00396	.00011	.00029	-.00079	.00021	.00113
#3	.00606	.00002	.00005	-.00050	.00037	-.00203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 15:07:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00570	-.00122	.00819	.00001	.00002	-.22586
Stddev	.01300	.00066	.00705	.00004	.00020	.79878
%RSD	227.96	54.068	86.014	328.75	798.54	353.66
#1	-.00364	-.00198	.01538	.00001	-.00020	-.47401
#2	-.01962	-.00076	.00130	-.00003	.00017	.66754
#3	.00614	-.00093	.00790	.00006	.00011	-.87110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01110	.00031	.00069	.00160	-.00029	-.00127
Stddev	.00160	.00019	.00051	.00218	.00043	.00066
%RSD	14.402	61.710	74.430	136.15	146.75	51.885
#1	.01294	.00021	.00127	.00331	-.00039	-.00064
#2	.01006	.00019	.00046	-.00086	.00018	-.00122
#3	.01030	.00053	.00033	.00236	-.00067	-.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 15:07:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00190	F 6.2457	.00006	-.00008	.00021	.00267
Stddev	.00250	.0313	.00010	.00008	.00086	.00113
%RSD	131.48	.50169	180.74	104.81	418.64	42.499
#1	-.00468	6.2803	.00007	-.00002	.00095	.00160
#2	-.00115	6.2193	.00014	-.00018	-.00074	.00385
#3	.00014	6.2374	-.00005	-.00004	.00041	.00255
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00016	.00005
Stddev	.00021	.00008
%RSD	128.23	163.16
#1	-.00009	-.00003
#2	.00000	.00013
#3	-.00040	.00004
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 15:07:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5015.5	96603.	9255.9
Stddev	32.1	859.	43.2
%RSD	.63963	.88925	.46671
#1	4979.6	95663.	9216.8
#2	5025.7	96801.	9248.6
#3	5041.3	97347.	9302.3

Sample Name: 140-31634-a-12-a Acquired: 5/9/2023 15:12:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.08306	-.00019	.27982	.02580	-.00000
Stddev	.00043	.02872	.00093	.00487	.00031	.00000
%RSD	126.70	34.578	486.11	1.7395	1.2138	2107.2
#1	.00062	.11613	.00060	.27586	.02546	-.00000
#2	.00055	.06436	-.00122	.27835	.02607	-.00000
#3	-.00016	.06870	.00004	.28525	.02587	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.75812	.00011	.00015	.00541	.09622	.18047
Stddev	.00866	.00014	.00006	.00009	.00053	.00081
%RSD	1.1424	129.09	41.319	1.6025	.54754	.45135
#1	.74864	.00002	.00008	.00544	.09673	.18129
#2	.76563	.00003	.00017	.00531	.09626	.18045
#3	.76008	.00027	.00020	.00548	.09568	.17966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-12-a Acquired: 5/9/2023 15:12:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36774	-.00087	.17597	.00918	.00235	.52023
Stddev	.02195	.00008	.00454	.00000	.00022	.88339
%RSD	5.9691	9.1686	2.5795	.02046	9.5194	169.81
#1	.38868	-.00089	.18086	.00919	.00240	1.2907
#2	.34490	-.00079	.17189	.00918	.00254	-.44394
#3	.36964	-.00095	.17516	.00918	.00210	.71394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.88781	.00777	.48871	.00677	.00306	.00166
Stddev	.00271	.00011	.00239	.00257	.00082	.00051
%RSD	.30559	1.3937	.48972	37.911	26.716	30.484
#1	.88891	.00785	.49131	.00478	.00300	.00218
#2	.88472	.00765	.48661	.00967	.00228	.00117
#3	.88980	.00782	.48820	.00587	.00391	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-12-a Acquired: 5/9/2023 15:12:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28180	10.326	.18748	.00135	.00171	-.00065
Stddev	.00107	.252	.00076	.00006	.00041	.00114
%RSD	.37994	2.4407	.40631	4.7953	23.953	174.48
#1	.28301	10.036	.18660	.00132	.00130	.00029
#2	.28098	10.488	.18799	.00143	.00212	-.00033
#3	.28141	10.454	.18784	.00131	.00170	-.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00016	.02629
Stddev	.00019	.00010
%RSD	119.05	.37038
#1	-.00037	.02621
#2	-.00002	.02640
#3	-.00008	.02626
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-12-a Acquired: 5/9/2023 15:12:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4829.1	93886.	9031.1
Stddev	40.9	1000.	34.0
%RSD	.84766	1.0655	.37668
#1	4783.5	92763.	9019.4
#2	4840.9	94212.	9004.5
#3	4862.8	94683.	9069.4

Sample Name: 140-31634-a-19-a Acquired: 5/9/2023 15:17:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.02517	-.00050	.21302	.00120	-.00001
Stddev	.00030	.01149	.00033	.01202	.00012	.00001
%RSD	218.54	45.641	65.045	5.6430	9.8322	85.607
#1	.00042	.03809	-.00057	.22559	.00132	-.00001
#2	.00015	.02132	-.00079	.20163	.00108	-.00000
#3	-.00017	.01610	-.00015	.21185	.00121	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22355	.00006	.00015	.00102	.00323	.02637
Stddev	.00613	.00007	.00011	.00022	.00044	.00083
%RSD	2.7415	104.14	77.696	21.911	13.721	3.1351
#1	.22927	-.00001	.00013	.00086	.00374	.02604
#2	.22431	.00009	.00027	.00092	.00292	.02575
#3	.21708	.00012	.00004	.00128	.00303	.02730
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-19-a Acquired: 5/9/2023 15:17:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16470	-.00014	.03702	.00069	.00046	1.4222
Stddev	.01718	.00017	.01047	.00010	.00003	.5282
%RSD	10.430	124.37	28.288	14.765	5.5397	37.138
#1	.15249	-.00006	.02504	.00079	.00043	1.9542
#2	.18434	-.00033	.04162	.00070	.00049	.89796
#3	.15726	-.00002	.04441	.00058	.00046	1.4145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.87486	.00154	.22196	.00241	-.00075	.00049
Stddev	.01749	.00018	.00484	.00143	.00126	.00068
%RSD	1.9996	11.693	2.1817	59.589	168.01	138.16
#1	.89137	.00151	.21899	.00112	.00069	.00004
#2	.87668	.00138	.21934	.00395	-.00133	.00016
#3	.85652	.00174	.22755	.00215	-.00160	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-19-a Acquired: 5/9/2023 15:17:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	8.0743	.09085	.00011	.00200	.00195
Stddev	.00027	.1415	.00253	.00006	.00115	.00052
%RSD	725.48	1.7520	2.7799	52.040	57.543	26.667
#1	.00027	7.9410	.08810	.00017	.00126	.00188
#2	-.00021	8.2227	.09138	.00006	.00141	.00147
#3	-.00017	8.0590	.09307	.00009	.00333	.00250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00000	.00315
Stddev	.00020	.00011
%RSD	12254.	3.6380
#1	-.00006	.00309
#2	.00022	.00307
#3	-.00017	.00328
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-19-a Acquired: 5/9/2023 15:17:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5331.5	101120.	9411.1
Stddev	45.7	5680.	109.5
%RSD	.85684	5.6175	1.1634
#1	5374.5	94759.	9368.0
#2	5336.6	105690.	9329.6
#3	5283.5	102910.	9535.5

Sample Name: 140-31634-a-1-a Acquired: 5/9/2023 15:22:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00459	.76642	.30928	F 124.41	.11652	.00003
Stddev	.00033	.02539	.00094	.99	.00010	.00000
%RSD	7.1468	3.3132	.30544	.79709	.08622	14.793
#1	.00446	.79544	.31029	125.38	.11660	.00003
#2	.00434	.74827	.30911	123.40	.11657	.00003
#3	.00496	.75555	.30843	124.45	.11641	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2447	.05359	.00194	.03333	1.5449	.60875
Stddev	.0046	.00013	.00020	.00014	.0039	.00432
%RSD	.36696	.23542	10.322	.42104	.24973	.70912
#1	1.2405	.05357	.00181	.03318	1.5487	.60767
#2	1.2440	.05347	.00185	.03346	1.5410	.61351
#3	1.2495	.05372	.00217	.03335	1.5449	.60508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-1-a Acquired: 5/9/2023 15:22:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.65645	.00045	.21766	.02747	.12486	9.9855
Stddev	.01542	.00034	.01078	.00012	.00044	.7440
%RSD	2.3484	74.683	4.9505	.45198	.35477	7.4508
#1	.63864	.00058	.23004	.02762	.12489	10.759
#2	.66523	.00071	.21041	.02741	.12529	9.9219
#3	.66546	.00007	.21252	.02740	.12440	9.2754
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.7387	.04277	.01973	2.3777	2.3235	.06300
Stddev	.0512	.00020	.00113	.0147	.0015	.00148
%RSD	.52557	.46337	5.7202	.61850	.06457	2.3553
#1	9.7789	.04261	.02092	2.3924	2.3247	.06343
#2	9.7562	.04270	.01867	2.3778	2.3218	.06421
#3	9.6811	.04299	.01959	2.3630	2.3238	.06134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-1-a Acquired: 5/9/2023 15:22:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20102	F 1233.5	.03615	.00703	.01434	.00977
Stddev	.00106	8.7	.00039	.00002	.00028	.00069
%RSD	.52937	.70220	1.0825	.22202	1.9695	7.0419
#1	.20214	1229.8	.03572	.00701	.01466	.00963
#2	.20001	1227.3	.03622	.00703	.01426	.01051
#3	.20092	1243.4	.03650	.00704	.01411	.00915
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00103	1.6048
Stddev	.00023	.0029
%RSD	22.030	.17767
#1	.00078	1.6080
#2	.00121	1.6025
#3	.00111	1.6039
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-1-a Acquired: 5/9/2023 15:22:50 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5053.0	97978.	9554.8
Stddev	3.4	398.	32.6
%RSD	.06668	.40655	.34137
#1	5054.7	97523.	9590.1
#2	5055.1	98261.	9548.5
#3	5049.1	98151.	9525.8

Sample Name: 140-31634-a-6-a Acquired: 5/9/2023 15:27:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00352	.80379	.23178	F 124.66	.09200	.00003
Stddev	.00007	.00836	.00149	.56	.00013	.00001
%RSD	1.9932	1.0406	.64114	.44778	.14267	28.485
#1	.00349	.79706	.23346	125.08	.09188	.00003
#2	.00346	.81316	.23064	124.87	.09214	.00003
#3	.00360	.80116	.23123	124.03	.09197	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99984	.05847	.00144	.02882	1.9841	.54983
Stddev	.00469	.00013	.00023	.00023	.0049	.00455
%RSD	.46905	.22357	16.222	.79246	.24829	.82788
#1	.99464	.05851	.00118	.02858	1.9792	.54691
#2	1.0012	.05857	.00164	.02884	1.9891	.54751
#3	1.0037	.05832	.00150	.02904	1.9840	.55507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a Acquired: 5/9/2023 15:27:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53446	.00020	.19148	.01528	.12623	6.9366
Stddev	.01035	.00069	.02052	.00012	.00018	.6379
%RSD	1.9369	348.57	10.715	.77921	.14391	9.1965
#1	.53644	-.00059	.18028	.01518	.12640	7.2145
#2	.52326	.00066	.21516	.01525	.12604	7.3884
#3	.54367	.00053	.17899	.01541	.12626	6.2069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.2510	.03394	-.01254	5.2508	5.2051	.10180
Stddev	.0193	.00046	.00131	.0205	.0112	.00061
%RSD	.30850	1.3543	10.474	.39020	.21475	.59601
#1	6.2305	.03359	-.01328	5.2597	5.2171	.10124
#2	6.2538	.03446	-.01103	5.2654	5.1951	.10245
#3	6.2687	.03377	-.01332	5.2274	5.2031	.10173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a Acquired: 5/9/2023 15:27:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09400	F 1231.7	.05844	.00649	.03550	.00833
Stddev	.00199	2.1	.00023	.00006	.00056	.00206
%RSD	2.1194	.17114	.39949	.98416	1.5715	24.724
#1	.09630	1229.6	.05844	.00656	.03490	.00596
#2	.09276	1231.8	.05867	.00643	.03561	.00972
#3	.09295	1233.8	.05821	.00649	.03600	.00931
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00097	4.8174
Stddev	.00014	.0060
%RSD	13.886	.12538
#1	.00111	4.8227
#2	.00097	4.8108
#3	.00084	4.8187
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-6-a Acquired: 5/9/2023 15:27:52 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5002.5	97468.	9521.0
Stddev	7.1	401.	27.8
%RSD	.14277	.41143	.29195
#1	4995.3	97234.	9524.7
#2	5002.6	97238.	9546.8
#3	5009.6	97931.	9491.5

Sample Name: 140-31634-a-6-a PDS Acquired: 5/9/2023 15:32:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05191	2.7456	.32877	F 123.98	.19010	.05192
Stddev	.00046	.0098	.00223	.86	.00105	.00038
%RSD	.88161	.35673	.67837	.68991	.55419	.72363
#1	.05226	2.7522	.32959	124.30	.18901	.05211
#2	.05206	2.7503	.33048	124.63	.19112	.05217
#3	.05139	2.7344	.32625	123.01	.19017	.05149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.826	.10660	.10490	.23640	2.1887	1.5680
Stddev	.312	.00028	.00028	.00086	.0010	.0164
%RSD	.60235	.26379	.26687	.36532	.04727	1.0453
#1	51.573	.10692	.10497	.23730	2.1899	1.5511
#2	52.175	.10641	.10460	.23634	2.1885	1.5838
#3	51.730	.10648	.10515	.23557	2.1878	1.5691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a PDS Acquired: 5/9/2023 15:32:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.323	.09849	10.071	.11638	.64307	56.475
Stddev	.276	.00048	.097	.00105	.00138	1.037
%RSD	.55901	.48913	.96729	.90618	.21395	1.8358
#1	49.171	.09904	9.9960	.11682	.64465	55.522
#2	49.641	.09829	10.181	.11713	.64238	57.579
#3	49.157	.09815	10.037	.11517	.64217	56.325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.302	.54338	5.1880	5.1963	5.0971	.59856
Stddev	.286	.00109	.0212	.0198	.0110	.00306
%RSD	.51664	.19982	.40783	.38131	.21556	.51149
#1	55.147	.54395	5.2121	5.2021	5.1073	.59667
#2	55.632	.54212	5.1726	5.2126	5.0854	.60209
#3	55.128	.54406	5.1792	5.1742	5.0985	.59692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a PDS Acquired: 5/9/2023 15:32:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23507	F 1210.4	.51589	.50700	.13864	.39819
Stddev	.00102	7.0	.00243	.00372	.00061	.00313
%RSD	.43235	.57629	.47070	.73330	.43770	.78593
#1	.23591	1204.5	.51870	.50480	.13931	.40136
#2	.23394	1218.1	.51444	.51130	.13848	.39511
#3	.23536	1208.5	.51454	.50492	.13813	.39809
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20742	5.2016
Stddev	.00138	.0132
%RSD	.66597	.25447
#1	.20833	5.2167
#2	.20811	5.1923
#3	.20583	5.1957
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-6-a PDS Acquired: 5/9/2023 15:32:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4918.3	95554.	9406.7
Stddev	21.7	742.	36.9
%RSD	.44168	.77612	.39190
#1	4893.2	94919.	9372.4
#2	4929.4	95374.	9402.2
#3	4932.2	96369.	9445.7

Sample Name: 140-31634-a-6-a PDSD Acquired: 5/9/2023 15:37:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05240	2.7174	.33116	F 122.99	.19022	.05191
Stddev	.00112	.0095	.00124	.06	.00022	.00018
%RSD	2.1416	.34951	.37561	.05205	.11630	.35551
#1	.05152	2.7228	.32973	123.07	.19028	.05170
#2	.05202	2.7064	.33198	122.95	.19041	.05204
#3	.05367	2.7229	.33177	122.96	.18998	.05198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.986	.10673	.10501	.23726	2.1853	1.5613
Stddev	.080	.00014	.00024	.00171	.0037	.0007
%RSD	.15398	.13489	.22707	.72114	.17095	.04423
#1	52.058	.10659	.10475	.23528	2.1824	1.5620
#2	51.899	.10673	.10506	.23831	2.1841	1.5612
#3	52.000	.10687	.10522	.23817	2.1895	1.5606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a PDSD Acquired: 5/9/2023 15:37:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.469	.09850	10.036	.11646	.64465	57.796
Stddev	.107	.00089	.077	.00064	.00023	.216
%RSD	.21668	.90377	.76494	.54848	.03514	.37448
#1	49.583	.09944	10.092	.11577	.64441	57.557
#2	49.452	.09840	10.068	.11704	.64486	57.852
#3	49.371	.09767	9.9489	.11656	.64469	57.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.374	.54513	5.2030	5.1815	5.1049	.59740
Stddev	.242	.00104	.0051	.0296	.0078	.00066
%RSD	.43705	.19167	.09748	.57230	.15309	.10972
#1	55.622	.54450	5.1976	5.1496	5.0971	.59712
#2	55.362	.54633	5.2076	5.2082	5.1127	.59815
#3	55.139	.54455	5.2040	5.1868	5.1047	.59694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a PDSD Acquired: 5/9/2023 15:37:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23416	F 1208.2	.51855	.50669	.14080	.39961
Stddev	.00195	3.4	.00132	.00110	.00533	.00081
%RSD	.83221	.28286	.25538	.21732	3.7829	.20308
#1	.23358	1212.0	.51764	.50750	.13819	.40010
#2	.23633	1207.2	.51795	.50714	.13728	.39868
#3	.23256	1205.4	.52007	.50544	.14693	.40007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20702	5.2013
Stddev	.00162	.0003
%RSD	.78291	.00560
#1	.20559	5.2010
#2	.20669	5.2015
#3	.20878	5.2013
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-6-a PDSD Acquired: 5/9/2023 15:37:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4909.5	95800.	9452.7
Stddev	4.6	296.	89.1
%RSD	.09447	.30909	.94271
#1	4907.0	96128.	9351.1
#2	4906.6	95553.	9517.4
#3	4914.8	95718.	9489.6

Sample Name: 140-31634-a-11-a Acquired: 5/9/2023 15:42:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00441	.86296	.19627	F 124.66	.13817	.00003
Stddev	.00013	.01616	.00092	1.53	.00053	.00001
%RSD	2.9235	1.8721	.47116	1.2242	.38076	22.167
#1	.00428	.84430	.19534	123.35	.13771	.00004
#2	.00442	.87243	.19719	126.34	.13875	.00004
#3	.00453	.87214	.19629	124.31	.13806	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99430	.05420	.00116	.02225	1.0008	.61675
Stddev	.00486	.00023	.00010	.00055	.0034	.00208
%RSD	.48907	.42226	8.5621	2.4942	.34477	.33777
#1	.98876	.05395	.00116	.02163	1.0048	.61449
#2	.99790	.05429	.00126	.02271	.99886	.61717
#3	.99622	.05438	.00107	.02240	.99880	.61859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-11-a Acquired: 5/9/2023 15:42:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50090	.00003	.20958	.01967	.13099	5.1194
Stddev	.02990	.00045	.02020	.00018	.00033	.8198
%RSD	5.9686	1776.2	9.6391	.91609	.25042	16.014
#1	.52252	.00021	.20387	.01948	.13077	5.5773
#2	.51340	.00035	.23202	.01983	.13083	5.6081
#3	.46678	-.00049	.19284	.01971	.13136	4.1729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.7154	.02529	.00675	3.1809	3.1092	.07934
Stddev	.0340	.00041	.00112	.0508	.0077	.00131
%RSD	.59536	1.6107	16.572	1.5984	.24740	1.6482
#1	5.6839	.02488	.00603	3.1247	3.1003	.08051
#2	5.7515	.02531	.00618	3.2236	3.1138	.07793
#3	5.7108	.02569	.00804	3.1945	3.1136	.07959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-11-a Acquired: 5/9/2023 15:42:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19333	F 1221.6	.03880	.00571	.07838	.00583
Stddev	.00118	9.6	.00016	.00008	.01128	.00104
%RSD	.60970	.78783	.40942	1.4809	14.393	17.836
#1	.19199	1211.2	.03891	.00580	.07248	.00463
#2	.19385	1223.3	.03862	.00565	.07127	.00643
#3	.19417	1230.2	.03889	.00567	.09139	.00642
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00069	2.4649
Stddev	.00007	.0004
%RSD	10.740	.01536
#1	.00078	2.4645
#2	.00067	2.4650
#3	.00064	2.4652
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-11-a Acquired: 5/9/2023 15:42:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5004.1	96591.	9551.9
Stddev	14.3	728.	110.0
%RSD	.28527	.75334	1.1514
#1	4988.5	97093.	9654.1
#2	5007.3	95757.	9566.0
#3	5016.5	96924.	9435.5

Sample Name: 140-31634-a-16-a Acquired: 5/9/2023 15:47:20 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	.62363	.00178	F 124.60	.02048	.00003
Stddev	.00083	.01732	.00074	.88	.00005	.00001
%RSD	139.74	2.7770	41.415	.70484	.26333	19.160
#1	-.00053	.63324	.00093	124.10	.02053	.00003
#2	-.00145	.60364	.00226	124.08	.02048	.00002
#3	.00020	.63401	.00215	125.61	.02042	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22052	.00137	.00118	.01389	.00277	.12821
Stddev	.00139	.00008	.00017	.00053	.00012	.00033
%RSD	.63014	5.8171	14.743	3.8488	4.3130	.26008
#1	.22055	.00144	.00112	.01450	.00280	.12855
#2	.22189	.00138	.00137	.01365	.00264	.12819
#3	.21911	.00128	.00104	.01352	.00287	.12788
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-16-a Acquired: 5/9/2023 15:47:20 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13754	-.00059	.09219	.00476	.07226	.35379
Stddev	.00958	.00099	.01124	.00007	.00025	.45962
%RSD	6.9628	169.17	12.193	1.4250	.33943	129.91
#1	.14838	.00018	.08147	.00475	.07242	-.16404
#2	.13024	-.00171	.09122	.00484	.07237	.71340
#3	.13399	-.00023	.10389	.00470	.07197	.51202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20285	.01589	-.03102	.02092	-.01579	.00419
Stddev	.00423	.00028	.00290	.00157	.00093	.00109
%RSD	2.0876	1.7643	9.3559	7.5241	5.8750	26.097
#1	.20702	.01618	-.03436	.02153	-.01676	.00435
#2	.20298	.01587	-.02957	.02209	-.01570	.00519
#3	.19856	.01562	-.02913	.01913	-.01491	.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-16-a Acquired: 5/9/2023 15:47:20 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00179	F 1230.6	-.00356	.00209	.00917	.00525
Stddev	.00107	2.9	.00068	.00002	.00112	.00180
%RSD	59.577	.23316	19.160	.79294	12.178	34.333
#1	-.00089	1230.9	-.00393	.00208	.00822	.00335
#2	-.00296	1233.3	-.00398	.00211	.00890	.00546
#3	-.00151	1227.6	-.00277	.00209	.01040	.00693
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00065	.01459
Stddev	.00028	.00017
%RSD	43.284	1.1508
#1	.00056	.01477
#2	.00042	.01456
#3	.00097	.01444
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-16-a Acquired: 5/9/2023 15:47:20 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5016.8	97111.	9446.0
Stddev	30.3	86.	25.6
%RSD	.60308	.08815	.27105
#1	4991.3	97070.	9425.9
#2	5008.8	97209.	9437.3
#3	5050.3	97052.	9474.8

Sample Name: 140-31634-a-17-a Acquired: 5/9/2023 15:52:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.01931	.00373	F 132.79	.00131	.00000
Stddev	.00021	.00054	.00059	.86	.00004	.00001
%RSD	61.080	2.8144	15.858	.64388	3.0824	642.51
#1	-.00046	.01993	.00315	132.90	.00130	-.00000
#2	-.00010	.01904	.00371	131.89	.00135	.00001
#3	-.00047	.01894	.00433	133.59	.00128	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18583	-.00007	.00017	.00064	.00479	.02478
Stddev	.00122	.00003	.00008	.00024	.00041	.00040
%RSD	.65915	42.707	48.294	37.265	8.5882	1.6155
#1	.18685	-.00004	.00015	.00065	.00514	.02517
#2	.18447	-.00006	.00026	.00088	.00488	.02480
#3	.18618	-.00010	.00010	.00040	.00434	.02437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-17-a Acquired: 5/9/2023 15:52:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03510	-.00032	.02985	.00098	.00036	.56605
Stddev	.00727	.00045	.01353	.00007	.00016	.87382
%RSD	20.717	140.72	45.336	6.8296	45.996	154.37
#1	.04011	-.00047	.04103	.00090	.00050	.87554
#2	.03844	.00019	.03371	.00102	.00018	1.2430
#3	.02676	-.00068	.01480	.00101	.00040	-.42040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.36140	.00061	-.00014	.00410	-.00106	.00052
Stddev	.00379	.00012	.00198	.00107	.00045	.00063
%RSD	1.0480	19.626	1400.9	26.124	42.474	120.00
#1	.36422	.00073	-.00115	.00370	-.00125	.00018
#2	.35710	.00049	-.00141	.00532	-.00055	.00014
#3	.36290	.00062	.00214	.00329	-.00139	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-17-a Acquired: 5/9/2023 15:52:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00254	1.9614	-.00013	.00041	.00040	.00479
Stddev	.00042	.2423	.00061	.00002	.00052	.00191
%RSD	16.616	12.352	468.64	4.2499	131.99	39.925
#1	-.00220	2.2362	.00051	.00043	.00099	.00653
#2	-.00301	1.8693	-.00021	.00040	.00003	.00274
#3	-.00240	1.7786	-.00069	.00040	.00017	.00510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00001	.00245
Stddev	.00014	.00004
%RSD	2176.7	1.8033
#1	-.00004	.00240
#2	.00015	.00246
#3	-.00013	.00248
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-17-a Acquired: 5/9/2023 15:52:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5009.1	96888.	9410.1
Stddev	4.8	286.	18.7
%RSD	.09526	.29552	.19823
#1	5006.9	96646.	9431.3
#2	5005.8	97204.	9402.6
#3	5014.6	96814.	9396.3

Sample Name: 140-31634-a-6-a SD@5 Acquired: 5/9/2023 15:57:34 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00096	.20264	.04881	27.075	.01835	-.00001
Stddev	.00069	.07141	.00212	.163	.00025	.00000
%RSD	71.686	35.240	4.3433	.60156	1.3386	39.559
#1	.00145	.28430	.05108	27.093	.01823	-.00001
#2	.00126	.15192	.04688	27.228	.01864	-.00002
#3	.00017	.17169	.04847	26.904	.01819	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21842	.01233	.00066	.00567	.39254	.11474
Stddev	.00607	.00008	.00007	.00019	.00199	.00105
%RSD	2.7790	.67319	10.660	3.4019	.50617	.91520
#1	.22536	.01241	.00073	.00582	.39176	.11594
#2	.21583	.01224	.00067	.00545	.39480	.11427
#3	.21408	.01234	.00059	.00574	.39106	.11400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a SD@5 Acquired: 5/9/2023 15:57:34 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08113	-.00040	.05590	.00316	.02569	.96686
Stddev	.01307	.00062	.00738	.00001	.00003	.69848
%RSD	16.108	157.53	13.210	.30952	.12067	72.242
#1	.09293	-.00033	.06185	.00317	.02568	1.5762
#2	.08337	.00019	.05821	.00317	.02572	1.1199
#3	.06708	-.00105	.04764	.00315	.02566	.20457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2776	.00755	-.00056	1.1267	1.1059	.02014
Stddev	.0111	.00004	.00096	.0087	.0008	.00076
%RSD	.86478	.57308	171.78	.77417	.07278	3.7666
#1	1.2828	.00760	-.00004	1.1358	1.1066	.02097
#2	1.2851	.00752	.00003	1.1258	1.1059	.01948
#3	1.2649	.00752	-.00166	1.1184	1.1050	.01997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a SD@5 Acquired: 5/9/2023 15:57:34 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01982	260.33	.01247	.00118	.00770	.00196
Stddev	.00103	1.17	.00038	.00008	.00135	.00086
%RSD	5.2102	.45132	3.0450	6.6928	17.535	44.062
#1	.02010	260.21	.01275	.00117	.00917	.00168
#2	.02069	261.56	.01262	.00127	.00741	.00127
#3	.01868	259.22	.01204	.00111	.00651	.00293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00038	1.0068
Stddev	.00020	.0015
%RSD	52.302	.14985
#1	.00036	1.0084
#2	.00058	1.0066
#3	.00019	1.0054
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-6-a SD@5 Acquired: 5/9/2023 15:57:34 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5014.4	96214.	9242.3
Stddev	19.9	720.	9.0
%RSD	.39616	.74843	.09744
#1	4993.5	95663.	9233.2
#2	5016.6	95950.	9251.2
#3	5033.0	97029.	9242.3

Sample Name: CRI Acquired: 5/9/2023 16:02:29 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00950	.19960	.01039	F .31057	.00952	.00534
Stddev	.00017	.00780	.00079	.01913	.00010	.00002
%RSD	1.8251	3.9068	7.6313	6.1580	1.0645	.29314
#1	.00930	.20181	.00966	.29035	.00953	.00533
#2	.00958	.20605	.01123	.31299	.00941	.00536
#3	.00962	.19093	.01028	.32837	.00961	.00535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				.20000		
Range				50.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2270	.00515	.05117	.00999	.02502	.12699
Stddev	.0241	.00008	.00022	.00019	.00006	.00109
%RSD	.46093	1.5788	.42523	1.8998	.25547	.85568
#1	5.2004	.00518	.05131	.01006	.02507	.12668
#2	5.2474	.00505	.05127	.00977	.02494	.12819
#3	5.2332	.00520	.05092	.01013	.02504	.12609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 16:02:29 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9847	.04532	4.9488	.01541	.04046	5.5279
Stddev	.0204	.00047	.0272	.00011	.00009	.5472
%RSD	.40897	1.0327	.55020	.68425	.22136	9.8986
#1	4.9638	.04482	4.9176	.01540	.04056	5.1830
#2	5.0046	.04574	4.9612	.01531	.04044	6.1588
#3	4.9856	.04541	4.9677	.01552	.04038	5.2420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9635	.04106	.30048	.01237	.00938	.06213
Stddev	.0243	.00024	.00196	.00203	.00076	.00058
%RSD	.48944	.59372	.65189	16.442	8.0871	.94029
#1	4.9448	.04123	.30118	.01274	.01018	.06256
#2	4.9910	.04117	.29826	.01017	.00930	.06236
#3	4.9547	.04078	.30198	.01419	.00867	.06146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 16:02:29 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00857	F 15.222	.09539	.04797	.04939	.01187
Stddev	.00028	.090	.00101	.00016	.00196	.00349
%RSD	3.2192	.58809	1.0613	.32625	3.9769	29.386
#1	.00869	15.288	.09611	.04800	.05142	.00957
#2	.00825	15.258	.09584	.04811	.04925	.01016
#3	.00877	15.120	.09423	.04780	.04749	.01589
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02518	.02144
Stddev	.00025	.00011
%RSD	.97627	.52453
#1	.02502	.02155
#2	.02546	.02133
#3	.02505	.02142
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/9/2023 16:02:29 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5020.1	96260.	9217.0
Stddev	36.5	431.	39.7
%RSD	.72688	.44810	.43041
#1	4980.5	96272.	9191.1
#2	5027.6	95823.	9262.7
#3	5052.3	96685.	9197.2

Sample Name: CCV Acquired: 5/9/2023 16:07:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94712	24.483	.48890	2.0999	1.9167	2.0472
Stddev	.00204	.090	.00027	.0112	.0080	.0106
%RSD	.21551	.36602	.05441	.53366	.41602	.51953
#1	.94640	24.533	.48862	2.0871	1.9084	2.0349
#2	.94554	24.536	.48916	2.1047	1.9242	2.0533
#3	.94943	24.379	.48892	2.1080	1.9175	2.0533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.372	.50621	1.9925	1.9931	1.8951	25.098
Stddev	.222	.00035	.0017	.0072	.0003	.080
%RSD	.44165	.06984	.08443	.35917	.01687	.32039
#1	50.420	.50597	1.9930	1.9850	1.8949	25.106
#2	50.567	.50662	1.9939	1.9958	1.8949	25.174
#3	50.130	.50606	1.9907	1.9986	1.8955	25.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 16:07:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.485	1.8626	50.403	2.0008	2.0314	48.485
Stddev	.151	.0055	.301	.0048	.0010	.956
%RSD	.31177	.29235	.59729	.24184	.04721	1.9715
#1	48.515	1.8582	50.648	1.9953	2.0314	48.197
#2	48.618	1.8687	50.495	2.0043	2.0324	49.552
#3	48.321	1.8609	50.067	2.0028	2.0304	47.707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.462	1.9892	1.9562	.51102	.49954	.48643
Stddev	.177	.0023	.0072	.00276	.00178	.00232
%RSD	.36584	.11548	.36589	.54030	.35651	.47753
#1	48.431	1.9898	1.9625	.50904	.50065	.48380
#2	48.653	1.9911	1.9484	.50984	.50049	.48820
#3	48.302	1.9867	1.9577	.51417	.49749	.48728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 16:07:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49905	F 14.603	1.8948	1.9384	1.9678	1.0073
Stddev	.00326	.275	.0009	.0072	.0072	.0015
%RSD	.65355	1.8849	.04821	.36944	.36739	.14837
#1	.50034	14.800	1.8938	1.9342	1.9620	1.0073
#2	.50148	14.720	1.8951	1.9467	1.9759	1.0088
#3	.49535	14.288	1.8955	1.9344	1.9655	1.0059
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9901	1.9655
Stddev	.0053	.0017
%RSD	.26650	.08402
#1	1.9841	1.9662
#2	1.9921	1.9667
#3	1.9942	1.9636
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 16:07:20 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4951.3	94941.	9144.2
Stddev	29.1	240.	163.6
%RSD	.58847	.25248	1.7890
#1	4923.1	94845.	8985.8
#2	4949.6	94764.	9134.3
#3	4981.3	95214.	9312.5

Sample Name: CCB Acquired: 5/9/2023 16:12:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	F .08393	.00070	F .15910	.00005	.00009
Stddev	.00013	.13074	.00073	.00196	.00005	.00009
%RSD	41.720	155.78	104.41	1.2319	108.02	98.128
#1	.00044	.23488	.00148	.15772	.00007	.00018
#2	.00021	.00685	.00057	.15823	.00008	.00006
#3	.00024	.01004	.00004	.16134	-.00001	.00002
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.05000		.03600		
Low Limit		-.05000		-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01179	.00007	.00027	-.00048	.00026	.00377
Stddev	.00964	.00004	.00011	.00006	.00028	.00268
%RSD	81.714	52.754	41.722	12.966	107.75	71.258
#1	.02289	.00008	.00018	-.00041	.00055	.00681
#2	.00700	.00009	.00024	-.00054	.00024	.00174
#3	.00549	.00003	.00040	-.00049	-.00001	.00274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 16:12:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00213	-.00043	.01854	.00012	.00019	.06673
Stddev	.00709	.00093	.04241	.00010	.00005	.83708
%RSD	333.31	216.91	228.77	81.756	23.922	1254.4
#1	-.00151	.00049	.06740	.00024	.00025	1.0322
#2	-.00950	-.00040	-.00309	.00009	.00018	-.37642
#3	.00463	-.00138	-.00870	.00005	.00016	-.45562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01809	.00013	.00034	.00187	-.00079	-.00112
Stddev	.01935	.00009	.00167	.00214	.00039	.00139
%RSD	106.99	71.580	489.82	114.21	49.351	123.61
#1	.03920	.00003	.00207	.00219	-.00040	-.00272
#2	.01387	.00020	-.00126	.00383	-.00079	-.00035
#3	.00119	.00017	.00021	-.00041	-.00118	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 16:12:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	F 10.538	.00034	.00003	.00010	.00175
Stddev	.00037	.118	.00043	.00010	.00107	.00127
%RSD	175.15	1.1224	127.59	332.15	1064.5	72.331
#1	-.00008	10.497	.00021	.00010	.00056	.00030
#2	.00008	10.672	.00082	-.00008	-.00112	.00236
#3	-.00063	10.447	-.00001	.00006	.00086	.00260
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00005	-.00001
Stddev	.00033	.00007
%RSD	643.66	505.49
#1	.00042	.00007
#2	-.00004	-.00006
#3	-.00022	-.00005
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 16:12:06 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5049.5	96656.	9249.6
Stddev	9.7	524.	20.5
%RSD	.19269	.54167	.22115
#1	5038.3	96058.	9233.0
#2	5055.1	96878.	9243.4
#3	5055.1	97032.	9272.5

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 16:38:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00081	.01206	.00383	F 131.56	.00076	.00001
Stddev	.00011	.00986	.00105	.88	.00008	.00002
%RSD	13.002	81.738	27.358	.67075	11.126	291.38
#1	-.00085	.02299	.00314	130.57	.00073	.00002
#2	-.00089	.00383	.00504	131.89	.00085	.00001
#3	-.00069	.00936	.00332	132.24	.00069	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.20000		
Low Limit				-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05780	-.00004	.00009	-.00013	.00001	.00946
Stddev	.00320	.00002	.00009	.00028	.00012	.00146
%RSD	5.5339	47.169	90.802	213.28	2311.8	15.443
#1	.05724	-.00002	.00019	.00008	-.00005	.00869
#2	.06125	-.00005	.00003	-.00044	.00014	.01115
#3	.05493	-.00006	.00006	-.00003	-.00008	.00855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 16:38:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00788	-.00038	.01496	.00063	.00032	-.26611
Stddev	.02335	.00056	.00719	.00008	.00007	.56689
%RSD	296.37	148.95	48.046	11.829	20.559	213.03
#1	.01096	-.00010	.01864	.00057	.00030	-.59505
#2	.02954	-.00001	.00668	.00072	.00040	-.59175
#3	-.01686	-.00103	.01956	.00062	.00027	.38848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03902	.00025	-.00034	.00119	-.00146	.00001
Stddev	.00821	.00012	.00154	.00121	.00090	.00063
%RSD	21.046	48.670	447.95	101.75	61.659	7700.8
#1	.03269	.00039	-.00208	.00061	-.00042	.00017
#2	.03606	.00019	.00084	.00258	-.00197	.00054
#3	.04829	.00017	.00021	.00038	-.00199	-.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 16:38:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00137	F .84816	.00030	.00019	-.00068	.00479
Stddev	.00221	.36857	.00026	.00006	.00057	.00106
%RSD	161.71	43.455	85.375	31.948	84.175	22.189
#1	.00073	1.2715	.00060	.00024	-.00054	.00554
#2	-.00116	.67427	.00013	.00019	-.00131	.00357
#3	-.00367	.59870	.00018	.00012	-.00019	.00525
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00003	.00101
Stddev	.00017	.00005
%RSD	519.20	5.1033
#1	-.00015	.00105
#2	.00016	.00095
#3	.00009	.00102
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-72685/5-a Acquired: 5/9/2023 16:38:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5067.8	96120.	9317.5
Stddev	52.6	267.	66.5
%RSD	1.0373	.27779	.71392
#1	5007.6	95815.	9298.4
#2	5091.0	96230.	9262.6
#3	5104.8	96314.	9391.5

Sample Name: 140-31425-a-1-a @2 Acquired: 5/9/2023 16:43:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.71528	.00402	F 64.449	.03912	.00007
Stddev	.00006	.03700	.00047	.798	.00051	.00009
%RSD	198.90	5.1735	11.658	1.2385	1.2985	117.75
#1	-.00004	.68597	.00446	63.637	.03855	.00003
#2	.00008	.75686	.00408	64.478	.03927	.00002
#3	.00005	.70300	.00353	65.232	.03953	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5362	.00102	.00190	.01461	.06989	.88788
Stddev	.0104	.00003	.00023	.00046	.00045	.01005
%RSD	.67538	2.8990	12.287	3.1579	.64682	1.1321
#1	1.5245	.00102	.00216	.01472	.06995	.87629
#2	1.5400	.00105	.00184	.01411	.06941	.89429
#3	1.5443	.00099	.00170	.01502	.07030	.89305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-1-a @2 Acquired: 5/9/2023 16:43:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33345	-.00091	.26154	.02579	.05977	5.7113
Stddev	.01085	.00072	.00700	.00005	.00054	1.0885
%RSD	3.2537	78.312	2.6765	.17688	.89855	19.058
#1	.32873	-.00078	.25412	.02575	.05931	6.3960
#2	.34586	-.00027	.26804	.02577	.06036	4.4562
#3	.32577	-.00169	.26245	.02584	.05963	6.2817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7002	.02216	.00806	.02664	-.00625	.00583
Stddev	.0327	.00003	.00186	.00204	.00176	.00190
%RSD	.69571	.14683	23.078	7.6615	28.093	32.566
#1	4.6651	.02215	.00633	.02861	-.00460	.00724
#2	4.7060	.02214	.01003	.02678	-.00606	.00367
#3	4.7297	.02220	.00783	.02453	-.00809	.00659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-1-a @2 Acquired: 5/9/2023 16:43:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00388	854.58	.00987	.00491	.02328	.00470
Stddev	.00057	6.68	.00031	.00006	.00020	.00204
%RSD	14.782	.78184	3.0989	1.2584	.84283	43.433
#1	-.00454	847.41	.00954	.00487	.02306	.00523
#2	-.00354	855.69	.01015	.00487	.02332	.00245
#3	-.00355	860.63	.00993	.00498	.02345	.00643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00105	.21461
Stddev	.00012	.00125
%RSD	11.181	.58443
#1	.00102	.21320
#2	.00095	.21507
#3	.00118	.21558
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-1-a @2 Acquired: 5/9/2023 16:43:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5118.8	96168.	9149.7
Stddev	24.4	651.	6.4
%RSD	.47635	.67670	.06991
#1	5094.6	95416.	9142.3
#2	5118.5	96547.	9152.7
#3	5143.4	96540.	9154.0

Sample Name: 140-31425-a-6-a @2 Acquired: 5/9/2023 16:48:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.58766	.00352	F 65.794	.03106	.00003
Stddev	.00030	.01791	.00130	.579	.00007	.00000
%RSD	711.13	3.0483	36.938	.88021	.23027	16.006
#1	.00030	.56706	.00374	65.604	.03109	.00002
#2	-.00021	.59956	.00469	66.444	.03110	.00003
#3	-.00022	.59635	.00212	65.333	.03097	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.75362	.00083	.00134	.01183	.02637	.95877
Stddev	.00647	.00004	.00014	.00032	.00043	.00352
%RSD	.85855	4.9032	10.270	2.6643	1.6347	.36751
#1	.76082	.00085	.00145	.01190	.02677	.95931
#2	.75177	.00078	.00138	.01149	.02641	.96199
#3	.74828	.00084	.00118	.01211	.02591	.95501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a @2 Acquired: 5/9/2023 16:48:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16058	-.00008	.17865	.01496	.06036	5.7781
Stddev	.03213	.00022	.00982	.00005	.00034	1.3031
%RSD	20.012	267.04	5.4960	.31650	.56244	22.553
#1	.19455	-.00022	.18587	.01496	.06075	7.1618
#2	.13066	.00017	.16747	.01501	.06022	4.5743
#3	.15653	-.00021	.18261	.01491	.06011	5.5981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9015	.01674	.00038	.01812	-.01557	.00511
Stddev	.0205	.00008	.00058	.00059	.00165	.00104
%RSD	.41864	.49841	154.40	3.2765	10.627	20.340
#1	4.9251	.01681	.00103	.01861	-.01649	.00631
#2	4.8884	.01665	-.00007	.01829	-.01656	.00445
#3	4.8909	.01677	.00017	.01746	-.01366	.00457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-6-a @2 Acquired: 5/9/2023 16:48:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00208	865.88	.01260	.00431	.01738	.00516
Stddev	.00032	3.67	.00019	.00015	.00008	.00147
%RSD	15.245	.42333	1.4847	3.3802	.47361	28.557
#1	-.00188	869.68	.01273	.00416	.01746	.00572
#2	-.00244	865.59	.01269	.00432	.01730	.00628
#3	-.00191	862.37	.01239	.00445	.01739	.00349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00054	.06964
Stddev	.00019	.00008
%RSD	34.927	.11194
#1	.00076	.06970
#2	.00042	.06955
#3	.00044	.06967
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-6-a @2 Acquired: 5/9/2023 16:48:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5096.9	95422.	9020.9
Stddev	14.8	737.	94.0
%RSD	.29086	.77249	1.0424
#1	5080.0	94640.	8928.0
#2	5107.4	95522.	9018.9
#3	5103.4	96104.	9116.0

Sample Name: 31425-a-6-a PDS@2 Acquired: 5/9/2023 16:53:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04821	2.5731	.10481	F 64.748	.12884	.05291
Stddev	.00095	.0156	.00085	.243	.00164	.00064
%RSD	1.9778	.60787	.81543	.37498	1.2763	1.2061
#1	.04750	2.5658	.10384	64.885	.12709	.05220
#2	.04784	2.5911	.10545	64.468	.12907	.05313
#3	.04930	2.5625	.10515	64.892	.13035	.05342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.606	.05158	.10527	.22307	.27466	1.9639
Stddev	.279	.00066	.00115	.00224	.00329	.0228
%RSD	.53057	1.2887	1.0957	1.0042	1.1978	1.1605
#1	52.379	.05083	.10397	.22066	.27180	1.9381
#2	52.918	.05179	.10565	.22347	.27392	1.9722
#3	52.521	.05211	.10618	.22508	.27825	1.9813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a PDS@2 Acquired: 5/9/2023 16:53:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.433	.09655	10.491	.11708	.57588	56.263
Stddev	.286	.00103	.092	.00110	.00527	.498
%RSD	.57825	1.0677	.88127	.93669	.91577	.88600
#1	49.306	.09540	10.430	.11593	.56994	56.294
#2	49.760	.09684	10.597	.11721	.57767	56.746
#3	49.232	.09740	10.444	.11811	.58002	55.750
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.972	.53422	5.2237	.11707	.08080	.49155
Stddev	.394	.00626	.0564	.00377	.00163	.00375
%RSD	.72948	1.1712	1.0805	3.2217	2.0169	.76389
#1	53.795	.52751	5.1602	.11287	.07937	.48859
#2	54.423	.53527	5.2426	.12016	.08046	.49028
#3	53.698	.53989	5.2682	.11818	.08257	.49577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a PDS@2 Acquired: 5/9/2023 16:53:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13644	851.97	.50821	.49900	.12336	.40053
Stddev	.00414	5.46	.00624	.00690	.00234	.00802
%RSD	3.0327	.64127	1.2270	1.3822	1.9009	2.0032
#1	.13282	847.82	.50109	.49124	.12101	.39146
#2	.13556	858.16	.51079	.50130	.12570	.40671
#3	.14095	849.93	.51273	.50444	.12336	.40341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20751	.57632
Stddev	.00268	.00590
%RSD	1.2930	1.0241
#1	.20462	.56998
#2	.20802	.57732
#3	.20991	.58165
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31425-a-6-a PDS@2 Acquired: 5/9/2023 16:53:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5018.2	94538.	8965.6
Stddev	9.2	385.	78.6
%RSD	.18295	.40713	.87670
#1	5007.6	94158.	8909.6
#2	5024.1	94527.	8931.8
#3	5022.9	94928.	9055.5

Sample Name: 31425-a-6-a PDSD@2 Acquired: 5/9/2023 16:58:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04745	2.5594	.10219	F 64.624	.12682	.05186
Stddev	.00019	.0993	.00041	.217	.00064	.00011
%RSD	.40959	3.8815	.40526	.33638	.50530	.21533
#1	.04761	2.5177	.10263	64.846	.12700	.05199
#2	.04723	2.4876	.10181	64.614	.12734	.05178
#3	.04749	2.6727	.10212	64.412	.12610	.05181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.263	.05068	.10305	.21960	.26964	1.9393
Stddev	.015	.00012	.00046	.00067	.00105	.0041
%RSD	.02913	.24145	.44688	.30452	.39036	.21178
#1	52.281	.05082	.10355	.22034	.27074	1.9433
#2	52.255	.05065	.10294	.21904	.26956	1.9351
#3	52.253	.05058	.10265	.21942	.26864	1.9395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a PDSD@2 Acquired: 5/9/2023 16:58:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.997	.09398	10.388	.11541	.55583	55.864
Stddev	.092	.00046	.033	.00036	.00147	.613
%RSD	.18723	.48917	.31823	.31199	.26490	1.0979
#1	49.027	.09443	10.408	.11564	.55700	55.197
#2	49.070	.09400	10.350	.11499	.55633	55.993
#3	48.894	.09351	10.407	.11560	.55418	56.403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.229	.52307	5.0522	.11484	.07898	.47387
Stddev	.190	.00178	.0107	.00238	.00134	.00144
%RSD	.35624	.34063	.21215	2.0719	1.6922	.30459
#1	53.353	.52504	5.0637	.11520	.07981	.47408
#2	53.322	.52158	5.0425	.11231	.07969	.47233
#3	53.011	.52259	5.0503	.11703	.07744	.47519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a PDSD@2 Acquired: 5/9/2023 16:58:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13388	841.33	.49116	.48594	.11893	.39236
Stddev	.00073	1.08	.00097	.00404	.00030	.00152
%RSD	.54635	.12884	.19824	.83112	.24946	.38648
#1	.13304	842.48	.49215	.48969	.11927	.39202
#2	.13432	841.17	.49020	.48645	.11881	.39402
#3	.13429	840.33	.49112	.48166	.11871	.39105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20331	.56444
Stddev	.00021	.00177
%RSD	.10548	.31326
#1	.20338	.56648
#2	.20307	.56341
#3	.20348	.56343
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31425-a-6-a PDSD@2 Acquired: 5/9/2023 16:58:21 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5028.8	94799.	9087.8
Stddev	21.9	244.	131.3
%RSD	.43502	.25737	1.4442
#1	5004.9	94582.	8936.8
#2	5033.8	95063.	9174.6
#3	5047.8	94754.	9151.8

Sample Name: 140-31425-a-11-a @2 Acquired: 5/9/2023 17:03:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.63284	.00494	F 64.666	.03260	.00003
Stddev	.00007	.01022	.00038	.227	.00023	.00000
%RSD	103.43	1.6151	7.7655	.35164	.70952	13.817
#1	.00007	.62328	.00519	64.923	.03234	.00004
#2	.00015	.63163	.00514	64.492	.03271	.00003
#3	-.00000	.64361	.00450	64.582	.03277	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.2226	.00100	.00147	.01598	.06669	.69436
Stddev	.0062	.00009	.00020	.00041	.00021	.00470
%RSD	.51020	9.0623	13.600	2.5516	.31494	.67641
#1	1.2154	.00109	.00135	.01637	.06645	.68896
#2	1.2266	.00101	.00170	.01556	.06681	.69756
#3	1.2258	.00091	.00135	.01601	.06682	.69654
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-11-a @2 Acquired: 5/9/2023 17:03:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51244	-.00024	.20896	.02595	.05858	7.4695
Stddev	.02110	.00028	.00833	.00010	.00032	.1718
%RSD	4.1180	113.95	3.9873	.37870	.55343	2.3004
#1	.53442	-.00034	.20476	.02585	.05892	7.5944
#2	.49235	.00007	.20356	.02604	.05828	7.5406
#3	.51056	-.00046	.21855	.02595	.05855	7.2736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.6891	.02363	.01962	.02892	-.00611	.00513
Stddev	.0114	.00031	.00144	.00272	.00057	.00069
%RSD	.16980	1.3074	7.3337	9.4122	9.2796	13.413
#1	6.6777	.02341	.01903	.03027	-.00675	.00463
#2	6.6892	.02398	.02126	.03070	-.00594	.00484
#3	6.7005	.02350	.01858	.02579	-.00565	.00591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31425-a-11-a @2 Acquired: 5/9/2023 17:03:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00063	864.85	.01498	.00485	.01826	.00675
Stddev	.00157	5.51	.00047	.00005	.00058	.00390
%RSD	248.74	.63655	3.1101	1.0327	3.1920	57.765
#1	.00092	858.56	.01511	.00490	.01876	.00847
#2	-.00222	867.17	.01447	.00480	.01841	.00949
#3	-.00059	868.81	.01537	.00485	.01762	.00229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00107	.24085
Stddev	.00033	.00049
%RSD	30.400	.20188
#1	.00103	.24141
#2	.00077	.24057
#3	.00141	.24057
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31425-a-11-a @2 Acquired: 5/9/2023 17:03:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5121.5	95774.	9045.5
Stddev	17.4	173.	2.5
%RSD	.34010	.18027	.02760
#1	5102.2	95717.	9047.0
#2	5126.6	95637.	9046.9
#3	5135.9	95968.	9042.6

Sample Name: 140-31398-a-3-a @3 Acquired: 5/9/2023 17:08:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00334	.55090	.01541	F 41.867	.00721	.00003
Stddev	.00064	.01010	.00094	.242	.00009	.00002
%RSD	19.039	1.8327	6.0720	.57723	1.1840	50.914
#1	.00306	.53926	.01615	42.133	.00724	.00004
#2	.00290	.55716	.01572	41.807	.00711	.00001
#3	.00407	.55629	.01436	41.661	.00727	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1524	.00187	.00182	.53847	.01179	.87686
Stddev	.0058	.00009	.00002	.00431	.00014	.00787
%RSD	.27144	4.7533	1.0547	.79971	1.1623	.89728
#1	2.1590	.00178	.00184	.54312	.01185	.88523
#2	2.1506	.00189	.00183	.53767	.01190	.87574
#3	2.1478	.00196	.00180	.53462	.01164	.86962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-3-a @3 Acquired: 5/9/2023 17:08:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15493	.00085	.13014	.01598	.05553	1.0574
Stddev	.00800	.00048	.00125	.00009	.00018	.1870
%RSD	5.1647	56.294	.95867	.53667	.32858	17.685
#1	.14642	.00113	.13078	.01607	.05573	1.1687
#2	.15606	.00030	.13093	.01597	.05549	.84153
#3	.16230	.00114	.12870	.01589	.05537	1.1620
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50719	.08367	.02322	.02111	-.00273	.00160
Stddev	.00766	.00016	.00167	.00268	.00035	.00028
%RSD	1.5095	.19662	7.2056	12.686	12.943	17.803
#1	.51382	.08377	.02359	.02419	-.00238	.00127
#2	.50895	.08376	.02468	.01976	-.00309	.00179
#3	.49881	.08348	.02140	.01938	-.00272	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-3-a @3 Acquired: 5/9/2023 17:08:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00144	655.47	.00079	.00588	.01205	.00456
Stddev	.00152	3.62	.00082	.00006	.00048	.00143
%RSD	106.13	.55213	104.76	1.0761	3.9702	31.389
#1	-.00213	659.64	.00104	.00587	.01183	.00291
#2	-.00249	653.15	.00145	.00594	.01172	.00552
#3	.00031	653.62	-.00013	.00582	.01259	.00524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00366	.03110
Stddev	.00025	.00011
%RSD	6.7576	.34161
#1	.00337	.03116
#2	.00381	.03116
#3	.00379	.03098
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-3-a @3 Acquired: 5/9/2023 17:08:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5104.0	97032.	9198.9
Stddev	10.2	662.	163.2
%RSD	.20007	.68273	1.7744
#1	5098.1	96296.	9014.8
#2	5098.1	97220.	9325.8
#3	5115.8	97580.	9256.2

Sample Name: 140-31398-a-10-a @3 Acquired: 5/9/2023 17:13:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML (B)

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.49247	.01917	F 41.969	.00534	.00002
Stddev	.00019	.00217	.00057	.108	.00020	.00002
%RSD	56.613	.44027	2.9484	.25839	3.7696	90.540
#1	.00012	.49116	.01969	42.092	.00520	.00000
#2	.00047	.49497	.01925	41.887	.00526	.00002
#3	.00043	.49127	.01857	41.929	.00558	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96511	.00221	.00173	.66860	.01041	.61399
Stddev	.00518	.00005	.00008	.00160	.00020	.00161
%RSD	.53684	2.2277	4.6181	.23876	1.9428	.26184
#1	.95918	.00222	.00178	.66748	.01017	.61408
#2	.96737	.00216	.00164	.66789	.01055	.61235
#3	.96877	.00226	.00177	.67042	.01049	.61556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a @3 Acquired: 5/9/2023 17:13:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML (B)

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08246	.00040	.10416	.01549	.05071	.87546
Stddev	.01355	.00075	.02319	.00007	.00030	.52509
%RSD	16.431	186.89	22.261	.45542	.58834	59.979
#1	.07329	-.00018	.07801	.01552	.05040	.63501
#2	.09802	.00125	.11224	.01541	.05074	1.4777
#3	.07606	.00014	.12222	.01554	.05099	.51365
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51520	.09139	.02564	.02537	.00046	.00141
Stddev	.00016	.00017	.00177	.00134	.00093	.00012
%RSD	.03095	.18532	6.9020	5.2870	201.42	8.2246
#1	.51531	.09128	.02752	.02628	.00047	.00147
#2	.51527	.09158	.02401	.02601	-.00047	.00148
#3	.51502	.09131	.02540	.02383	.00138	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-10-a @3 Acquired: 5/9/2023 17:13:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML (B)

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00150	637.79	.00182	.00238	.01169	.00421
Stddev	.00139	.60	.00014	.00007	.00112	.00320
%RSD	92.333	.09464	7.8303	2.8208	9.5736	76.062
#1	-.00198	637.69	.00190	.00240	.01297	.00095
#2	-.00259	637.24	.00166	.00230	.01125	.00736
#3	.00006	638.43	.00190	.00243	.01087	.00433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00287	.02409
Stddev	.00008	.00015
%RSD	2.8216	.61706
#1	.00282	.02392
#2	.00283	.02417
#3	.00297	.02418
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-10-a @3 Acquired: 5/9/2023 17:13:03 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML (B)

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5058.8	95431.	9096.6
Stddev	6.8	480.	55.3
%RSD	.13433	.50329	.60774
#1	5055.4	94934.	9055.6
#2	5054.4	95892.	9074.6
#3	5066.6	95466.	9159.5

Sample Name: 31398-a-10-a PDS@3 Acquired: 5/9/2023 17:17:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04883	2.4549	.12065	F 42.317	.10511	.05235
Stddev	.00020	.0045	.00071	.089	.00069	.00026
%RSD	.40899	.18482	.59045	.20934	.65391	.48853
#1	.04906	2.4528	.11983	42.355	.10432	.05207
#2	.04870	2.4517	.12102	42.379	.10543	.05245
#3	.04874	2.4600	.12110	42.215	.10558	.05255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.220	.05300	.10636	.86010	.27378	1.6482
Stddev	.561	.00008	.00018	.00148	.00168	.0070
%RSD	1.0747	.15612	.16687	.17164	.61521	.42581
#1	51.597	.05291	.10619	.86131	.27186	1.6408
#2	52.375	.05307	.10633	.85846	.27450	1.6490
#3	52.687	.05303	.10655	.86053	.27499	1.6548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDS@3 Acquired: 5/9/2023 17:17:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.146	.09903	10.238	.11803	.56053	51.709
Stddev	.414	.00108	.101	.00058	.00170	.192
%RSD	.84147	1.0890	.98892	.49219	.30371	.37145
#1	48.673	.09802	10.142	.11736	.55857	51.546
#2	49.323	.10017	10.228	.11840	.56153	51.662
#3	49.441	.09890	10.344	.11832	.56150	51.921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.385	.60871	5.0736	.12591	.09837	.48404
Stddev	.317	.00045	.0115	.00195	.00051	.00253
%RSD	.64210	.07409	.22727	1.5472	.52199	.52338
#1	49.021	.60853	5.0619	.12717	.09778	.48112
#2	49.606	.60838	5.0850	.12689	.09872	.48565
#3	49.527	.60923	5.0739	.12367	.09860	.48535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDS@3 Acquired: 5/9/2023 17:17:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13811	634.30	.50446	.50033	.11512	.40514
Stddev	.00234	.75	.00068	.00289	.00053	.00270
%RSD	1.6974	.11757	.13414	.57847	.46092	.66606
#1	.13637	635.09	.50437	.49719	.11548	.40606
#2	.13717	633.61	.50384	.50288	.11451	.40726
#3	.14077	634.21	.50518	.50093	.11538	.40210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20966	.53456
Stddev	.00051	.00144
%RSD	.24479	.26947
#1	.20911	.53290
#2	.20975	.53547
#3	.21012	.53532
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31398-a-10-a PDS@3 Acquired: 5/9/2023 17:17:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4978.5	94042.	9018.9
Stddev	15.6	620.	71.3
%RSD	.31356	.65887	.79071
#1	4961.5	93349.	8938.7
#2	4981.9	94236.	9075.0
#3	4992.1	94542.	9043.2

Sample Name: 31425-a-6-a SD@10 Acquired: 5/9/2023 17:22:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00052	.33268	.00256	13.414	.00625	.00002
Stddev	.00007	.34841	.00067	.074	.00013	.00000
%RSD	12.645	104.73	26.291	.54856	2.0847	29.517
#1	-.00046	.12161	.00184	13.329	.00637	.00001
#2	-.00050	.73482	.00317	13.451	.00611	.00002
#3	-.00059	.14161	.00266	13.461	.00627	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16566	.00014	.00032	.00259	.00504	.19770
Stddev	.01308	.00003	.00002	.00016	.00022	.00404
%RSD	7.8944	18.419	7.2909	6.0770	4.4596	2.0429
#1	.16050	.00013	.00031	.00242	.00528	.19425
#2	.18053	.00013	.00031	.00271	.00484	.20214
#3	.15595	.00017	.00035	.00266	.00500	.19672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a SD@10 Acquired: 5/9/2023 17:22:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04885	.00072	.08021	.00300	.01196	.95810
Stddev	.01537	.00181	.07663	.00004	.00027	.47083
%RSD	31.459	252.24	95.530	1.2725	2.2652	49.142
#1	.05096	-.00019	.02866	.00295	.01168	1.3116
#2	.06304	.00281	.16826	.00303	.01222	1.1390
#3	.03253	-.00046	.04370	.00302	.01199	.42364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0035	.00344	.00369	.00417	-.00580	.00103
Stddev	.0628	.00014	.00120	.00073	.00018	.00075
%RSD	6.2584	3.9566	32.552	17.597	3.0722	72.893
#1	.97555	.00356	.00502	.00339	-.00559	.00018
#2	1.0754	.00346	.00337	.00484	-.00593	.00131
#3	.95955	.00329	.00268	.00427	-.00587	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31425-a-6-a SD@10 Acquired: 5/9/2023 17:22:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00146	182.99	.00282	.00087	.00341	.00375
Stddev	.00087	1.01	.00039	.00014	.00067	.00345
%RSD	59.495	.55377	13.732	16.558	19.643	91.931
#1	-.00123	182.31	.00252	.00073	.00268	.00706
#2	-.00073	184.16	.00269	.00086	.00399	.00401
#3	-.00242	182.51	.00325	.00101	.00356	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00006	.01412
Stddev	.00024	.00007
%RSD	372.02	.47305
#1	-.00006	.01408
#2	-.00031	.01407
#3	.00018	.01419
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31425-a-6-a SD@10 Acquired: 5/9/2023 17:22:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5104.9	96305.	9134.3
Stddev	8.5	417.	10.8
%RSD	.16727	.43314	.11835
#1	5095.1	96114.	9145.7
#2	5110.9	96784.	9124.2
#3	5108.5	96018.	9133.1

Sample Name: CCV Acquired: 5/9/2023 17:27:36 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93919	23.986	.47148	2.0718	1.8742	2.0095
Stddev	.00332	.212	.00240	.0221	.0089	.0197
%RSD	.35334	.88592	.51002	1.0664	.47655	.97791
#1	.93764	23.763	.47410	2.0506	1.8641	1.9907
#2	.93694	24.009	.47095	2.0701	1.8772	2.0079
#3	.94300	24.186	.46938	2.0947	1.8812	2.0299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.224	.49258	1.9488	1.9803	1.8643	24.806
Stddev	.392	.00108	.0049	.0081	.0021	.260
%RSD	.79592	.21990	.24892	.40879	.11335	1.0476
#1	48.830	.49376	1.9542	1.9738	1.8630	24.595
#2	49.229	.49235	1.9476	1.9776	1.8632	24.728
#3	49.614	.49164	1.9447	1.9894	1.8667	25.096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 17:27:36 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.491	1.8376	49.561	1.9869	1.9428	48.185
Stddev	.283	.0136	.689	.0144	.0037	1.564
%RSD	.59695	.74097	1.3894	.72417	.19236	3.2462
#1	47.229	1.8241	49.019	1.9761	1.9469	46.450
#2	47.454	1.8373	49.329	1.9814	1.9397	48.617
#3	47.792	1.8514	50.336	2.0033	1.9417	49.487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.963	1.9571	1.9144	.49849	.49024	.46654
Stddev	.313	.0046	.0079	.00260	.00181	.00227
%RSD	.66754	.23535	.41422	.52180	.36887	.48707
#1	46.684	1.9623	1.9233	.50055	.49032	.46883
#2	46.902	1.9556	1.9119	.49557	.49200	.46649
#3	47.302	1.9534	1.9080	.49935	.48839	.46429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 17:27:36 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47145	F 14.768	1.9623	1.9103	1.9241	.98310
Stddev	.00211	.234	.0021	.0171	.0177	.00883
%RSD	.44708	1.5864	.10461	.89793	.91855	.89863
#1	.46905	14.498	1.9642	1.8934	1.9046	.98400
#2	.47234	14.900	1.9625	1.9098	1.9289	.99144
#3	.47297	14.906	1.9601	1.9277	1.9390	.97384
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9541	1.9156
Stddev	.0066	.0035
%RSD	.33756	.18222
#1	1.9497	1.9196
#2	1.9509	1.9139
#3	1.9617	1.9132
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 17:27:36 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5015.8	94493.	8979.6
Stddev	28.8	445.	60.6
%RSD	.57380	.47144	.67519
#1	4988.1	94388.	8958.8
#2	5013.8	94981.	9047.9
#3	5045.5	94109.	8932.1

Sample Name: CCB Acquired: 5/9/2023 17:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00043	.01808	.00047	F .13205	-.00004	.00010
Stddev	.00058	.00486	.00071	.00316	.00022	.00010
%RSD	133.63	26.883	149.56	2.3938	507.73	94.782
#1	-.00108	.01249	-.00005	.13544	-.00004	.00021
#2	.00001	.02124	.00019	.13152	.00017	.00006
#3	-.00021	.02053	.00128	.12919	-.00026	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00586	.00004	.00015	-.00038	-.00046	.04621
Stddev	.00099	.00002	.00002	.00015	.00010	.00386
%RSD	16.848	37.443	14.733	39.935	22.027	8.3480
#1	.00690	.00003	.00014	-.00054	-.00040	.04753
#2	.00575	.00005	.00014	-.00025	-.00041	.04187
#3	.00494	.00006	.00018	-.00035	-.00058	.04924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 17:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00504	-.00133	.00082	.00035	.00020	F .66615
Stddev	.01358	.00084	.01099	.00012	.00011	.71368
%RSD	269.18	63.566	1331.6	35.314	56.534	107.14
#1	.00005	-.00124	.00040	.00047	.00030	-.12274
#2	-.02043	-.00053	-.00994	.00035	.00008	1.2670
#3	.00525	-.00221	.01202	.00023	.00022	.85422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01786	.00005	.00120	F .00311	-.00150	.00049
Stddev	.00780	.00019	.00034	.00134	.00063	.00060
%RSD	43.668	350.16	28.251	42.977	42.049	121.44
#1	.02638	.00019	.00084	.00271	-.00190	-.00017
#2	.01612	-.00016	.00125	.00202	-.00077	.00065
#3	.01108	.00013	.00151	.00460	-.00182	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/9/2023 17:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00077	F 9.9178	.00005	.00014	.00026	.00336
Stddev	.00133	.1689	.00033	.00008	.00064	.00263
%RSD	174.10	1.7035	692.18	62.094	249.67	78.242
#1	-.00002	10.041	-.00011	.00008	.00100	.00498
#2	.00001	9.9868	.00042	.00023	-.00008	.00033
#3	.00230	9.7253	-.00017	.00010	-.00014	.00477
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00018	-.00002
Stddev	.00029	.00005
%RSD	163.01	253.17
#1	.00050	.00002
#2	.00011	-.00008
#3	-.00007	.00000
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 17:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5131.9	95916.	9101.7
Stddev	11.8	574.	46.8
%RSD	.22928	.59812	.51417
#1	5118.9	95420.	9049.5
#2	5135.1	95785.	9139.9
#3	5141.8	96544.	9115.7

Sample Name: 31398-a-10-a PDSD@3 Acquired: 5/9/2023 17:37:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04789	2.3755	.11687	F 41.907	.10217	.05122
Stddev	.00117	.0575	.00220	.038	.00213	.00144
%RSD	2.4409	2.4216	1.8828	.09138	2.0892	2.8082
#1	.04655	2.3091	.11433	41.942	.09979	.04966
#2	.04839	2.4070	.11797	41.912	.10283	.05151
#3	.04872	2.4104	.11830	41.866	.10390	.05249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.096	.05229	.10515	.85242	.26173	1.6089
Stddev	1.112	.00087	.00208	.00789	.00736	.0246
%RSD	2.1761	1.6569	1.9814	.92601	2.8122	1.5268
#1	49.841	.05130	.10276	.84344	.25343	1.5815
#2	51.489	.05269	.10610	.85557	.26427	1.6164
#3	51.957	.05288	.10658	.85826	.26748	1.6288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDSD@3 Acquired: 5/9/2023 17:37:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.838	.09480	10.001	.11546	.54992	50.922
Stddev	1.025	.00193	.286	.00274	.00846	2.025
%RSD	2.1430	2.0328	2.8579	2.3689	1.5383	3.9774
#1	46.692	.09263	9.6731	.11253	.54015	48.783
#2	48.154	.09545	10.134	.11589	.55494	51.172
#3	48.668	.09631	10.196	.11795	.55467	52.811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.767	.60243	5.0071	.12392	.09704	.47678
Stddev	.940	.01093	.0837	.00458	.00277	.00666
%RSD	1.9681	1.8142	1.6712	3.6928	2.8575	1.3978
#1	46.707	.58984	4.9109	.11871	.09404	.46912
#2	48.093	.60797	5.0473	.12575	.09757	.48121
#3	48.501	.60948	5.0631	.12730	.09951	.48001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a PDSD@3 Acquired: 5/9/2023 17:37:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13399	626.27	.50289	.48325	.11070	.39459
Stddev	.00467	2.36	.00854	.01210	.00146	.00888
%RSD	3.4835	.37754	1.6986	2.5043	1.3170	2.2493
#1	.12988	626.28	.49316	.46988	.10903	.38438
#2	.13303	628.62	.50639	.48643	.11166	.40042
#3	.13906	623.90	.50913	.49345	.11143	.39898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20529	.52571
Stddev	.00565	.01086
%RSD	2.7539	2.0649
#1	.19913	.51325
#2	.20652	.53073
#3	.21023	.53314
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31398-a-10-a PDSD@3 Acquired: 5/9/2023 17:37:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5031.3	95182.	9062.5
Stddev	37.2	377.	16.6
%RSD	.73901	.39655	.18280
#1	4998.2	94872.	9043.6
#2	5024.1	95602.	9069.0
#3	5071.5	95072.	9074.7

Sample Name: 140-31398-a-17-a @3 Acquired: 5/9/2023 17:42:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	.54069	.01925	F 43.017	.00575	.00005
Stddev	.00026	.01801	.00126	.165	.00016	.00000
%RSD	1251.2	3.3315	6.5631	.38449	2.8138	9.5185
#1	-.00002	.56148	.01948	43.201	.00580	.00005
#2	-.00028	.53078	.01789	42.969	.00557	.00004
#3	.00024	.52980	.02039	42.881	.00588	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95594	.00936	.00182	.68148	.01058	.65684
Stddev	.00228	.00006	.00015	.00099	.00011	.00159
%RSD	.23870	.61122	8.0014	.14561	1.0085	.24163
#1	.95478	.00943	.00199	.68242	.01055	.65509
#2	.95857	.00932	.00176	.68044	.01070	.65724
#3	.95448	.00933	.00172	.68159	.01050	.65818
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-17-a @3 Acquired: 5/9/2023 17:42:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15821	.00079	.09931	.01320	.05105	1.3443
Stddev	.01693	.00014	.01289	.00005	.00018	.5490
%RSD	10.700	17.791	12.982	.36499	.34683	40.838
#1	.15744	.00094	.10480	.01324	.05111	1.5332
#2	.14168	.00074	.08458	.01320	.05085	1.7740
#3	.17550	.00067	.10854	.01314	.05119	.72585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.63368	.08616	.00859	.02698	-.00118	.00243
Stddev	.00532	.00023	.00121	.00188	.00077	.00134
%RSD	.83904	.26164	14.133	6.9576	65.472	55.125
#1	.62783	.08615	.00864	.02586	-.00031	.00396
#2	.63821	.08638	.00978	.02593	-.00146	.00149
#3	.63500	.08593	.00736	.02915	-.00178	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-17-a @3 Acquired: 5/9/2023 17:42:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	660.68	.00038	.00248	.01221	.00652
Stddev	.00187	1.49	.00058	.00002	.00067	.00238
%RSD	363.35	.22537	153.27	.75481	5.4688	36.534
#1	.00162	659.92	.00003	.00250	.01290	.00883
#2	-.00184	659.74	.00105	.00247	.01157	.00407
#3	-.00133	662.40	.00006	.00246	.01217	.00667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00304	.03181
Stddev	.00018	.00007
%RSD	5.9355	.23134
#1	.00310	.03189
#2	.00284	.03176
#3	.00318	.03177
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-17-a @3 Acquired: 5/9/2023 17:42:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5023.3	95077.	9020.5
Stddev	30.6	666.	39.1
%RSD	.60928	.70071	.43394
#1	4988.6	94310.	9054.9
#2	5034.7	95518.	8977.9
#3	5046.5	95403.	9028.6

Sample Name: 140-31398-a-29-a @3 Acquired: 5/9/2023 17:46:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	.33750	.00415	F 43.303	.00371	.00003
Stddev	.00015	.01356	.00039	.092	.00014	.00001
%RSD	32.675	4.0179	9.3375	.21222	3.8487	37.134
#1	-.00053	.34626	.00390	43.227	.00377	.00004
#2	-.00028	.32188	.00460	43.405	.00381	.00004
#3	-.00054	.34435	.00396	43.276	.00355	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13297	.00043	.00076	.00674	.00694	.04714
Stddev	.00130	.00004	.00005	.00025	.00011	.00153
%RSD	.97883	8.8959	6.8424	3.7026	1.6028	3.2441
#1	.13153	.00047	.00082	.00669	.00685	.04805
#2	.13406	.00043	.00072	.00702	.00707	.04799
#3	.13332	.00039	.00074	.00652	.00691	.04537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-29-a @3 Acquired: 5/9/2023 17:46:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02209	-.00029	.06810	.00237	.04908	.51327
Stddev	.01198	.00084	.00736	.00004	.00030	1.1191
%RSD	54.224	285.83	10.816	1.7687	.60964	218.03
#1	.00835	-.00109	.07084	.00238	.04873	1.3189
#2	.02758	-.00038	.05975	.00232	.04929	-.76449
#3	.03033	.00058	.07370	.00240	.04920	.98537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07338	.02402	-.01435	.01394	-.01917	.00330
Stddev	.00192	.00015	.00147	.00182	.00049	.00076
%RSD	2.6157	.63814	10.275	13.049	2.5793	23.103
#1	.07552	.02402	-.01600	.01537	-.01870	.00302
#2	.07282	.02387	-.01389	.01455	-.01914	.00272
#3	.07181	.02417	-.01316	.01189	-.01968	.00417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31398-a-29-a @3 Acquired: 5/9/2023 17:46:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00214	722.39	-.00074	.00083	.00514	.00496
Stddev	.00150	2.51	.00012	.00009	.00111	.00077
%RSD	69.892	.34770	16.545	10.589	21.660	15.575
#1	-.00370	719.62	-.00079	.00087	.00583	.00423
#2	-.00072	723.02	-.00060	.00088	.00386	.00577
#3	-.00201	724.52	-.00084	.00073	.00574	.00488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00024	.00364
Stddev	.00007	.00012
%RSD	29.638	3.2463
#1	.00016	.00350
#2	.00030	.00371
#3	.00025	.00371
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31398-a-29-a @3 Acquired: 5/9/2023 17:46:59 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 4ML TO 12ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5135.9	96583.	9166.8
Stddev	15.1	505.	24.6
%RSD	.29358	.52305	.26821
#1	5119.2	96236.	9148.3
#2	5148.6	96350.	9157.4
#3	5139.8	97162.	9194.7

Sample Name: 31398-a-10-a SD@15 Acquired: 5/9/2023 17:51:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (B) TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.12095	.00467	8.7365	.00126	.00001
Stddev	.00035	.01039	.00084	.0243	.00005	.00001
%RSD	690.57	8.5866	17.999	.27829	4.2783	76.290
#1	-.00045	.13167	.00469	8.7489	.00124	.00002
#2	.00019	.11094	.00550	8.7085	.00132	.00000
#3	.00010	.12025	.00382	8.7522	.00121	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20098	.00048	.00047	.13381	.00172	.12474
Stddev	.00270	.00001	.00005	.00030	.00019	.00263
%RSD	1.3455	2.7000	11.187	.22372	11.274	2.1089
#1	.19800	.00049	.00046	.13403	.00151	.12230
#2	.20167	.00050	.00053	.13393	.00188	.12440
#3	.20327	.00047	.00043	.13347	.00178	.12753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a SD@15 Acquired: 5/9/2023 17:51:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (B) TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01086	-.00092	.02369	.00313	.01009	.28958
Stddev	.00923	.00041	.00627	.00010	.00016	.86419
%RSD	84.973	44.372	26.488	3.2127	1.5461	298.43
#1	.01982	-.00056	.02222	.00316	.01024	-.58468
#2	.01138	-.00136	.01828	.00302	.00993	.31009
#3	.00138	-.00084	.03056	.00322	.01009	1.1433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10922	.01885	.00723	.00516	-.00199	.00184
Stddev	.00802	.00004	.00094	.00178	.00098	.00054
%RSD	7.3402	.21491	12.972	34.424	49.352	29.605
#1	.11397	.01884	.00773	.00721	-.00289	.00243
#2	.09996	.01882	.00780	.00428	-.00095	.00172
#3	.11372	.01890	.00615	.00400	-.00211	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31398-a-10-a SD@15 Acquired: 5/9/2023 17:51:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (B) TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00075	138.57	.00043	.00033	.00190	.00133
Stddev	.00177	.64	.00026	.00013	.00057	.00122
%RSD	236.51	.46426	60.028	39.049	30.056	91.947
#1	-.00269	139.26	.00038	.00020	.00155	.00247
#2	.00075	138.47	.00071	.00046	.00256	.00004
#3	-.00030	137.98	.00020	.00033	.00159	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00074	.00478
Stddev	.00019	.00004
%RSD	25.991	.74071
#1	.00082	.00478
#2	.00052	.00475
#3	.00089	.00482
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31398-a-10-a SD@15 Acquired: 5/9/2023 17:51:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (B) TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5179.2	97163.	9123.8
Stddev	17.1	776.	70.6
%RSD	.33006	.79914	.77373
#1	5160.9	96270.	9045.0
#2	5182.0	97536.	9181.1
#3	5194.8	97681.	9145.5

Sample Name: 140-31634-a-1-a @2 Acquired: 5/9/2023 17:56:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00184	.38944	.15432	F 64.181	.05698	.00004
Stddev	.00041	.02588	.00015	.491	.00012	.00001
%RSD	22.174	6.6452	.09994	.76528	.21373	19.475
#1	.00137	.41932	.15418	64.736	.05692	.00004
#2	.00212	.37378	.15449	64.007	.05689	.00004
#3	.00202	.37524	.15430	63.801	.05712	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.61818	.02653	.00141	.01663	.74386	.34790
Stddev	.00369	.00011	.00008	.00016	.00156	.00431
%RSD	.59665	.40917	6.0371	.93336	.20983	1.2384
#1	.61421	.02657	.00146	.01654	.74489	.34356
#2	.61883	.02660	.00145	.01681	.74463	.35218
#3	.62150	.02640	.00131	.01655	.74206	.34798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-1-a @2 Acquired: 5/9/2023 17:56:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30600	-.00070	.10622	.01416	.05971	5.3062
Stddev	.01473	.00043	.01277	.00007	.00050	1.1219
%RSD	4.8144	61.985	12.018	.49239	.83625	21.144
#1	.31753	-.00105	.10473	.01424	.06028	6.5980
#2	.31106	-.00021	.11967	.01412	.05951	4.7442
#3	.28940	-.00083	.09427	.01412	.05935	4.5763
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.6859	.02214	.01226	1.2218	1.1751	.03116
Stddev	.0193	.00035	.00291	.0048	.0010	.00202
%RSD	.41279	1.5832	23.770	.38969	.08526	6.4823
#1	4.7071	.02190	.01468	1.2272	1.1762	.02898
#2	4.6816	.02197	.00902	1.2182	1.1742	.03297
#3	4.6691	.02254	.01308	1.2201	1.1749	.03154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-1-a @2 Acquired: 5/9/2023 17:56:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09384	652.59	.01957	.00347	.00668	.00566
Stddev	.00066	.74	.00057	.00012	.00030	.00137
%RSD	.70142	.11411	2.9031	3.4063	4.5180	24.193
#1	.09453	653.09	.01917	.00343	.00676	.00536
#2	.09322	651.74	.01933	.00361	.00694	.00446
#3	.09377	652.96	.02022	.00338	.00635	.00715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00003	.79127
Stddev	.00021	.00120
%RSD	624.77	.15141
#1	.00019	.79184
#2	-.00020	.79208
#3	.00011	.78990
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-1-a @2 Acquired: 5/9/2023 17:56:55 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5178.7	96993.	9186.3
Stddev	21.2	1185.	24.0
%RSD	.40926	1.2218	.26127
#1	5154.3	95648.	9167.5
#2	5191.3	97449.	9178.1
#3	5190.6	97882.	9213.3

Sample Name: 140-31634-a-6-a @2 Acquired: 5/9/2023 18:01:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (C)

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00172	.48987	.11587	F 64.377	.04493	.00004
Stddev	.00022	.11388	.00082	.291	.00026	.00001
%RSD	12.656	23.247	.70814	.45236	.58860	20.524
#1	.00177	.41030	.11647	64.490	.04463	.00004
#2	.00191	.62031	.11493	64.595	.04508	.00003
#3	.00148	.43899	.11619	64.047	.04509	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49768	.02896	.00122	.01445	.94883	.27416
Stddev	.00364	.00006	.00012	.00011	.00389	.00287
%RSD	.73200	.19063	9.6194	.76412	.40959	1.0470
#1	.49369	.02901	.00126	.01444	.95324	.27086
#2	.49852	.02890	.00132	.01456	.94593	.27550
#3	.50083	.02896	.00109	.01434	.94730	.27611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a @2 Acquired: 5/9/2023 18:01:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (C)

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22941	.00027	.09593	.00774	.06002	3.8572
Stddev	.01522	.00094	.00197	.00006	.00015	.7918
%RSD	6.6362	340.47	2.0576	.74472	.25130	20.527
#1	.22513	.00126	.09463	.00779	.06020	4.3259
#2	.24631	.00016	.09820	.00768	.05994	2.9430
#3	.21678	-.00060	.09495	.00776	.05993	4.3026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.0052	.01797	-.00188	2.7228	2.6451	.05071
Stddev	.0231	.00019	.00112	.0113	.0099	.00128
%RSD	.76883	1.0344	59.528	.41310	.37483	2.5289
#1	2.9894	.01813	-.00063	2.7356	2.6565	.04984
#2	3.0318	.01776	-.00278	2.7148	2.6392	.05218
#3	2.9946	.01801	-.00221	2.7179	2.6395	.05010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-6-a @2 Acquired: 5/9/2023 18:01:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (C)

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04055	662.33	.03305	.00323	.01862	.00436
Stddev	.00149	2.31	.00013	.00005	.00183	.00188
%RSD	3.6852	.34904	.38822	1.4096	9.8378	43.060
#1	.04227	661.81	.03308	.00326	.01723	.00595
#2	.03979	660.33	.03291	.00325	.02070	.00229
#3	.03958	664.86	.03316	.00318	.01793	.00483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00046	2.3931
Stddev	.00032	.0063
%RSD	70.142	.26482
#1	.00024	2.4004
#2	.00032	2.3896
#3	.00084	2.3893
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-6-a @2 Acquired: 5/9/2023 18:01:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (C)

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5172.4	96977.	9170.4
Stddev	29.6	747.	120.2
%RSD	.57314	.76989	1.3109
#1	5138.7	96115.	9036.3
#2	5183.9	97400.	9268.4
#3	5194.5	97417.	9206.5

Sample Name: 31634-a-6-a PDS@2 Acquired: 5/9/2023 18:06:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04848	2.3104	.21542	F 63.673	.14049	.05125
Stddev	.00413	.1499	.00815	.655	.00740	.00363
%RSD	8.5220	6.4890	3.7843	1.0290	5.2679	7.0752
#1	.04397	2.1479	.20601	63.227	.13224	.04728
#2	.04939	2.3397	.22006	64.426	.14271	.05211
#3	.05209	2.4434	.22019	63.368	.14653	.05437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.961	.07865	.10506	.22165	1.1762	1.2801
Stddev	.858	.00299	.00608	.01543	.0202	.0776
%RSD	1.6509	3.8022	5.7892	6.9623	1.7186	6.0618
#1	52.230	.07525	.09814	.20465	1.1535	1.1961
#2	52.653	.07982	.10746	.22553	1.1829	1.2950
#3	51.001	.08087	.10958	.23478	1.1922	1.3491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a PDS@2 Acquired: 5/9/2023 18:06:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.086	.09364	10.252	.10771	.55880	54.726
Stddev	.772	.00770	.191	.00726	.03017	2.006
%RSD	1.5722	8.2220	1.8665	6.7363	5.3982	3.6662
#1	49.526	.08539	10.318	.09974	.52446	55.190
#2	49.536	.09489	10.401	.10947	.57094	56.459
#3	48.194	.10063	10.036	.11393	.58102	52.528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.227	.53629	5.1513	2.7137	2.6544	.52497
Stddev	.897	.03048	.3013	.0268	.0168	.02999
%RSD	1.7518	5.6834	5.8496	.98884	.63286	5.7123
#1	51.762	.50159	4.8076	2.6828	2.6370	.49061
#2	51.728	.54853	5.2762	2.7310	2.6706	.53845
#3	50.191	.55875	5.3701	2.7274	2.6556	.54586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a PDS@2 Acquired: 5/9/2023 18:06:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17748	655.50	.53742	.48122	.11653	.39846
Stddev	.00992	5.10	.02896	.03272	.00590	.02439
%RSD	5.5868	.77758	5.3889	6.8002	5.0661	6.1220
#1	.16658	652.11	.50440	.44580	.11038	.37079
#2	.17988	661.36	.54936	.48755	.11706	.40771
#3	.18597	653.03	.55850	.51032	.12215	.41687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20165	2.8463
Stddev	.01420	.0395
%RSD	7.0399	1.3878
#1	.18621	2.8007
#2	.20460	2.8689
#3	.21414	2.8693
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31634-a-6-a PDS@2 Acquired: 5/9/2023 18:06:58 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5085.1	96081.	9135.3
Stddev	14.1	473.	108.2
%RSD	.27681	.49242	1.1842
#1	5084.5	96374.	9058.8
#2	5071.4	95535.	9088.2
#3	5099.6	96334.	9259.1

Sample Name: 31634-a-6-a PDSD@2 Acquired: 5/9/2023 18:11:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04874	2.3370	.21655	F 64.247	.14092	.05201
Stddev	.00220	.1060	.00527	.333	.00600	.00264
%RSD	4.5119	4.5347	2.4339	.51859	4.2581	5.0821
#1	.04635	2.2184	.21051	64.378	.13462	.04911
#2	.04918	2.3699	.21891	64.495	.14157	.05266
#3	.05068	2.4226	.22023	63.868	.14657	.05428
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.721	.07866	.10547	.22585	1.1798	1.2894
Stddev	.953	.00200	.00404	.01114	.0115	.0654
%RSD	1.8069	2.5482	3.8313	4.9331	.97517	5.0684
#1	51.705	.07642	.10098	.21354	1.1672	1.2222
#2	52.864	.07928	.10663	.22875	1.1825	1.2934
#3	53.594	.08028	.10881	.23525	1.1897	1.3527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a PDSD@2 Acquired: 5/9/2023 18:11:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.893	.09460	10.468	.10927	.56113	55.671
Stddev	.848	.00460	.224	.00516	.01574	.173
%RSD	1.6999	4.8656	2.1386	4.7233	2.8059	.31003
#1	48.999	.08979	10.252	.10370	.54338	55.501
#2	49.992	.09505	10.454	.11023	.56658	55.846
#3	50.687	.09896	10.699	.11389	.57343	55.666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.013	.53797	5.1803	2.7300	2.6485	.52928
Stddev	.874	.02144	.1623	.0194	.0138	.01519
%RSD	1.6803	3.9857	3.1324	.70957	.51970	2.8701
#1	51.127	.51378	4.9966	2.7082	2.6326	.51222
#2	52.039	.54551	5.2401	2.7369	2.6569	.53427
#3	52.874	.55463	5.3042	2.7451	2.6560	.54134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a PDSD@2 Acquired: 5/9/2023 18:11:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17842	655.75	.54215	.48654	.11853	.40321
Stddev	.00604	4.13	.01607	.02748	.00513	.01782
%RSD	3.3855	.62974	2.9633	5.6475	4.3282	4.4195
#1	.17156	652.03	.52389	.45754	.11453	.38294
#2	.18291	655.02	.54847	.48989	.11674	.41027
#3	.18080	660.20	.55410	.51219	.12431	.41642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20432	2.8410
Stddev	.01077	.0242
%RSD	5.2697	.85044
#1	.19256	2.8136
#2	.20671	2.8505
#3	.21369	2.8591
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31634-a-6-a PDSD@2 Acquired: 5/9/2023 18:11:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5088.7	95151.	9098.0
Stddev	7.4	170.	16.1
%RSD	.14581	.17898	.17727
#1	5080.8	95009.	9112.2
#2	5090.1	95104.	9080.5
#3	5095.4	95340.	9101.4

Sample Name: 140-31634-a-11-a @2 Acquired: 5/9/2023 18:16:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00158	.47614	.09923	F 64.597	.06946	.00004
Stddev	.00016	.00946	.00084	.302	.00064	.00001
%RSD	10.197	1.9866	.84739	.46676	.91840	29.648
#1	.00176	.48690	.09902	64.310	.07016	.00002
#2	.00154	.47241	.09852	64.911	.06932	.00004
#3	.00144	.46912	.10016	64.571	.06891	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52938	.02699	.00103	.01120	.48659	.32169
Stddev	.01090	.00011	.00010	.00009	.00066	.00766
%RSD	2.0587	.42099	9.8672	.82578	.13601	2.3797
#1	.54194	.02706	.00103	.01129	.48697	.32696
#2	.52384	.02706	.00093	.01121	.48697	.31291
#3	.52236	.02686	.00114	.01111	.48583	.32520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-11-a @2 Acquired: 5/9/2023 18:16:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26583	-.00020	.08605	.01012	.06258	3.2945
Stddev	.02617	.00011	.00029	.00016	.00056	.9930
%RSD	9.8442	51.894	.33746	1.5470	.89257	30.141
#1	.27712	-.00033	.08588	.00998	.06296	2.1551
#2	.23591	-.00015	.08587	.01029	.06285	3.9753
#3	.28446	-.00013	.08638	.01009	.06194	3.7531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7954	.01378	.00611	1.6533	1.5900	.04072
Stddev	.0345	.00029	.00174	.0116	.0098	.00190
%RSD	1.2358	2.0716	28.536	.69931	.61848	4.6783
#1	2.8326	.01410	.00647	1.6427	1.5930	.03861
#2	2.7644	.01369	.00764	1.6656	1.5980	.04232
#3	2.7892	.01355	.00421	1.6515	1.5790	.04123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-11-a @2 Acquired: 5/9/2023 18:16:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08927	668.93	.02306	.00296	.03628	.00604
Stddev	.00136	8.36	.00090	.00018	.00076	.00009
%RSD	1.5277	1.2499	3.9137	6.0223	2.1029	1.5261
#1	.09053	677.22	.02205	.00316	.03703	.00611
#2	.08783	660.50	.02333	.00287	.03551	.00606
#3	.08946	669.09	.02379	.00284	.03630	.00593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00032	1.2279
Stddev	.00043	.0055
%RSD	133.30	.44517
#1	.00011	1.2297
#2	.00082	1.2322
#3	.00004	1.2218
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-11-a @2 Acquired: 5/9/2023 18:16:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5155.6	96096.	9015.6
Stddev	26.4	53.	134.9
%RSD	.51119	.05514	1.4964
#1	5127.2	96121.	8859.9
#2	5160.2	96035.	9089.9
#3	5179.3	96132.	9097.1

Sample Name: 31634-a-6-a SD@10 Acquired: 5/9/2023 18:21:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (C) TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.10344	.02492	13.187	.00899	.00009
Stddev	.00027	.01997	.00077	.061	.00015	.00008
%RSD	235.69	19.306	3.0926	.46151	1.6584	95.485
#1	.00009	.08388	.02511	13.117	.00885	.00004
#2	.00040	.10263	.02557	13.227	.00898	.00018
#3	-.00014	.12380	.02407	13.218	.00914	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10552	.00586	.00039	.00287	.18816	.05525
Stddev	.00182	.00002	.00008	.00052	.00139	.00097
%RSD	1.7294	.36433	19.913	18.080	.74016	1.7536
#1	.10419	.00589	.00047	.00312	.18659	.05512
#2	.10478	.00585	.00039	.00322	.18861	.05434
#3	.10760	.00585	.00031	.00227	.18927	.05627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a SD@10 Acquired: 5/9/2023 18:21:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (C) TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03754	-.00012	.04168	.00163	.01197	.73682
Stddev	.01702	.00088	.01158	.00003	.00017	1.0484
%RSD	45.352	715.75	27.793	1.6908	1.4105	142.28
#1	.05517	.00006	.02983	.00165	.01215	-.47039
#2	.02119	-.00108	.04223	.00164	.01193	1.2628
#3	.03625	.00065	.05298	.00160	.01182	1.4181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.59883	.00374	.00125	.55747	.54341	.01046
Stddev	.00338	.00025	.00124	.00220	.00056	.00049
%RSD	.56421	6.5684	98.890	.39427	.10241	4.6516
#1	.59494	.00352	.00257	.55677	.54367	.01082
#2	.60057	.00400	.00011	.55570	.54278	.00990
#3	.60099	.00369	.00108	.55993	.54380	.01064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31634-a-6-a SD@10 Acquired: 5/9/2023 18:21:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (C) TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00834	140.92	.00729	.00061	.00299	.00513
Stddev	.00028	.80	.00036	.00002	.00062	.00091
%RSD	3.3128	.56450	4.8745	2.9387	20.656	17.655
#1	.00853	140.28	.00708	.00060	.00364	.00453
#2	.00848	141.81	.00709	.00061	.00242	.00470
#3	.00802	140.67	.00770	.00063	.00291	.00618
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00021	.48635
Stddev	.00038	.00176
%RSD	180.04	.36180
#1	-.00019	.48826
#2	.00055	.48599
#3	.00027	.48480
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31634-a-6-a SD@10 Acquired: 5/9/2023 18:21:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (C) TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5177.1	96784.	9146.5
Stddev	38.1	211.	7.5
%RSD	.73644	.21764	.08181
#1	5133.4	96601.	9144.1
#2	5194.0	97014.	9140.5
#3	5203.8	96738.	9154.9

Sample Name: CCV Acquired: 5/9/2023 18:26:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.93756	24.077	.47278	2.0334	1.8786	2.0234
Stddev	.00236	.186	.00158	.0207	.0038	.0135
%RSD	.25222	.77365	.33454	1.0161	.20219	.66540
#1	.93545	23.880	.47148	2.0124	1.8749	2.0079
#2	.93710	24.101	.47233	2.0340	1.8783	2.0302
#3	.94011	24.250	.47454	2.0538	1.8825	2.0322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.380	.49637	1.9617	2.0093	1.8560	24.808
Stddev	.160	.00131	.0031	.0121	.0059	.214
%RSD	.32315	.26299	.16018	.60331	.31666	.86271
#1	49.278	.49490	1.9582	1.9962	1.8495	24.610
#2	49.298	.49737	1.9628	2.0116	1.8610	24.779
#3	49.564	.49685	1.9642	2.0201	1.8573	25.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 18:26:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.306	1.8182	49.449	1.9885	1.9280	47.626
Stddev	.211	.0112	.373	.0125	.0038	.617
%RSD	.44565	.61548	.75527	.63073	.19752	1.2951
#1	47.207	1.8095	49.208	1.9779	1.9236	47.213
#2	47.163	1.8143	49.259	1.9853	1.9304	47.330
#3	47.548	1.8308	49.879	2.0023	1.9300	48.335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.261	1.9754	1.9198	.50988	.49562	.46215
Stddev	.284	.0040	.0020	.00451	.00146	.00167
%RSD	.61306	.20364	.10594	.88509	.29471	.36168
#1	46.027	1.9708	1.9174	.50473	.49475	.46299
#2	46.180	1.9782	1.9210	.51314	.49731	.46023
#3	46.577	1.9771	1.9210	.51177	.49481	.46324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 18:26:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46772	F 14.793	2.0320	1.8949	1.9185	.99037
Stddev	.00301	.183	.0047	.0144	.0088	.00410
%RSD	.64328	1.2372	.23246	.75842	.46047	.41423
#1	.46937	14.660	2.0269	1.8809	1.9120	.98654
#2	.46954	14.717	2.0362	1.8941	1.9149	.99470
#3	.46424	15.002	2.0330	1.9096	1.9285	.98988
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9587	1.9138
Stddev	.0068	.0040
%RSD	.34946	.20964
#1	1.9509	1.9093
#2	1.9613	1.9154
#3	1.9638	1.9168
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 18:26:31 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5095.6	95168.	9052.3
Stddev	12.0	64.	74.8
%RSD	.23467	.06757	.82630
#1	5085.8	95239.	9008.8
#2	5091.9	95152.	9138.7
#3	5108.9	95114.	9009.4

Sample Name: CCB Acquired: 5/9/2023 18:31:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	.01370	.00074	F .11913	.00020	.00012
Stddev	.00020	.00447	.00148	.00103	.00015	.00012
%RSD	50.271	32.662	200.56	.86660	74.624	96.966
#1	-.00025	.01268	-.00048	.11920	.00034	.00026
#2	-.00032	.01860	.00239	.11807	.00004	.00007
#3	-.00062	.00982	.00031	.12013	.00023	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00570	.00003	.00018	-.00053	-.00045	.00224
Stddev	.00202	.00002	.00004	.00037	.00009	.00023
%RSD	35.425	62.356	21.993	69.120	19.696	10.437
#1	.00770	.00003	.00019	-.00050	-.00038	.00247
#2	.00574	.00001	.00014	-.00018	-.00041	.00224
#3	.00366	.00005	.00021	-.00092	-.00055	.00200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 18:31:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00933	-.00061	.02120	.00016	.00025	.09079
Stddev	.01064	.00095	.01155	.00014	.00019	1.2257
%RSD	114.01	157.68	54.482	86.523	76.048	1350.1
#1	.01676	.00045	.02496	.00030	.00007	-.78732
#2	-.00286	-.00085	.03040	.00015	.00045	-.43146
#3	.01409	-.00141	.00824	.00002	.00023	1.4911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01234	.00013	.00121	.00162	-.00101	.00038
Stddev	.00443	.00020	.00120	.00147	.00143	.00103
%RSD	35.863	149.93	98.411	90.735	140.75	267.65
#1	.00933	-.00007	.00179	.00036	-.00002	.00142
#2	.01742	.00032	-.00016	.00323	-.00265	.00038
#3	.01027	.00015	.00202	.00126	-.00038	-.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 18:31:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00129	F 10.785	.00058	.00002	-.00086	.00326
Stddev	.00116	.151	.00016	.00015	.00087	.00111
%RSD	89.703	1.4030	27.186	872.53	101.44	34.169
#1	.00003	10.929	.00059	.00018	-.00184	.00392
#2	-.00177	10.799	.00072	-.00008	-.00015	.00387
#3	-.00214	10.628	.00041	-.00005	-.00060	.00197
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00010	-.00003
Stddev	.00009	.00006
%RSD	90.277	205.27
#1	-.00002	.00003
#2	-.00008	-.00003
#3	-.00020	-.00009
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 18:31:18 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5234.0	96109.	9144.4
Stddev	18.8	890.	79.2
%RSD	.36010	.92596	.86593
#1	5212.5	95096.	9053.2
#2	5247.4	96764.	9194.7
#3	5242.3	96467.	9185.4

Sample Name: 140-31634-a-16-a @2 Acquired: 5/9/2023 18:36:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	.65494	.00458	F 65.230	.01037	.00004
Stddev	.00041	.55816	.00059	.351	.00029	.00001
%RSD	98.445	85.223	12.771	.53862	2.7792	20.018
#1	.00000	.32149	.00398	65.232	.01006	.00005
#2	-.00044	.34402	.00514	64.878	.01041	.00004
#3	-.00081	1.2993	.00463	65.580	.01064	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12794	.00036	.00111	.00663	.00117	.06924
Stddev	.02283	.00004	.00013	.00028	.00018	.00682
%RSD	17.847	11.565	11.995	4.2256	15.066	9.8442
#1	.11407	.00032	.00124	.00643	.00127	.06558
#2	.11545	.00038	.00098	.00695	.00127	.06504
#3	.15429	.00040	.00111	.00650	.00097	.07711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-16-a @2 Acquired: 5/9/2023 18:36:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08810	.00045	.12545	.00260	.03489	.68389
Stddev	.01693	.00132	.13666	.00003	.00005	.82802
%RSD	19.220	291.88	108.93	1.2730	.14161	121.07
#1	.08111	-.00041	.05328	.00261	.03488	-.21372
#2	.07578	-.00021	.04001	.00263	.03484	1.4179
#3	.10740	.00198	.28306	.00257	.03494	.84749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14125	.00885	-.01278	.01039	-.01787	.00282
Stddev	.07381	.00012	.00053	.00074	.00093	.00035
%RSD	52.258	1.3769	4.1289	7.0802	5.2129	12.425
#1	.09484	.00875	-.01286	.00960	-.01738	.00251
#2	.10254	.00881	-.01327	.01053	-.01727	.00320
#3	.22636	.00898	-.01222	.01105	-.01894	.00275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31634-a-16-a @2 Acquired: 5/9/2023 18:36:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00341	664.41	-.00175	.00118	.00433	.00514
Stddev	.00073	7.48	.00100	.00012	.00169	.00032
%RSD	21.455	1.1264	56.995	9.9822	39.014	6.2558
#1	-.00421	656.55	-.00191	.00105	.00267	.00487
#2	-.00278	665.22	-.00068	.00124	.00428	.00549
#3	-.00325	671.45	-.00265	.00126	.00605	.00506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00017	.00712
Stddev	.00005	.00006
%RSD	27.881	.78250
#1	.00012	.00714
#2	.00021	.00706
#3	.00018	.00717
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31634-a-16-a @2 Acquired: 5/9/2023 18:36:19 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5234.8	96365.	9145.3
Stddev	10.5	570.	10.1
%RSD	.20031	.59155	.11069
#1	5230.8	95803.	9150.3
#2	5226.8	96943.	9133.6
#3	5246.7	96348.	9151.9

Sample Name: CRI Acquired: 5/9/2023 18:41:26 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00841	.20015	.01047	.26825	.00938	.00542
Stddev	.00031	.00502	.00032	.02031	.00020	.00005
%RSD	3.7070	2.5060	3.0835	7.5707	2.0876	.96699
#1	.00843	.20552	.01080	.24726	.00922	.00548
#2	.00871	.19937	.01044	.26970	.00933	.00538
#3	.00809	.19558	.01016	.28779	.00960	.00539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0872	.00499	.05031	.00987	.02384	.10188
Stddev	.0362	.00008	.00030	.00026	.00024	.00234
%RSD	.71059	1.6599	.59219	2.5846	.99540	2.2940
#1	5.0465	.00494	.05037	.00958	.02410	.10132
#2	5.1156	.00508	.05057	.00998	.02377	.09988
#3	5.0995	.00494	.04998	.01005	.02364	.10445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 18:41:26 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9515	.04443	4.9484	.01505	.03862	5.3693
Stddev	.0320	.00030	.0894	.00010	.00017	.2218
%RSD	.64634	.67913	1.8061	.65130	.45100	4.1303
#1	4.9173	.04431	4.8465	.01516	.03847	5.1856
#2	4.9807	.04478	5.0132	.01503	.03881	5.3066
#3	4.9564	.04421	4.9857	.01496	.03860	5.6156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8033	.04045	.29181	.01156	.00941	.05467
Stddev	.0329	.00016	.00165	.00119	.00039	.00125
%RSD	.68456	.39029	.56508	10.262	4.1881	2.2888
#1	4.7654	.04034	.29360	.01204	.00958	.05354
#2	4.8243	.04063	.29036	.01244	.00969	.05444
#3	4.8203	.04037	.29147	.01021	.00896	.05601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/9/2023 18:41:26 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00692	F 11.192	.10121	.04752	.04714	.01197
Stddev	.00180	.220	.00033	.00040	.00027	.00034
%RSD	25.999	1.9625	.33046	.83354	.56741	2.8015
#1	.00707	10.940	.10122	.04717	.04744	.01169
#2	.00864	11.345	.10154	.04744	.04693	.01188
#3	.00505	11.290	.10087	.04795	.04704	.01234
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02499	.01969
Stddev	.00004	.00007
%RSD	.17249	.37639
#1	.02504	.01975
#2	.02495	.01973
#3	.02498	.01961
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/9/2023 18:41:26 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5214.4	95556.	9083.4
Stddev	27.8	638.	65.8
%RSD	.53248	.66757	.72400
#1	5196.6	94820.	9085.1
#2	5200.1	95944.	9016.8
#3	5246.4	95905.	9148.3

Sample Name: CCV Acquired: 5/9/2023 18:46:19 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94436	24.313	.47797	2.0703	1.8874	2.0633
Stddev	.00046	.153	.00257	.0160	.0010	.0182
%RSD	.04820	.63064	.53691	.77216	.05135	.88038
#1	.94463	24.141	.48093	2.0546	1.8866	2.0462
#2	.94384	24.363	.47660	2.0699	1.8872	2.0612
#3	.94462	24.436	.47638	2.0865	1.8885	2.0824
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.116	.50119	1.9708	2.0293	1.8600	25.157
Stddev	.204	.00123	.0055	.0060	.0061	.147
%RSD	.40691	.24537	.28052	.29790	.32986	.58533
#1	49.880	.50206	1.9754	2.0253	1.8671	24.994
#2	50.240	.49979	1.9647	2.0263	1.8565	25.196
#3	50.226	.50174	1.9724	2.0363	1.8564	25.280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 18:46:19 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.767	1.8248	50.568	2.0238	1.9523	49.509
Stddev	.134	.0071	.381	.0101	.0036	.447
%RSD	.28152	.39002	.75311	.50069	.18639	.90191
#1	47.651	1.8220	50.157	2.0141	1.9562	49.965
#2	47.736	1.8196	50.637	2.0229	1.9491	49.072
#3	47.914	1.8329	50.909	2.0343	1.9515	49.491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.971	1.9833	1.9299	.51435	.49728	.46651
Stddev	.162	.0050	.0055	.00145	.00200	.00127
%RSD	.34590	.25408	.28364	.28148	.40261	.27211
#1	46.873	1.9875	1.9325	.51489	.49800	.46717
#2	46.882	1.9777	1.9237	.51271	.49502	.46731
#3	47.159	1.9847	1.9337	.51545	.49882	.46505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/9/2023 18:46:19 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47436	F 11.903	2.0099	1.9167	1.9430	.99478
Stddev	.00308	.206	.0043	.0084	.0091	.00421
%RSD	.65006	1.7324	.21243	.43688	.46653	.42354
#1	.47784	11.671	2.0099	1.9114	1.9339	.99927
#2	.47197	12.067	2.0056	1.9123	1.9430	.99091
#3	.47327	11.970	2.0141	1.9264	1.9521	.99415
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9828	1.9272
Stddev	.0054	.0035
%RSD	.27085	.18103
#1	1.9793	1.9302
#2	1.9801	1.9234
#3	1.9890	1.9280
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/9/2023 18:46:19 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5129.8	95139.	9024.3
Stddev	19.3	276.	46.5
%RSD	.37645	.28990	.51577
#1	5108.1	95203.	9008.0
#2	5145.3	95376.	8988.1
#3	5135.9	94836.	9076.8

Sample Name: CCB Acquired: 5/9/2023 18:51:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00029	.02783	.00083	F .13344	.00022	.00010
Stddev	.00012	.01326	.00070	.00239	.00022	.00009
%RSD	40.225	47.634	84.391	1.7920	99.651	89.132
#1	-.00016	.04006	.00124	.13076	.00046	.00021
#2	-.00037	.02969	.00123	.13420	.00014	.00005
#3	-.00036	.01374	.00002	.13535	.00005	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00634	.00004	.00023	-.00010	-.00065	.00280
Stddev	.00152	.00004	.00004	.00042	.00019	.00377
%RSD	24.029	100.61	18.022	429.13	28.685	134.50
#1	.00701	.00009	.00022	.00038	-.00048	.00398
#2	.00741	.00002	.00028	-.00040	-.00063	-.00142
#3	.00459	.00002	.00020	-.00026	-.00085	.00584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 18:51:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01789	-.00128	.01639	.00014	.00007	F -.37387
Stddev	.00904	.00034	.00220	.00009	.00006	.74199
%RSD	50.524	26.625	13.429	62.830	88.850	198.46
#1	-.01344	-.00138	.01390	.00021	.00014	-1.1276
#2	-.02830	-.00157	.01720	.00016	.00002	-.34976
#3	-.01194	-.00090	.01807	.00004	.00005	.35577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01567	.00020	.00167	.00095	-.00061	-.00081
Stddev	.00685	.00007	.00058	.00151	.00093	.00137
%RSD	43.691	37.134	34.694	159.38	150.59	169.96
#1	.02195	.00023	.00232	.00019	.00039	-.00123
#2	.00837	.00024	.00119	-.00004	-.00079	-.00192
#3	.01670	.00011	.00152	.00269	-.00144	.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/9/2023 18:51:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00159	F 8.4657	.00019	.00010	-.00152	.00350
Stddev	.00136	.1170	.00019	.00009	.00117	.00118
%RSD	85.712	1.3823	96.527	92.267	77.361	33.650
#1	-.00314	8.5623	.00041	-.00000	-.00036	.00215
#2	-.00060	8.4992	.00010	.00018	-.00271	.00434
#3	-.00102	8.3355	.00007	.00012	-.00148	.00400
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00015	.00001
Stddev	.00003	.00008
%RSD	20.294	991.68
#1	-.00017	.00010
#2	-.00011	-.00001
#3	-.00016	-.00006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/9/2023 18:51:05 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5241.5	96788.	9119.0
Stddev	12.8	319.	93.4
%RSD	.24331	.32998	1.0247
#1	5230.9	96811.	9034.8
#2	5238.0	96457.	9102.6
#3	5255.7	97095.	9219.5

Eurofins Knoxville ICP Batch Review Checklist – SOPs: KNOX-MT-0007r28, KNOX-MT-0008r10

Chart Name:	FD50923	Analysis Batch #:	73123	Analyst:	KNC	Instrument:	DUO

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated per SOP?	Y	✓	
2. Was CCVL within limits? (90-110%R)	Y	✓	
3. ICV analyzed within limits? (90-110%R and <5.0% RSD)	Y	✓	
4. CCV analyzed at required frequency & within limits? (90 - 110%R and <5.0% RSD)	Y	✓	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM#_____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste ≤RL)	Y	✓	☒ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM#_____)
6. ICSA/ICSAB run before samples?	Y	✓	
7. ICSAB interferents and analytes within limits? (80 - 120%R)	Y	✓	
8. ICSA criteria for non-interfering elements met? (Water/Soil/Waste ±1x RL) (Air/SEP/PM10/JN ±2x RL if RL ≤10 µg/L; ±1x RL if RL >10 µg/L)	Y	✓	☐ **ICSA->2X MDL; Stock Impurities** (NCM#_____)
9. Reporting Limit Check Standard (CRI) within limits? (Water/Soil/Waste=70-130%R; Air/SEP/PM10/JN Waste=50-150%)	Y	✓	
10. 6010C samples bracketed by RL Check Standards?	Y	✓	
B. Client Sample and QC Sample Results			
1. Were samples with target element concentrations > the linear range (LR) diluted and reanalyzed?	NA	✓	Comments: High Si (IEC)
2. Were all hits reported from a run with interfering elements < LR?	Y	✓	
3. Elements with F, k or ^ flags reported from a dilution if necessary?	Y	✓	
4. Were sample results reported as ND with elevated RLs?	Y	✓	☐ **RL-Dilution, Matrix** (NCM#_____) ☒ **RL-Dilution, Interferents** (NCM# 45550, 1, 2 ☐ **RL-Dilution, Matrix, Neg. Analyte** (NCM#_____)
5. Internal standard (IS) response ±30% of ICB IS? *If no, list details:*	Y	✓	☐ **ISTD – Matrix, DL Required** (NCM#_____) ☐ Low IS response. Reanalyzed.
6. Report flag turned to No for Mg-SEP Step1 and Na-Steps 2 & 5?	NA	✓	
7. Calculations checked for error? (Document manual calc in comments.)	Y	✓	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Zn <RL; Air/SEP/PM10/JN Waste <RL)	Y	✓	☐ **Method Blank–Report, ND** (NCM#_____) ☐ **Method Blank – Report, 10X** (NCM#_____) ☐ **Method Blank–Insufficient Sample** (NCM#_____) ☐ See narrative-common analyte in SEP leachate.
2. LCS done per prep batch & within QC limits?	Y	✓	☐ **LCS/LCSD –Insufficient Sample** (NCM#_____) ☐ **LCS/LCSD - %R High** (NCM#_____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	NA	✓	☐ **MS/MSD/DUP-Insufficient Volume** (NCM#_____)
4. MS/MSD %R and RPD within QC limits?	NA	✓	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM#_____)
5. DUP RPD within limits?	NA	✓	☐ **DUP - %RPD** (NCM#_____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R) 140-31634-6 >4x Spike added	Y	✓	☐ **Post Digestion Spike - %R** (NCM#_____) ☐ **MS/MSD; High Bias; PDS Acceptable** (NCM#_____)
7. Serial dilution per prep batch & ≤ 10% D for analytes >50X MDL?	Y	✓	☐ **Serial Dilution - %D** (NCM#_____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: KNC 5-10-23	2nd Level Review by: [signature] 5-11-23
Calculation: Pb at 1801	
2.7228 mg/L x 0.100L x 1000 µg/mg x $\frac{10 ml}{5 ml}$ = 544.56 µg	

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard				
S:6	Standard #1 (0.1 ug/L)	Standard				
S:5	Standard #2 (0.2 ug/L)	Standard				
S:4	Standard #3 (0.5 ug/L)	Standard				
S:3	Standard #4 (1.0 ug/L)	Standard				
S:2	Standard #5 (5.0 ug/L)	Standard				
S:1	Standard #6 (10.0 ug/l)	Standard				
1:1	ICV 140-72920/15-A	ICV				
1:2	ICB 140-72920/16-A	ICB				
1:3	CRA 140-72920/17-A	CRDL Standard				
S:9	CCV 140-72920/18-A	CCV — Incorrectly labeled. CCB was analyzed.				
S:10	CCB 140-72920/19-A	CCB				
S:9	CCV 140-72920/18-A	CCV				
S:10	CCB 140-72920/19-A	CCB				
1:4	MB 140-72769/4-B	Method Blank				
1:5	LCS 140-72769/5-B	LCS				
1:6	LCSD 140-72769/6-B	LCS				
1:7	140-31591-A-1-C	Unknown				
1:8	140-31591-A-6-C	Unknown				
1:9	140-31591-A-6-C pds	Unknown				
1:10	140-31591-A-6-C pdsd	Unknown				
1:11	140-31591-A-11-C	Unknown				
1:12	MB 140-72915/1-B	Method Blank				
1:13	LCS 140-72915/2-B	LCS				
S:9	CCV 140-72920/18-A	CCV				
S:10	CCB 140-72920/19-A	CCB				
1:14	140-31634-A-3-B	Unknown				
1:15	140-31634-A-8-D	Unknown				
1:16	140-31634-A-8-E MS	Unknown				
1:17	140-31634-A-8-F MSD	Unknown				
1:18	140-31634-A-13-B	Unknown				
1:19	MB 140-72916/1-B	Method Blank				
1:20	LCS 140-72916/2-B	LCS				
1:21	140-31634-A-4-B	Unknown				
1:22	140-31634-A-9-D	Unknown				
1:23	140-31634-A-9-E MS	Unknown				
S:9	CCV 140-72920/18-A	CCV				
S:10	CCB 140-72920/19-A	CCB				
1:24	140-31634-A-9-F MSD	Unknown				
1:25	140-31634-A-14-B	Unknown				
1:26	140-31634-A-18-B	Unknown				
1:27	140-31634-A-20-B	Unknown				
1:28	MB 140-72917/1-B	Method Blank				
1:29	LCS 140-72917/2-B	LCS				
1:30	140-31634-A-5-B	Unknown				
1:31	140-31634-A-10-D	Unknown				
1:32	140-31634-A-10-E MS	Unknown				
1:33	140-31634-A-10-F MSD	Unknown				
S:9	CCV 140-72920/18-A	CCV				
S:10	CCB 140-72920/19-A	CCB				
1:34	140-31634-A-15-B	Unknown				
1:35	140-31634-A-21-B	Unknown				
1:36	MB 140-72976/1-B	Method Blank				
1:37	LCS 140-72976/2-B	LCS				
1:38	140-31634-A-2-C	Unknown				
1:39	140-31634-A-7-E	Unknown				

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
1:40	140-31634-A-7-F MS	Unknown			
1:41	140-31634-A-7-G MSD	Unknown			
1:42	140-31634-A-12-C	Unknown			
1:43	140-31634-A-19-C	Unknown			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard			
S:6	Standard #1 (0.1 ug/L)	Standard			
S:5	Standard #2 (0.2 ug/L)	Standard			
S:4	Standard #3 (0.5 ug/L)	Standard			
S:3	Standard #4 (1.0 ug/L)	Standard			
S:2	Standard #5 (5.0 ug/L)	Standard			
S:1	Standard #6 (10.0 ug/l)	Standard			
1:1	ICV 140-72920/15-A	ICV			
1:2	ICB 140-72920/16-A	ICB			
1:3	CRA 140-72920/17-A	CRDL Standard			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			
1:4	MB 140-72769/4-B	Method Blank			
1:5	LCS 140-72769/5-B	LCS			
1:6	LCSD 140-72769/6-B	LCS			
1:7	140-31591-A-1-C	Unknown			
1:8	140-31591-A-6-C	Unknown			
1:9	140-31591-A-6-C pds	Unknown			
1:10	140-31591-A-6-C pdsd	Unknown			
1:11	140-31591-A-11-C	Unknown			
1:12	MB 140-72915/1-B	Method Blank			
1:13	LCS 140-72915/2-B	LCS			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			
1:14	140-31634-A-3-B	Unknown			
1:15	140-31634-A-8-D	Unknown			
1:16	140-31634-A-8-E MS	Unknown			
1:17	140-31634-A-8-F MSD	Unknown			
1:18	140-31634-A-13-B	Unknown			
1:19	MB 140-72916/1-B	Method Blank			
1:20	LCS 140-72916/2-B	LCS			
1:21	140-31634-A-4-B	Unknown			
1:22	140-31634-A-9-D	Unknown			
1:23	140-31634-A-9-E MS	Unknown			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			
1:24	140-31634-A-9-F MSD	Unknown			
1:25	140-31634-A-14-B	Unknown			
1:26	140-31634-A-18-B	Unknown			
1:27	140-31634-A-20-B	Unknown			
1:28	MB 140-72917/1-B	Method Blank			
1:29	LCS 140-72917/2-B	LCS			
1:30	140-31634-A-5-B	Unknown			
1:31	140-31634-A-10-D	Unknown			
1:32	140-31634-A-10-E MS	Unknown			
1:33	140-31634-A-10-F MSD	Unknown			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			
1:34	140-31634-A-15-B	Unknown			
1:35	140-31634-A-21-B	Unknown			
1:36	MB 140-72976/1-B	Method Blank			
1:37	LCS 140-72976/2-B	LCS			
1:38	140-31634-A-2-C	Unknown			
1:39	140-31634-A-7-E	Unknown			
1:40	140-31634-A-7-F MS	Unknown			
1:41	140-31634-A-7-G MSD	Unknown			

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
1:42	140-31634-A-12-C	Unknown			
1:43	140-31634-A-19-C	Unknown			
S:9	CCV 140-72920/18-A	CCV			
S:10	CCB 140-72920/19-A	CCB			

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72919

Analyst: Kincaid, Whitney S

Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31591-A-1-B (29_7470A)	N/A (140-31591-1)	Digestate	5 mL	50 mL	5/8/23	5_Day_RUSH	4		140-31591-A-1-C
2	140-31591-A-6-B (29_7470A)	N/A (140-31591-1)	Digestate	5 mL	50 mL	5/8/23	5_Day_RUSH	4	PDS + PDSD	140-31591-A-6-C
3	140-31591-A-11-B (29_7470A)	N/A (140-31591-1)	Digestate	5 mL	50 mL	5/8/23	5_Day_RUSH	4		140-31591-A-11-C
4	MB~140-72769/4-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-72769/4-B
5	LCS~140-72769/5-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-72769/5-B
6	LCSD~140-72769/6-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-72769/6-B

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72920

Analyst: Kincaid, Whitney S

Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-72915/1-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-72915/1-B
2	LCS~140-72915/2-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		LCS 140-72915/2-B
3	140-31634-A-3-A (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-3-B
4	140-31634-A-8-A (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-8-D
5	140-31634-A-8-B~MS (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-8-E MS
6	140-31634-A-8-C~MSD (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-8-F MSD
7	140-31634-A-13-A (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-13-B
8	STD0~140-72920/8 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/8-A
9	STD1~140-72920/9 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/9-A
10	STD2~140-72920/10 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/10-A
11	STD3~140-72920/11 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/11-A
12	STD4~140-72920/12 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/12-A
13	STD5~140-72920/13 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-72920/13-A

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72920 Analyst: Kincaid, Whitney S Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

14	STD6~140-72920/14 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-72920/14-A
15	ICV~140-72920/15 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICV 140-72920/15-A
16	ICB~140-72920/16 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICB 140-72920/16-A
17	CRA~140-72920/17 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CRA 140-72920/17-A
18	CCV~140-72920/18 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCV 140-72920/18-A
19	CCB~140-72920/19 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCB 140-72920/19-A

HG_BH_KMNO4_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72962

Analyst: Kincaid, Whitney S

Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
1	MB~140-72916/1-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		MB 140-72916/1-B
2	LCS~140-72916/2-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		LCS 140-72916/2-B
3	140-31634-A-4-A (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-4-B
4	140-31634-A-9-A (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-9-D
5	140-31634-A-9-B~MS (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-9-E MS
6	140-31634-A-9-C~MSD (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-9-F MSD
7	140-31634-A-14-A (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-14-B
8	140-31634-A-18-A (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-18-B
9	140-31634-A-20-A (29_7470A)	N/A (140-31634-1)	AT_Volume	25 mL	50 mL	5/11/23	8_Days	4		140-31634-A-20-B

5/15/2023 4:46 PM

HG_BH_HCL_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72963

Analyst: Kincaid, Whitney S

Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-72917/1-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		MB 140-72917/1-B
2	LCS~140-72917/2-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		LCS 140-72917/2-B
3	140-31634-A-5-A (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-5-B
4	140-31634-A-10-A (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-10-D
5	140-31634-A-10-B~MS (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-10-E MS
6	140-31634-A-10-C~MSD (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-10-F MSD
7	140-31634-A-15-A (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-15-B
8	140-31634-A-21-A (29_7470A)	N/A (140-31634-1)	AT_Volume	10 mL	50 mL	5/11/23	8_Days	4		140-31634-A-21-B

5/15/2023 4:46 PM

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-72977

Analyst: Kincaid, Whitney S

Batch Open: 5/5/2023 10:20:00AM

Batch End: 5/5/2023 2:50:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-72976/1-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-72976/1-B
2	LCS~140-72976/2-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		LCS 140-72976/2-B
3	140-31634-A-2-B (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-2-C
4	140-31634-A-7-B (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-7-E
5	140-31634-A-7-C~MS (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-7-F MS
6	140-31634-A-7-D~MSD (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-7-G MSD
7	140-31634-A-12-B (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-12-C
8	140-31634-A-19-B (29_7470A)	N/A (140-31634-1)	AT_Volume	2.5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-19-C

5/15/2023 4:46 PM

Eurofins Knoxville *WSK*

Report Generated By Teledyne Leeman QuickTrace

Analyst: knxinsthg2

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\A050623B.wszf

Creation Date: 5/6/2023 9:56:25 AM

Comment:

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/06/23 10:05:09 am	0.00000	723	2.63			1.0000	N/A
Replicates	695.6	739.8	725.8	729.7					
Standard #1 (0.1 ug/L)	STD	05/06/23 10:07:42 am	0.10000	1341	1.64	-35.08%		1.0000	N/A
Replicates	1343.9	1368.7	1315.5	1336.2					
Standard #2 (0.2 ug/L)	STD	05/06/23 10:10:15 am	0.20000	2629	0.19	-15.79%		1.0000	N/A
Replicates	2628.4	2623.7	2629.7	2635.5					
Standard #3 (0.5 ug/L)	STD	05/06/23 10:12:48 am	0.50000	6606	1.73	-2.42%		1.0000	N/A
Replicates	6728.9	6662.7	6566.7	6467.5					
Standard #4 (1.0 ug/L)	STD	05/06/23 10:15:21 am	1.00000	12407	0.95	-4.61%		1.0000	N/A
Replicates	12253.4	12402.9	12433.1	12540.4					
Standard #5 (5.0 ug/L)	STD	05/06/23 10:17:53 am	5.00000	65349	0.08	4.14%		1.0000	N/A
Replicates	65392.1	65349.2	65275.7	65379.8					
Standard #6 (10.0 ug/l)	STD	05/06/23 10:20:25 am	10.00000	123806	0.28	-0.97%		1.0000	N/A
Replicates	124244.6	123902.3	123637.6	123440.3					

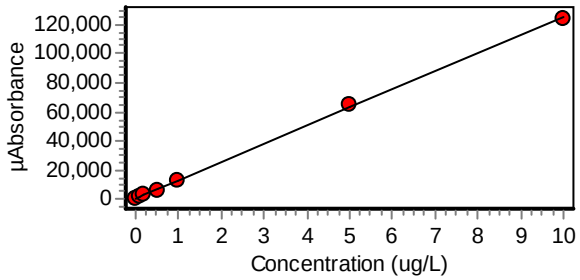
Calibration

Equation: Abs = 12448.346x + 532.883

R2: 0.99934 RSE: 19.53%

SEE: 1328.6160

Flags: C



ICV 140-72920/15-A	ICV	05/06/23 10:22:56 am	2.50470	31712	0.11			1.0000	100.19
Replicates	31732.4	31736.0	31719.4	31660.7					
ICB 140-72920/16-A	ICB	05/06/23 10:25:28 am	0.03152	925	7.24			1.0000	N/A
Replicates	956.1	935.4	888.5	920.7					
CRA 140-72920/17-A	CRDL	05/06/23 10:27:59 am	0.17716	2738	0.46			1.0000	88.58
Replicates	2730.4	2729.1	2750.1	2743.6					
CCV 140-72920/18-A	CCV	05/06/23 10:30:34 am	0.00618	610	19.65		Q	1.0000	0.12
Replicates	598.2	602.2	607.2	631.8					
CCB 140-72920/19-A	CCB	05/06/23 10:47:23 am	0.00589	606	15.09			1.0000	N/A
Replicates	614.2	590.4	606.9	613.6					

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
CCV 140-72920/18-A				CCV	05/06/23 10:49:57 am	5.12050	64274	1.21			1.0000	102.41
Replicates	65368.5	64250.7	63754.1	63723.2								
CCB 140-72920/19-A				CCB	05/06/23 10:52:32 am	0.00195	557	25.52			1.0000	N/A
Replicates	559.3	548.0	559.3	561.8								
MB 140-72769/4-B				MB	05/06/23 10:55:04 am	-0.03195	135	5.66			1.0000	N/A
Replicates	137.5	109.7	129.2	164.0								
LCS 140-72769/5-B				LCS	05/06/23 10:57:35 am	4.94740	62120	0.03			1.0000	98.95
Replicates	62128.2	62118.6	62098.8	62133.9								
LCSD 140-72769/6-B				LCS	05/06/23 11:00:08 am	5.40120	67769	2.15			1.0000	108.02
Replicates	65693.6	67922.7	68912.9	68547.9								
140-31591-A-1-C				UNK	05/06/23 11:02:40 am	-0.03436	105	2.03			1.0000	N/A
Replicates	93.5	108.0	114.2	104.7								
140-31591-A-6-C				UNK	05/06/23 11:05:12 am	-0.03392	111	2.81			1.0000	N/A
Replicates	106.7	114.5	96.7	124.7								
140-31591-A-6-C pds				UNK	05/06/23 11:07:45 am	0.95334	12400	0.45			1.0000	N/A
Replicates	12474.5	12399.0	12352.5	12375.5								
140-31591-A-6-C pdsd				UNK	05/06/23 11:10:18 am	0.94334	12276	0.33			1.0000	N/A
Replicates	12234.7	12257.0	12286.8	12325.3								
140-31591-A-11-C				UNK	05/06/23 11:12:51 am	-0.03101	147	2.94			1.0000	N/A
Replicates	137.4	160.8	151.3	137.8								
MB 140-72915/1-B				MB	05/06/23 11:15:24 am	-0.00341	490	21.45			1.0000	N/A
Replicates	488.0	483.0	486.8	503.7								
LCS 140-72915/2-B				LCS	05/06/23 11:17:55 am	4.85590	60980	0.81			1.0000	97.12
Replicates	61643.5	60620.0	60595.4	61061.9								
CCV 140-72920/18-A				CCV	05/06/23 11:20:29 am	5.06980	63644	0.05			1.0000	101.40
Replicates	63647.0	63621.0	63617.6	63690.8								
CCB 140-72920/19-A				CCB	05/06/23 11:23:04 am	0.00041	538	258.00			1.0000	N/A
Replicates	547.1	533.9	521.1	550.1								
140-31634-A-3-B				UNK	05/06/23 11:25:35 am	-0.03261	127	4.00			1.0000	N/A
Replicates	135.3	124.8	105.1	142.4								
140-31634-A-8-D				UNK	05/06/23 11:28:07 am	-0.03361	114	1.67			1.0000	N/A
Replicates	120.7	118.4	104.9	113.7								
140-31634-A-8-E MS				UNK	05/06/23 11:30:39 am	1.00450	13037	1.03			1.0000	N/A
Replicates	12860.3	13031.5	13154.2	13103.3								
140-31634-A-8-F MSD				UNK	05/06/23 11:33:11 am	0.94670	12318	0.53			1.0000	N/A
Replicates	12309.6	12243.0	12322.7	12395.5								
140-31634-A-13-B				UNK	05/06/23 11:35:43 am	-0.03212	133	3.31			1.0000	N/A
Replicates	126.1	121.4	133.0	151.5								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
MB 140-72916/1-B				MB	05/06/23 11:38:15 am	-0.00911	419	8.92			1.0000	N/A
Replicates	414.3	416.3	412.8	434.5								
LCS 140-72916/2-B				LCS	05/06/23 11:40:48 am	5.07960	63765	0.03			1.0000	101.59
Replicates	63744.1	63787.0	63757.8	63772.7								
140-31634-A-4-B				UNK	05/06/23 11:43:20 am	-0.03513	96	3.92			1.0000	N/A
Replicates	117.6	92.6	96.1	75.9								
140-31634-A-9-D				UNK	05/06/23 11:45:53 am	-0.02017	282	1.77			1.0000	N/A
Replicates	275.4	282.3	285.1	284.6								
140-31634-A-9-E MS				UNK	05/06/23 11:48:26 am	0.97443	12663	0.45			1.0000	N/A
Replicates	12601.1	12636.2	12690.2	12724.2								
CCV 140-72920/18-A				CCV	05/06/23 11:51:00 am	5.09260	63928	0.48			1.0000	101.85
Replicates	63580.4	63821.6	64010.1	64299.1								
CCB 140-72920/19-A				CCB	05/06/23 11:53:34 am	0.00266	566	20.00			1.0000	N/A
Replicates	564.4	575.6	562.8	561.0								
140-31634-A-9-F MSD				UNK	05/06/23 11:56:08 am	1.00310	13019	0.06			1.0000	N/A
Replicates	13024.2	13021.3	13007.5	13024.2								
140-31634-A-14-B				UNK	05/06/23 11:58:39 am	-0.02297	247	4.00			1.0000	N/A
Replicates	240.5	234.5	254.3	258.8								
140-31634-A-18-B				UNK	05/06/23 12:01:11 pm	-0.03452	103	1.62			1.0000	N/A
Replicates	95.4	105.5	100.3	111.6								
140-31634-A-20-B				UNK	05/06/23 12:03:43 pm	-0.03486	99	1.61			1.0000	N/A
Replicates	107.2	91.3	95.5	101.8								
MB 140-72917/1-B				MB	05/06/23 12:06:15 pm	-0.01374	362	9.98			1.0000	N/A
Replicates	366.1	383.6	344.3	353.3								
LCS 140-72917/2-B				LCS	05/06/23 12:08:47 pm	5.09850	64001	0.21			1.0000	101.97
Replicates	64161.1	64043.5	63946.6	63854.1								
140-31634-A-5-B				UNK	05/06/23 12:11:19 pm	2.74700	34729	0.13			1.0000	N/A
Replicates	34785.2	34743.2	34703.7	34682.9								
140-31634-A-10-D				UNK	05/06/23 12:13:51 pm	0.15129	2416	0.79			1.0000	N/A
Replicates	2401.3	2424.8	2432.3	2406.2								
140-31634-A-10-E MS				UNK	05/06/23 12:16:23 pm	1.17510	15161	2.79			1.0000	N/A
Replicates	15549.6	15415.7	15034.6	14642.9								
140-31634-A-10-F MSD				UNK	05/06/23 12:18:56 pm	1.17800	15197	0.10			1.0000	N/A
Replicates	15220.2	15190.3	15189.2	15190.0								
CCV 140-72920/18-A				CCV	05/06/23 12:21:30 pm	5.29560	66454	2.48			1.0000	105.91
Replicates	65179.7	65114.7	66995.6	68525.3								
CCB 140-72920/19-A				CCB	05/06/23 12:24:05 pm	0.00113	547	103.82			1.0000	N/A
Replicates	551.9	555.7	525.2	555.2								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-31634-A-15-B				UNK	05/06/23 12:26:37 pm	0.20864	3130	0.53			1.0000	N/A
Replicates	3134.5	3147.6	3119.1	3119.1								
140-31634-A-21-B				UNK	05/06/23 12:29:10 pm	0.02301	819	1.98			1.0000	N/A
Replicates	811.7	822.2	824.7	818.5								
MB 140-72976/1-B				MB	05/06/23 12:31:43 pm	-0.01647	328	4.03			1.0000	N/A
Replicates	327.6	339.3	324.8	319.8								
LCS 140-72976/2-B				LCS	05/06/23 12:34:15 pm	4.87230	61185	2.08			1.0000	97.45
Replicates	63024.3	60939.3	60225.1	60552.1								
140-31634-A-2-C				UNK	05/06/23 12:36:47 pm	-0.03683	74	5.07			1.0000	N/A
Replicates	77.4	58.7	55.5	106.2								
140-31634-A-7-E				UNK	05/06/23 12:39:19 pm	-0.03021	157	3.84			1.0000	N/A
Replicates	163.9	148.8	141.3	173.3								
140-31634-A-7-F MS				UNK	05/06/23 12:41:51 pm	0.99908	12970	1.20			1.0000	N/A
Replicates	13093.9	13088.4	12910.4	12786.4								
140-31634-A-7-G MSD				UNK	05/06/23 12:44:23 pm	0.98957	12851	1.96			1.0000	N/A
Replicates	13092.2	12983.1	12787.0	12543.5								
140-31634-A-12-C				UNK	05/06/23 12:46:55 pm	-0.03099	147	1.39			1.0000	N/A
Replicates	151.9	151.5	143.0	141.9								
140-31634-A-19-C				UNK	05/06/23 12:49:27 pm	-0.02541	217	2.45			1.0000	N/A
Replicates	215.7	213.6	227.6	209.6								
CCV 140-72920/18-A				CCV	05/06/23 12:52:01 pm	5.36160	67276	3.09			1.0000	107.23
Replicates	64950.7	66269.6	68299.6	69585.5								
CCB 140-72920/19-A				CCB	05/06/23 12:54:36 pm	0.00199	558	101.22			1.0000	N/A
Replicates	535.9	592.5	543.6	558.5								

Eurofins Knoxville Mercury Batch Review Checklist
SOPs: KNOX-MT-0009r16, KNOX-MT-0010r15, KNOX-MT-0008r8, KNOX-MT-0001r5

Chart Name:	AC50623B	Analysis Batch #:	73011	Analyst:	WSK	Instrument:	ADT	

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated with at least 5 standards and a blank?	Y	Y	
2. Linearity and intercept verified? (r≥0.995 and x-intercept <RL)	Y	Y	
3. ICV analyzed at beginning of run & within limits? (90 - 110%R)	Y	Y	
4. CCV analyzed at required frequency & within limits? (80 - 120%R)	N	Y	☒ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM# _____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM# _____)
6. Reporting Limit Check Standard (CRI) within limits? (±30%; ±50 % for Method 30B)	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with results > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments:
2. Were samples with negative results >RL reanalyzed at a dilution?	NA	NA	
3. Were samples analyzed with the holding time?	Y	Y	☐ **Holding Time-Receipt** (NCM# _____) ☐ **Holding Time-Initial Analysis** (NCM# _____) ☐ **Holding Time-Reanalysis** (NCM# _____) ☐ **Holding Time- Insufficient Time** (NCM# _____)
4. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM# _____) ☐ **Method Blank – Report, 10X** (NCM# _____) ☐ **Method Blank–Insufficient Sample** (NCM# _____)
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCS –Insufficient Sample** (NCM# _____) ☐ **LCS/LCSD - %R High** (NCM# _____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	Y	Y	☐ **MS/MSD/DUP-Insufficient Vol** (NCM# _____)
4. MS/MSD %R and RPD within QC limits?	Y	Y	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM# _____)
5. DUP RPD within limits?	NA	NA	☐ **DUP - %RPD** (NCM# _____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R and ≤20 RPD)	Y	Y	☐ **Post Digestion Spike - %R** (NCM# _____) ☐ **MS/MSD; High Bias; PDS Accept.** (NCM# _____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: WSK 5-8-23	2nd Level Review by: ICNC 5-8-23
140-31634-A-5-B @ 12:11	
(2.74 700 µg/L) (0.280L) (50mL / ~~250 mL~~) ≈ 3.85 µg/Sample	
10mL WSK 5-8-23	

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard			
S:6	Standard #1 (0.1 ug/L)	Standard			
S:5	Standard #2 (0.2 ug/L)	Standard			
S:4	Standard #3 (0.5 ug/L)	Standard			
S:3	Standard #4 (1.0 ug/L)	Standard			
S:2	Standard #5 (5.0 ug/L)	Standard			
S:1	Standard #6 (10.0 ug/l)	Standard			
1:1	ICV 140-73044/16-A	ICV			
1:2	ICB 140-73044/17-A	ICB			
1:3	CRA 140-73044/18-A	CRDL Standard			
S:9	CCV 140-73044/19-A	CCV			
S:10	CCB 140-73044/20-A	CCB			
1:4	MB 140-72928/6-B	Method Blank			
1:5	LCS 140-72928/7-B	LCS			
1:6	LCSD 140-72928/8-B	LCS			
1:7	140-31634-A-1-B	Unknown			
1:8	140-31634-A-6-B	Unknown			
1:9	140-31634-A-6-B pds	Unknown			
1:10	140-31634-A-6-B pdsd	Unknown			
1:11	140-31634-A-11-B	Unknown			
1:12	140-31634-A-16-B	Unknown			
1:13	140-31634-A-17-B	Unknown			
S:9	CCV 140-73044/19-A	CCV			
S:10	CCB 140-73044/20-A	CCB			

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73044 Analyst: Kincaid, Whitney S Batch Open: 5/8/2023 10:00:00AM

Batch End: 5/8/2023 1:30:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31634-A-1-A (29_7470A)	N/A (140-31634-1)	Digestate	5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-1-B
2	140-31634-A-6-A (29_7470A)	N/A (140-31634-1)	Digestate	5 mL	50 mL	5/11/23	8_Days	4	PDS + PDSD	140-31634-A-6-B
3	140-31634-A-11-A (29_7470A)	N/A (140-31634-1)	Digestate	5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-11-B
4	140-31634-A-16-A (29_7470A)	N/A (140-31634-1)	Digestate	5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-16-B
5	140-31634-A-17-A (29_7470A)	N/A (140-31634-1)	Digestate	5 mL	50 mL	5/11/23	8_Days	4		140-31634-A-17-B
6	MB~140-72928/6-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-72928/6-B
7	LCS~140-72928/7-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-72928/7-B
8	LCSD~140-72928/8-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-72928/8-B
9	STD0~140-73044/9 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/9-A
10	STD1~140-73044/10 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/10-A
11	STD2~140-73044/11 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/11-A
12	STD3~140-73044/12 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/12-A
13	STD4~140-73044/13 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/13-A

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73044 Analyst: Kincaid, Whitney S Batch Open: 5/8/2023 10:00:00AM

Batch End: 5/8/2023 1:30:00PM

14	STD5~140-73044/14 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/14-A
15	STD6~140-73044/15 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-73044/15-A
16	ICV~140-73044/16 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		ICV 140-73044/16-A
17	ICB~140-73044/17 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		ICB 140-73044/17-A
18	CRA~140-73044/18 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		CRA 140-73044/18-A
19	CCV~140-73044/19 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		CCV 140-73044/19-A
20	CCB~140-73044/20 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		CCB 140-73044/20-A

Eurofins Knoxville *WSK*

Report Generated By Teledyne Leeman QuickTrace

Analyst: knxinsthg2

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\A050823A.wszf

Creation Date: 5/8/2023 9:24:24 AM

Comment:

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	05/08/23 02:26:43 pm	0.00000	138	2.05			1.0000	N/A
Replicates	133.9	140.1	136.9	139.6					
Standard #1 (0.1 ug/L)	STD	05/08/23 02:29:17 pm	0.10000	1256	1.77	-12.54%		1.0000	N/A
Replicates	1270.5	1239.4	1234.4	1279.0					
Standard #2 (0.2 ug/L)	STD	05/08/23 02:31:50 pm	0.20000	2457	0.44	-5.36%		1.0000	N/A
Replicates	2464.3	2441.3	2460.8	2463.2					
Standard #3 (0.5 ug/L)	STD	05/08/23 02:34:23 pm	0.50000	5938	1.16	-3.15%		1.0000	N/A
Replicates	6028.8	5954.7	5886.2	5882.4					
Standard #4 (1.0 ug/L)	STD	05/08/23 02:36:55 pm	1.00000	11954	0.64	-0.59%		1.0000	N/A
Replicates	12010.7	12007.5	11952.2	11846.5					
Standard #5 (5.0 ug/L)	STD	05/08/23 02:39:27 pm	5.00000	60414	0.14	2.02%		1.0000	N/A
Replicates	60487.9	60467.4	60406.2	60294.7					
Standard #6 (10.0 ug/l)	STD	05/08/23 02:41:59 pm	10.00000	117647	0.13	-0.49%		1.0000	N/A
Replicates	117753.8	117779.2	117614.9	117438.5					

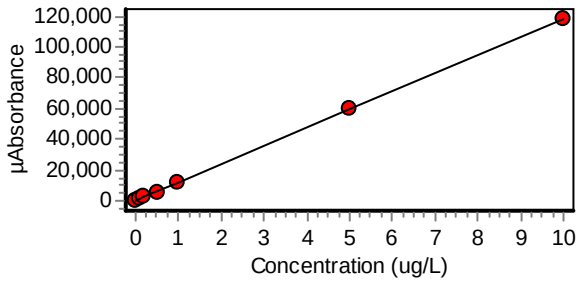
Calibration

Equation: Abs = 11799.807x + 223.857

R2: 0.99985 RSE: 7.08%

SEE: 605.7217

Flags:



ICV 140-73044/16-A	ICV	05/08/23 02:44:31 pm	2.69550	32030	0.52			1.0000	107.82
Replicates	31986.9	32215.8	32094.3	31823.2					
ICB 140-73044/17-A	ICB	05/08/23 02:47:02 pm	-0.01579	38	3.93			1.0000	N/A
Replicates	40.5	32.7	46.4	30.4					
CRA 140-73044/18-A	CRDL	05/08/23 02:49:34 pm	0.18430	2399	0.90			1.0000	92.15
Replicates	2403.3	2372.6	2398.9	2419.6					
CCV 140-73044/19-A	CCV	05/08/23 02:52:08 pm	5.10580	60472	0.34			1.0000	102.12
Replicates	60730.7	60538.7	60328.6	60289.6					
CCB 140-73044/20-A	CCB	05/08/23 02:54:43 pm	-0.00898	118	29.48			1.0000	N/A
Replicates	110.8	162.9	106.9	90.9					

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
MB 140-72928/6-B				MB	05/08/23 02:57:15 pm	-0.01503	47	5.82			1.0000	N/A
Replicates	36.8	49.8	39.9	59.6								
LCS 140-72928/7-B				LCS	05/08/23 02:59:47 pm	4.97510	58929	1.42			1.0000	99.50
Replicates	57689.3	59354.9	59446.7	59226.7								
LCSD 140-72928/8-B				LCS	05/08/23 03:02:19 pm	4.72280	55952	0.09			1.0000	94.46
Replicates	55881.6	55967.5	55962.8	55997.2								
140-31634-A-1-B				UNK	05/08/23 03:04:51 pm	0.04865	798	3.79			1.0000	N/A
Replicates	801.6	767.2	805.0	818.2								
140-31634-A-6-B				UNK	05/08/23 03:07:24 pm	0.00874	327	19.89			1.0000	N/A
Replicates	344.2	336.3	297.5	330.0								
140-31634-A-6-B pds				UNK	05/08/23 03:09:56 pm	1.08560	13033	1.70			1.0000	N/A
Replicates	13260.2	13143.8	12970.0	12759.0								
140-31634-A-6-B pdsd				UNK	05/08/23 03:12:29 pm	1.07390	12895	2.76			1.0000	N/A
Replicates	13356.3	12960.0	12711.0	12553.4								
140-31634-A-11-B				UNK	05/08/23 03:15:02 pm	0.06664	1010	1.55			1.0000	N/A
Replicates	1027.7	1000.3	1009.0	1004.0								
140-31634-A-16-B				UNK	05/08/23 03:17:35 pm	-0.01429	55	7.16			1.0000	N/A
Replicates	58.0	71.1	44.8	47.0								
140-31634-A-17-B				UNK	05/08/23 03:20:06 pm	-0.01729	20	6.42			1.0000	N/A
Replicates	6.9	22.4	13.0	37.0								
CCV 140-73044/19-A				CCV	05/08/23 03:22:41 pm	5.46670	64730	0.65			1.0000	109.33
Replicates	64948.3	64257.5	64527.0	65187.3								
CCB 140-73044/20-A				CCB	05/08/23 03:25:15 pm	-0.01076	97	19.70			1.0000	N/A
Replicates	88.8	132.6	74.2	92.1								

Eurofins Knoxville Mercury Batch Review Checklist
SOPs: KNOX-MT-0009r16, KNOX-MT-0010r15, KNOX-MT-0008r8, KNOX-MT-0001r5

Chart Name:	A050823A	Analysis Batch #:	730658	Analyst:	WSC	Instrument:	ADT	

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated with at least 5 standards and a blank?	Y	Y	
2. Linearity and intercept verified? (r≥0.995 and x-intercept <RL)	Y	Y	
3. ICV analyzed at beginning of run & within limits? (90 - 110%R)	Y	Y	
4. CCV analyzed at required frequency & within limits? (80 - 120%R)	Y	Y	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM# _____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM# _____)
6. Reporting Limit Check Standard (CRI) within limits? (±30%; ±50 % for Method 30B)	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with results > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments:
2. Were samples with negative results >RL reanalyzed at a dilution?	NA	NA	
3. Were samples analyzed with the holding time?	Y	Y	☐ **Holding Time-Receipt** (NCM# _____) ☐ **Holding Time-Initial Analysis** (NCM# _____) ☐ **Holding Time-Reanalysis** (NCM# _____) ☐ **Holding Time- Insufficient Time** (NCM# _____)
4. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM# _____) ☐ **Method Blank – Report, 10X** (NCM# _____) ☐ **Method Blank–Insufficient Sample** (NCM# _____)
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCS –Insufficient Sample** (NCM# _____) ☐ **LCS/LCSD - %R High** (NCM# _____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	NA	NA	☐ **MS/MSD/DUP-Insufficient Vol** (NCM# _____)
4. MS/MSD %R and RPD within QC limits?	NA	NA	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM# _____)
5. DUP RPD within limits?	NA	NA	☐ **DUP - %RPD** (NCM# _____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R and ≤20 RPD)	Y	Y	☐ **Post Digestion Spike - %R** (NCM# _____) ☐ **MS/MSD; High Bias; PDS Accept.** (NCM# _____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: WSC 5-8-23	2nd Level Review by: KNC 5-9-23
140-31634-A-6-B PDS @15:09	
$(1.08560\ mg/L)(0.100\ mL)\left(\frac{50\ mL}{5\ mL}\right) \approx 1.086\ mg/Sample$	

Shipping and Receiving Documents

Chain of Custody Record

No. 118.01290.00025_0300

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

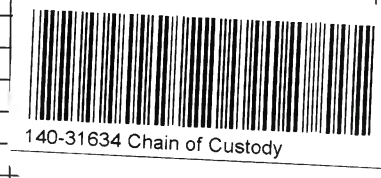
SLR

Project Name:	FMMI	Project Number:	118.01290.00025_0300
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsulting.com		

Page 1 of 2

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Analysis Required: Full Metals List	Analysis Required: Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
AS29-1, Container 1	04/12/23		Filter	1	X	X		
AS29-1, Container 3	04/12/23		0.1 N HNO_3	1	X	X	Custody Seals Intact	
AS29-1, Container 4	04/12/23		H_2O_2/HNO_3	1	X	X	Received @ Ambient	BT: 19.7 / CT: 19.5 °C
AS29-1, Container 5A	04/12/23		0.1 N HNO3	1		X		BT: 18.7 / CT: 18.5 °C
AS29-1, Container 5B	04/12/23		Acidified KMnO4	1		X	ON 5/1/23	
AS29-1, Container 5C	04/12/23		H_2O_2/HCl	1		X	2 Boxes Fed Ex 7719	7116 2353 Po
AS29-2, Container 1	04/15/23		Filter	1	X	X	7719	5171 9108 Po
AS29-2, Container 3	04/15/23		0.1 N HNO3	1	X	X		
AS29-2, Container 4	04/15/23		H2O2/HNO3	1	X	X		
AS29-2, Container 5A	04/15/23		0.1 N HNO3	1		X		
AS29-2, Container 5B	04/15/23		Acidified KMnO4	1		X		
AS29-2, Container 5C	04/15/23		H2O2/HCl	1		X		
AS29-3, Container 1	04/17/23		Filter	1	X	X		
AS29-3, Container 3	04/17/23		0.1 N HNO3	1	X	X		
AS29-3, Container 4	04/17/23		H2O2/HNO3	1	X	X		
AS29-3, Container 5B	04/17/23		0.1 N HNO3	1		X		
AS29-3, Container 5B	04/17/23		Acidified KMnO4	1		X		
AS29-3, Container 5C	04/17/23		H2O2/HCl	1		X		



Relinquished by: (Signature)	4/25/23	16:00	Received by: (Signature) Deanna Hicks ETA KNX	5/1/23	09:30	Sample Custodian Remarks (Completed By Laboratory):
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	

QA/QC Level		Turnaround		Sample Receipt	
Level I	☐	Routine	☑	Total # Containers Received?	
Level II	☐	24 Hour	☐	COC Seals Present?	
Level III	☐	1 Week	☐	COC Seals Intact?	
Other	☐	Other		Received Containers Intact?	
				Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

Chain of Custody Record

No. 118.01290.00025_0300

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

SLR

Project Name:	FMMI	Project Number:	118.01290.00025_0300
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsulting.com		

Page 2 of 2

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Full Metals List	Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
Blank, Container 12	04/12/23		Filter	1	X	X		
Blank, Container 8A	04/12/23		0.1 N HNO_3	1	X	X		
Blank, Container 8B	04/12/23		H2O	1	X	X		
Blank, Container 9	04/12/23		H_2O_2/HNO_3	1	X	X		
Blank, Container 10	04/12/23		Acidified KMnO4	1		X		
Blank, Container 11	04/12/23		H2O/HCl	1		X		

Please provide separate front and back half metals results.
Metals List: Lead, Silver, Arsenic, Gold, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Mercury, Nickel, Antimony, Selenium, Thallium, Vanadium, Zinc.
Please provide digital results to Doug Bopray at dbopray@slrconsulting.com
If you have any questions or concerns regarding the samples or instructions please call Doug Bopray at (970) 219-1431.

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	4/25/23	16:00	Deann Hick ETA KNX	5/1/23	09:30
Relinquished by: (Signature)			Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level		Turnaround	
Level I	☐	Routine	☑
Level II	☐	24 Hour	☐
Level III	☐	1 Week	☐
Other	☐	Other	

Sample Receipt	
Total # Containers Received?	
COC Seals Present?	
COC Seals Intact?	
Received Containers Intact?	
Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SC75 Correction factor: -0.2°C			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	✓	✓		☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

7, AS29-3, Container 5B
COC: Container 5B
Container label: Container 5A
Logged per container label

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 140003887 PM Instructions:

Sample Receiving Associate: Dean Hick Date: 5/3/23

QA026R32.doc, 062719

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Doug Bopray
SLR International Corp
1612 Specht Point Road, Suite 119
Fort Collins CO 80525

Generated 5/31/2023 10:32 AM

JOB DESCRIPTION

FMMI - Method 29

JOB NUMBER

140-31777-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

myEOL

Eurofins Knoxville

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
5/31/2023 10:32 AM

Authorized for release by
Courtney M Adkins, Project Manager II
Courtney.Adkins@et.eurofinsus.com
Designee for
Kevin S Woodcock, Business Unit Manager
Kevin.Woodcock@et.eurofinsus.com
865 291-3082

Table of Contents

Table of Contents

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Method	Method Description	Protocol	Laboratory
29/6010C	Metals (ICP), Stationary Source	EPA	EET KNX
29/7470A	Mercury (CVAA), Stationary Source	EPA	EET KNX
Air Train Vol.	Air Train Volume	None	EET KNX
AT Prep (BH)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (BH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (Empty)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (FH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (HCl)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (KMnO4)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep FH	Preparation, Mercury (Stationary Source) FH	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-31777-1	VF29-1,CONTAINER 1,3	Air	05/11/23 00:00	05/16/23 09:15
140-31777-2	VF29-1,CONTAINER 4	Air	05/11/23 00:00	05/16/23 09:15
140-31777-3	VF29-1,CONTAINER 5A	Air	05/11/23 00:00	05/16/23 09:15
140-31777-4	VF29-1,CONTAINER 5B	Air	05/11/23 00:00	05/16/23 09:15
140-31777-5	VF29-1,CONTAINER 5C	Air	05/11/23 00:00	05/16/23 09:15
140-31777-6	VF29-2,CONTAINER 1,3	Air	05/11/23 00:00	05/16/23 09:15
140-31777-7	VF29-2,CONTAINER 4	Air	05/11/23 00:00	05/16/23 09:15
140-31777-8	VF29-2,CONTAINER 5A	Air	05/11/23 00:00	05/16/23 09:15
140-31777-9	VF29-2,CONTAINER 5B	Air	05/11/23 00:00	05/16/23 09:15
140-31777-10	VF29-2,CONTAINER 5C	Air	05/11/23 00:00	05/16/23 09:15
140-31777-11	VF29-3,CONTAINER 1,3	Air	05/11/23 00:00	05/16/23 09:15
140-31777-12	VF29-3,CONTAINER 4	Air	05/11/23 00:00	05/16/23 09:15
140-31777-13	VF29-3,CONTAINER 5A	Air	05/11/23 00:00	05/16/23 09:15
140-31777-14	VF29-3,CONTAINER 5B	Air	05/11/23 00:00	05/16/23 09:15
140-31777-15	VF29-3,CONTAINER 5C	Air	05/11/23 00:00	05/16/23 09:15
140-31777-16	BLANK, CONTAINER 12	Air	05/11/23 00:00	05/16/23 09:15
140-31777-17	BLANK, CONTAINER 8A	Air	05/11/23 00:00	05/16/23 09:15
140-31777-18	BLANK, CONTAINER 8B	Air	05/11/23 00:00	05/16/23 09:15
140-31777-19	BLANK, CONTAINER 9	Air	05/11/23 00:00	05/16/23 09:15
140-31777-20	BLANK, CONTAINER 10	Air	05/11/23 00:00	05/16/23 09:15
140-31777-21	BLANK, CONTAINER 11	Air	05/11/23 00:00	05/16/23 09:15

Job Narrative
140-31777-1

Receipt

The samples were received on 5/16/2023 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 21.2º C.

Metals

Multi-Metals Train Preparation and Analysis

These stack gas samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0006 which is based on EPA SW-846 Method 0060, "Determination of Metals in Stack Emissions" and Method 29, "Determination of Metals Emissions from Stationary Sources". SW-846 Methods 6010C and 7470A as incorporated in Eurofins TestAmerica Knoxville standard operating procedures KNOX-MT-0007 and KNOX-MT-0009 were used to perform the final instrument analysis.

Acid digestion was performed on the front half particulate filter and the nitric acid probe rinse fractions separately using HNO3 and HF. After digestion, these two fractions were combined, and the HF was sequestered using H3BO3 followed by another heating cycle. This digestate was adjusted to final volume and analyzed by ICP. A portion of the ICP digestate was prepared for CVAA analysis in order to determine the particle-bound mercury. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L) x (Final Volume Hg Digestate, mL / Volume ICP Digestate Used, mL)

The 5%HNO3/10%H2O2 impinger samples were reduced in volume to 100 mL. A 20 milliliter portion of the concentrated sample was removed and processed for mercury. The remaining 80 mL of concentrated sample was digested using HNO3 and H2O2, adjusted to a final volume of 80 mL, and analyzed by ICP. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume ICP Digestate, mL / Volume Conc. Sample Digested, mL)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume Hg Digestate, mL / Volume Conc. Sample Digested, mL)

For the 0.1N HNO3 rinse samples (empty impingers), a 2.5 milliliter portion of the sample as received was removed and processed for mercury.

The 4% KMnO4/10%H2SO4 impinger samples were filtered to remove MnO2, followed by removal of a 25 mL portion of filtrate for mercury processing. The filtered MnO2 residue was digested in HCl, combined with the HCl rinse sample and analyzed for mercury.

Results for the 0.1N HNO3 rinse samples and the KMnO4 filtrate were calculated using the following equation:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Results for the combined MnO2 residue HCl digestates and HCl rinse samples were calculated as follows:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L + MnO2 HCl Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Note: The total sample volume for the 5%HNO3/10%H2O2 impinger samples is the final volume of the concentrated sample. The total sample volume for the combined MnO2 residue HCl digestates and HCl rinse samples is equal to the total sample volume plus the MnO2 HCl volume.

Method 29/6010C: The following samples were diluted due to the presence of Silicon which interferes with Arsenic, Cobalt, Lead, Nickel, Selenium and Thallium: VF29-1,CONTAINER 1,3 (140-31777-1), VF29-2,CONTAINER 1,3 (140-31777-6), VF29-3,CONTAINER 1,3 (140-31777-11) and BLANK, CONTAINER 12 (140-31777-16). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Prep Batch: 73443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-2	VF29-1,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31777-7	VF29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31777-12	VF29-3,CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-31777-18	BLANK, CONTAINER 8B	Total/NA	Air	AT Prep (BH)	
140-31777-19	BLANK, CONTAINER 9	Total/NA	Air	AT Prep (BH)	
MB 140-73443/13-A	Method Blank	Total/NA	Air	AT Prep (BH)	
LCS 140-73443/14-A	Lab Control Sample	Total/NA	Air	AT Prep (BH)	
LCSD 140-73443/15-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (BH)	

Prep Batch: 73444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-1	VF29-1,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31777-6	VF29-2,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31777-11	VF29-3,CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-31777-16	BLANK, CONTAINER 12	Total/NA	Air	AT Prep (FH)	
140-31777-17	BLANK, CONTAINER 8A	Total/NA	Air	AT Prep (FH)	
MB 140-73444/14-A	Method Blank	Total/NA	Air	AT Prep (FH)	
MB 140-73444/14-B	Method Blank	Total/NA	Air	AT Prep (FH)	
LCS 140-73444/15-A	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCS 140-73444/15-B	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCSD 140-73444/16-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	
LCSD 140-73444/16-B	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	

Pre Prep Batch: 73511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-3	VF29-1,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31777-8	VF29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31777-13	VF29-3,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
MB 140-73511/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-73511/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31777-8 MS	VF29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-31777-8 MSD	VF29-2,CONTAINER 5A	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 73513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-4	VF29-1,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31777-9	VF29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31777-14	VF29-3,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31777-20	BLANK, CONTAINER 10	Total/NA	Air	Air Train Vol.	
MB 140-73513/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-73513/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31777-9 MS	VF29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-31777-9 MSD	VF29-2,CONTAINER 5B	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 73515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-5	VF29-1,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31777-10	VF29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31777-15	VF29-3,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31777-21	BLANK, CONTAINER 11	Total/NA	Air	Air Train Vol.	
MB 140-73515/1-B	Method Blank	Total/NA	Air	Air Train Vol.	

Metals (Continued)

Pre Prep Batch: 73515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 140-73515/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31777-10 MS	VF29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-31777-10 MSD	VF29-2,CONTAINER 5C	Total/NA	Air	Air Train Vol.	

Prep Batch: 73581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-3	VF29-1,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	73511
140-31777-8	VF29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	73511
140-31777-13	VF29-3,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	73511
MB 140-73511/1-B	Method Blank	Total/NA	Air	AT Prep (Empty)	73511
LCS 140-73511/2-B	Lab Control Sample	Total/NA	Air	AT Prep (Empty)	73511
140-31777-8 MS	VF29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	73511
140-31777-8 MSD	VF29-2,CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	73511

Prep Batch: 73582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-4	VF29-1,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	73513
140-31777-9	VF29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	73513
140-31777-14	VF29-3,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	73513
140-31777-20	BLANK, CONTAINER 10	Total/NA	Air	AT Prep (KMnO4)	73513
MB 140-73513/1-B	Method Blank	Total/NA	Air	AT Prep (KMnO4)	73513
LCS 140-73513/2-B	Lab Control Sample	Total/NA	Air	AT Prep (KMnO4)	73513
140-31777-9 MS	VF29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	73513
140-31777-9 MSD	VF29-2,CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	73513

Prep Batch: 73583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-5	VF29-1,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	73515
140-31777-10	VF29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	73515
140-31777-15	VF29-3,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	73515
140-31777-21	BLANK, CONTAINER 11	Total/NA	Air	AT Prep (HCl)	73515
MB 140-73515/1-B	Method Blank	Total/NA	Air	AT Prep (HCl)	73515
LCS 140-73515/2-B	Lab Control Sample	Total/NA	Air	AT Prep (HCl)	73515
140-31777-10 MS	VF29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	73515
140-31777-10 MSD	VF29-2,CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	73515

Cleanup Batch: 73591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-1	VF29-1,CONTAINER 1,3	Total/NA	Air	AT Prep FH	73444
140-31777-6	VF29-2,CONTAINER 1,3	Total/NA	Air	AT Prep FH	73444
140-31777-11	VF29-3,CONTAINER 1,3	Total/NA	Air	AT Prep FH	73444
140-31777-16	BLANK, CONTAINER 12	Total/NA	Air	AT Prep FH	73444
140-31777-17	BLANK, CONTAINER 8A	Total/NA	Air	AT Prep FH	73444
MB 140-73444/14-B	Method Blank	Total/NA	Air	AT Prep FH	73444
LCS 140-73444/15-B	Lab Control Sample	Total/NA	Air	AT Prep FH	73444

Metals (Continued)

Cleanup Batch: 73591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 140-73444/16-B	Lab Control Sample Dup	Total/NA	Air	AT Prep FH	73444

Pre Prep Batch: 73593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-2	VF29-1,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31777-7	VF29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31777-12	VF29-3,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31777-18	BLANK, CONTAINER 8B	Total/NA	Air	Air Train Vol.	
140-31777-19	BLANK, CONTAINER 9	Total/NA	Air	Air Train Vol.	
MB 140-73593/1-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-73593/2-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-31777-7 MS	VF29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-31777-7 MSD	VF29-2,CONTAINER 4	Total/NA	Air	Air Train Vol.	

Prep Batch: 73595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-2	VF29-1,CONTAINER 4	Total/NA	Air	AT Prep (BH)	73593
140-31777-7	VF29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	73593
140-31777-12	VF29-3,CONTAINER 4	Total/NA	Air	AT Prep (BH)	73593
140-31777-18	BLANK, CONTAINER 8B	Total/NA	Air	AT Prep (BH)	73593
140-31777-19	BLANK, CONTAINER 9	Total/NA	Air	AT Prep (BH)	73593
MB 140-73593/1-B	Method Blank	Total/NA	Air	AT Prep (BH)	73593
LCS 140-73593/2-B	Lab Control Sample	Total/NA	Air	AT Prep (BH)	73593
140-31777-7 MS	VF29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	73593
140-31777-7 MSD	VF29-2,CONTAINER 4	Total/NA	Air	AT Prep (BH)	73593

Analysis Batch: 73629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-2	VF29-1,CONTAINER 4	Total/NA	Air	29/6010C	73443
140-31777-7	VF29-2,CONTAINER 4	Total/NA	Air	29/6010C	73443
140-31777-12	VF29-3,CONTAINER 4	Total/NA	Air	29/6010C	73443
140-31777-18	BLANK, CONTAINER 8B	Total/NA	Air	29/6010C	73443
140-31777-19	BLANK, CONTAINER 9	Total/NA	Air	29/6010C	73443
MB 140-73443/13-A	Method Blank	Total/NA	Air	29/6010C	73443
LCS 140-73443/14-A	Lab Control Sample	Total/NA	Air	29/6010C	73443
LCSD 140-73443/15-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	73443

Analysis Batch: 73672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-1	VF29-1,CONTAINER 1,3	Total/NA	Air	29/7470A	73591
140-31777-2	VF29-1,CONTAINER 4	Total/NA	Air	29/7470A	73595
140-31777-3	VF29-1,CONTAINER 5A	Total/NA	Air	29/7470A	73581
140-31777-4	VF29-1,CONTAINER 5B	Total/NA	Air	29/7470A	73582
140-31777-5	VF29-1,CONTAINER 5C	Total/NA	Air	29/7470A	73583
140-31777-6	VF29-2,CONTAINER 1,3	Total/NA	Air	29/7470A	73591
140-31777-7	VF29-2,CONTAINER 4	Total/NA	Air	29/7470A	73595
140-31777-8	VF29-2,CONTAINER 5A	Total/NA	Air	29/7470A	73581
140-31777-9	VF29-2,CONTAINER 5B	Total/NA	Air	29/7470A	73582
140-31777-10	VF29-2,CONTAINER 5C	Total/NA	Air	29/7470A	73583
140-31777-11	VF29-3,CONTAINER 1,3	Total/NA	Air	29/7470A	73591
140-31777-12	VF29-3,CONTAINER 4	Total/NA	Air	29/7470A	73595

Metals (Continued)

Analysis Batch: 73672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-13	VF29-3,CONTAINER 5A	Total/NA	Air	29/7470A	73581
140-31777-14	VF29-3,CONTAINER 5B	Total/NA	Air	29/7470A	73582
140-31777-15	VF29-3,CONTAINER 5C	Total/NA	Air	29/7470A	73583
140-31777-16	BLANK, CONTAINER 12	Total/NA	Air	29/7470A	73591
140-31777-17	BLANK, CONTAINER 8A	Total/NA	Air	29/7470A	73591
140-31777-18	BLANK, CONTAINER 8B	Total/NA	Air	29/7470A	73595
140-31777-19	BLANK, CONTAINER 9	Total/NA	Air	29/7470A	73595
140-31777-20	BLANK, CONTAINER 10	Total/NA	Air	29/7470A	73582
140-31777-21	BLANK, CONTAINER 11	Total/NA	Air	29/7470A	73583
MB 140-73444/14-B	Method Blank	Total/NA	Air	29/7470A	73591
MB 140-73511/1-B	Method Blank	Total/NA	Air	29/7470A	73581
MB 140-73513/1-B	Method Blank	Total/NA	Air	29/7470A	73582
MB 140-73515/1-B	Method Blank	Total/NA	Air	29/7470A	73583
MB 140-73593/1-B	Method Blank	Total/NA	Air	29/7470A	73595
LCS 140-73444/15-B	Lab Control Sample	Total/NA	Air	29/7470A	73591
LCS 140-73511/2-B	Lab Control Sample	Total/NA	Air	29/7470A	73581
LCS 140-73513/2-B	Lab Control Sample	Total/NA	Air	29/7470A	73582
LCS 140-73515/2-B	Lab Control Sample	Total/NA	Air	29/7470A	73583
LCS 140-73593/2-B	Lab Control Sample	Total/NA	Air	29/7470A	73595
LCSD 140-73444/16-B	Lab Control Sample Dup	Total/NA	Air	29/7470A	73591
140-31777-7 MS	VF29-2,CONTAINER 4	Total/NA	Air	29/7470A	73595
140-31777-7 MSD	VF29-2,CONTAINER 4	Total/NA	Air	29/7470A	73595
140-31777-8 MS	VF29-2,CONTAINER 5A	Total/NA	Air	29/7470A	73581
140-31777-8 MSD	VF29-2,CONTAINER 5A	Total/NA	Air	29/7470A	73581
140-31777-9 MS	VF29-2,CONTAINER 5B	Total/NA	Air	29/7470A	73582
140-31777-9 MSD	VF29-2,CONTAINER 5B	Total/NA	Air	29/7470A	73582
140-31777-10 MS	VF29-2,CONTAINER 5C	Total/NA	Air	29/7470A	73583
140-31777-10 MSD	VF29-2,CONTAINER 5C	Total/NA	Air	29/7470A	73583

Analysis Batch: 73674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31777-1	VF29-1,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-1	VF29-1,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-6	VF29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-6	VF29-2,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-11	VF29-3,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-11	VF29-3,CONTAINER 1,3	Total/NA	Air	29/6010C	73444
140-31777-16	BLANK, CONTAINER 12	Total/NA	Air	29/6010C	73444
140-31777-16	BLANK, CONTAINER 12	Total/NA	Air	29/6010C	73444
140-31777-17	BLANK, CONTAINER 8A	Total/NA	Air	29/6010C	73444
MB 140-73444/14-A	Method Blank	Total/NA	Air	29/6010C	73444
LCS 140-73444/15-A	Lab Control Sample	Total/NA	Air	29/6010C	73444
LCSD 140-73444/16-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	73444

Client Sample ID: VF29-1,CONTAINER 1,3
Lab Sample ID: 140-31777-1

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.36**	**J**	6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Arsenic	**8.97**		2.00	1.78	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Barium	**4.85**		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Cadmium	**3.23**		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Chromium	**3.46**		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Cobalt	ND		10.0	2.00	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Copper	**17.1**	**B**	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Lead	**16.7**		2.00	0.940	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Manganese	**1.23**	**J**	1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Nickel	**3.56**	**J**	8.00	0.500	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Selenium	**2.30**		2.00	1.32	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Silver	**0.224**	**J**	1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Thallium	ND		2.00	0.960	ug/Sample		05/22/23 08:00	05/26/23 14:30	2
Vanadium	**0.126**	**J**	2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 12:02	1
Zinc	**21.1**		2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 12:02	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.114**	**J**	0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 10:55	1

Client Sample ID: VF29-1,CONTAINER 4
Lab Sample ID: 140-31777-2

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Arsenic	**1.99**		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Barium	**2.75**		1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Chromium	**0.528**	**J**	1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Copper	**6.30**		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Lead	**0.585**	**J**	1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Manganese	**0.817**	**J**	1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Nickel	**0.469**	**J**	4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Selenium	**2.34**		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:12	1
Zinc	**4.46**		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 16:12	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:28	1

Client Sample ID: VF29-1,CONTAINER 5A
Lab Sample ID: 140-31777-3

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.380	0.114	ug/Sample		05/25/23 10:30	05/26/23 11:23	1

Client Sample ID: VF29-1,CONTAINER 5B
Lab Sample ID: 140-31777-4

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.127	J	0.152	0.0456	ug/Sample		05/25/23 08:20	05/26/23 11:59	1

Client Sample ID: VF29-1,CONTAINER 5C
Lab Sample ID: 140-31777-5

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	10.4		0.275	0.121	ug/Sample		05/25/23 10:30	05/26/23 12:42	1

Client Sample ID: VF29-2,CONTAINER 1,3
Lab Sample ID: 140-31777-6

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.35**	**J**	6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Arsenic	**6.82**		2.00	1.78	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Barium	**3.30**		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Cadmium	**3.08**		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Chromium	**2.45**		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Cobalt	ND		10.0	2.00	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Copper	**9.77**	**B**	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Lead	**13.8**		2.00	0.940	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Manganese	**1.35**	**J**	1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Nickel	**0.854**	**J**	8.00	0.500	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Selenium	**2.64**		2.00	1.32	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Silver	ND		1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Thallium	ND		2.00	0.960	ug/Sample		05/22/23 08:00	05/26/23 14:35	2
Vanadium	**0.100**	**J**	2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 12:07	1
Zinc	**17.1**		2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 12:07	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0899**	**J**	0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 10:58	1

Client Sample ID: VF29-2,CONTAINER 4
Lab Sample ID: 140-31777-7

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Arsenic	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Barium	**1.06**		1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Chromium	**0.485**	**J**	1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Copper	**5.10**		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Lead	**0.821**	**J**	1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Manganese	**105**		1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Nickel	**0.627**	**J**	4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Selenium	**1.02**		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:29	1
Zinc	**4.39**		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 16:29	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:31	1

Client Sample ID: VF29-2,CONTAINER 5A
Lab Sample ID: 140-31777-8

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 11:26	1

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Client Sample ID: VF29-2,CONTAINER 5B
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15
Sample Container: Air Train

Lab Sample ID: 140-31777-9
Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.160	0.0480	ug/Sample		05/25/23 08:20	05/26/23 12:02	1

Client Sample ID: VF29-2,CONTAINER 5C
Lab Sample ID: 140-31777-10

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.35		0.280	0.123	ug/Sample		05/25/23 10:30	05/26/23 12:45	1

Client Sample ID: VF29-3,CONTAINER 1,3
Lab Sample ID: 140-31777-11

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**3.20**	**J**	6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Arsenic	**9.39**		2.00	1.78	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Barium	**3.22**		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Cadmium	**4.34**		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Chromium	**2.45**		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Cobalt	ND		10.0	2.00	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Copper	**11.1**	**B**	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Lead	**21.2**		2.00	0.940	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Manganese	**1.22**	**J**	1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Nickel	**0.588**	**J**	8.00	0.500	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Selenium	**2.79**		2.00	1.32	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Silver	ND		1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Thallium	ND		2.00	0.960	ug/Sample		05/22/23 08:00	05/26/23 14:50	2
Vanadium	**0.111**	**J**	2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 12:22	1
Zinc	**22.9**		2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 12:22	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 11:06	1

Client Sample ID: VF29-3,CONTAINER 4
Lab Sample ID: 140-31777-12

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Arsenic	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Barium	**2.21**		1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Chromium	**0.473**	**J**	1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Copper	**6.58**		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Lead	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Manganese	**1.08**	**J**	1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Nickel	**0.527**	**J**	4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Selenium	**3.01**		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:44	1
Zinc	**2.79**		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 16:44	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:38	1

Client Sample ID: VF29-3,CONTAINER 5A
Lab Sample ID: 140-31777-13

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 11:34	1

Client Sample ID: VF29-3,CONTAINER 5B
Lab Sample ID: 140-31777-14

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.158	0.0474	ug/Sample		05/25/23 08:20	05/26/23 12:09	1

Client Sample ID: VF29-3,CONTAINER 5C
Lab Sample ID: 140-31777-15

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.27		0.280	0.123	ug/Sample		05/25/23 10:30	05/26/23 12:58	1

Client Sample ID: BLANK, CONTAINER 12
Lab Sample ID: 140-31777-16

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Arsenic	ND		2.00	1.78	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Barium	**2.27**		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Cadmium	ND		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Chromium	**1.33**		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Cobalt	ND		10.0	2.00	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Copper	**0.418**	**J B**	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Lead	ND		2.00	0.940	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Manganese	**0.832**	**J**	1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Nickel	ND		8.00	0.500	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Selenium	**2.76**		2.00	1.32	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Silver	ND		1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Thallium	ND		2.00	0.960	ug/Sample		05/22/23 08:00	05/26/23 14:55	2
Vanadium	**0.0920**	**J**	2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 12:27	1
Zinc	**1.56**	**J**	2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 12:27	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 11:08	1

Client Sample ID: BLANK, CONTAINER 8A
Lab Sample ID: 140-31777-17

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Arsenic	ND		1.00	0.890	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Barium	ND		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Cadmium	ND		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Chromium	ND		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Cobalt	ND		5.00	1.00	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Copper	**0.430**	**J B**	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Lead	ND		1.00	0.470	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Manganese	ND		1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Nickel	ND		4.00	0.250	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Selenium	ND		1.00	0.660	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Silver	ND		1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Thallium	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Vanadium	ND		2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 12:59	1
Zinc	ND		2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 12:59	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 11:11	1

Client Sample ID: BLANK, CONTAINER 8B
Lab Sample ID: 140-31777-18

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Arsenic	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Barium	**0.276**	**J**	1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Chromium	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Copper	ND		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Lead	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Manganese	ND		1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Nickel	**0.308**	**J**	4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Selenium	**0.559**	**J**	1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:48	1
Zinc	ND		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 16:48	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:41	1

Client Sample ID: BLANK, CONTAINER 9
Lab Sample ID: 140-31777-19

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Arsenic	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Barium	**0.157**	**J**	1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Chromium	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Copper	ND		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Lead	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Manganese	**0.235**	**J**	1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Nickel	**0.332**	**J**	4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Selenium	**0.477**	**J**	1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 16:53	1
Zinc	ND		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 16:53	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:43	1

Client: SLR International Corp
Job ID: 140-31777-1
Project/Site: FMMI - Method 29

Client Sample ID: BLANK, CONTAINER 10
Lab Sample ID: 140-31777-20
Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		05/25/23 08:20	05/26/23 12:12	1

Client Sample ID: BLANK, CONTAINER 11
Lab Sample ID: 140-31777-21

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0660	ug/Sample		05/25/23 10:30	05/26/23 13:00	1

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Antimony	6.00	0.840	ug/Sample
Arsenic	1.00	0.390	ug/Sample
Barium	1.00	0.150	ug/Sample
Beryllium	0.500	0.0470	ug/Sample
Cadmium	0.500	0.0530	ug/Sample
Chromium	1.00	0.350	ug/Sample
Cobalt	5.00	0.100	ug/Sample
Copper	2.50	0.580	ug/Sample
Lead	1.00	0.480	ug/Sample
Manganese	1.50	0.180	ug/Sample
Nickel	4.00	0.260	ug/Sample
Selenium	1.00	0.390	ug/Sample
Silver	1.00	0.350	ug/Sample
Thallium	1.00	0.340	ug/Sample
Vanadium	2.50	0.100	ug/Sample
Zinc	2.00	0.940	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Antimony	6.00	1.10	ug/Sample
Arsenic	1.00	0.890	ug/Sample
Barium	1.00	0.860	ug/Sample
Beryllium	0.500	0.0160	ug/Sample
Cadmium	0.500	0.280	ug/Sample
Chromium	1.00	0.360	ug/Sample
Cobalt	5.00	1.00	ug/Sample
Copper	2.50	0.210	ug/Sample
Lead	1.00	0.470	ug/Sample
Manganese	1.50	0.120	ug/Sample
Nickel	4.00	0.250	ug/Sample
Selenium	1.00	0.660	ug/Sample
Silver	1.00	0.0810	ug/Sample
Thallium	1.00	0.480	ug/Sample
Vanadium	2.50	0.0730	ug/Sample
Zinc	2.00	0.900	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Mercury	0.400	0.120	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (Empty)

Analyte	RL	MDL	Units
Mercury	0.200	0.0600	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Mercury	0.200	0.0840	ug/Sample

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (HCl)

Analyte	RL	MDL	Units
Mercury	0.0500	0.0220	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (KMnO4)

Analyte	RL	MDL	Units
Mercury	0.0200	0.00600	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source

Lab Sample ID: MB 140-73443/13-A
Matrix: Air
Analysis Batch: 73629

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Arsenic	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Barium	ND		1.00	0.150	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Beryllium	ND		0.500	0.0470	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Cadmium	ND		0.500	0.0530	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Chromium	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Cobalt	ND		5.00	0.100	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Copper	ND		2.50	0.580	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Lead	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Manganese	ND		1.50	0.180	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Nickel	ND		4.00	0.260	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Selenium	ND		1.00	0.390	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Silver	ND		1.00	0.350	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Thallium	ND		1.00	0.340	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Vanadium	ND		2.50	0.100	ug/Sample		05/22/23 08:00	05/25/23 11:53	1
Zinc	ND		2.00	0.940	ug/Sample		05/22/23 08:00	05/25/23 11:53	1

Lab Sample ID: LCS 140-73443/14-A
Matrix: Air
Analysis Batch: 73629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			50.0	47.53		ug/Sample		95	80 - 120		
Arsenic			10.0	9.492		ug/Sample		95	80 - 120		
Barium			10.0	9.957		ug/Sample		100	80 - 120		
Beryllium			5.00	5.157		ug/Sample		103	80 - 120		
Cadmium			5.00	4.910		ug/Sample		98	80 - 120		
Chromium			20.0	19.91		ug/Sample		100	80 - 120		
Cobalt			10.0	9.848		ug/Sample		98	80 - 120		
Copper			25.0	23.74		ug/Sample		95	80 - 120		
Lead			10.0	9.570		ug/Sample		96	80 - 120		
Manganese			10.0	9.807		ug/Sample		98	80 - 120		
Nickel			50.0	49.41		ug/Sample		99	80 - 120		
Selenium			15.0	13.65		ug/Sample		91	80 - 120		
Silver			5.00	4.677		ug/Sample		94	80 - 120		
Thallium			40.0	38.41		ug/Sample		96	80 - 120		
Vanadium			20.0	19.61		ug/Sample		98	80 - 120		
Zinc			50.0	49.41		ug/Sample		99	80 - 120		

Lab Sample ID: LCSD 140-73443/15-A
Matrix: Air
Analysis Batch: 73629

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73443

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony			50.0	48.47		ug/Sample		97	80 - 120	2	20
Arsenic			10.0	9.696		ug/Sample		97	80 - 120	2	20
Barium			10.0	10.08		ug/Sample		101	80 - 120	1	20
Beryllium			5.00	5.222		ug/Sample		104	80 - 120	1	20
Cadmium			5.00	4.982		ug/Sample		100	80 - 120	1	20

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCSD 140-73443/15-A
Matrix: Air
Analysis Batch: 73629

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73443

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	20.0	20.38		ug/Sample		102	80 - 120	2	20
Cobalt	10.0	9.990		ug/Sample		100	80 - 120	1	20
Copper	25.0	24.31		ug/Sample		97	80 - 120	2	20
Lead	10.0	9.901		ug/Sample		99	80 - 120	3	20
Manganese	10.0	9.964		ug/Sample		100	80 - 120	2	20
Nickel	50.0	50.14		ug/Sample		100	80 - 120	1	20
Selenium	15.0	13.82		ug/Sample		92	80 - 120	1	20
Silver	5.00	4.800		ug/Sample		96	80 - 120	3	20
Thallium	40.0	38.96		ug/Sample		97	80 - 120	1	20
Vanadium	20.0	20.06		ug/Sample		100	80 - 120	2	20
Zinc	50.0	50.08		ug/Sample		100	80 - 120	1	20

Lab Sample ID: MB 140-73444/14-A
Matrix: Air
Analysis Batch: 73674

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Arsenic	ND		1.00	0.890	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Barium	ND		1.00	0.860	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Beryllium	ND		0.500	0.0160	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Cadmium	ND		0.500	0.280	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Chromium	ND		1.00	0.360	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Cobalt	ND		5.00	1.00	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Copper	0.2450	J	2.50	0.210	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Lead	ND		1.00	0.470	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Manganese	ND		1.50	0.120	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Nickel	ND		4.00	0.250	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Selenium	ND		1.00	0.660	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Silver	ND		1.00	0.0810	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Thallium	ND		1.00	0.480	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Vanadium	ND		2.50	0.0730	ug/Sample		05/22/23 08:00	05/26/23 10:01	1
Zinc	ND		2.00	0.900	ug/Sample		05/22/23 08:00	05/26/23 10:01	1

Lab Sample ID: LCS 140-73444/15-A
Matrix: Air
Analysis Batch: 73674

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	49.85		ug/Sample		100	80 - 120
Arsenic	10.0	10.63		ug/Sample		106	80 - 120
Barium	10.0	10.21		ug/Sample		102	80 - 120
Beryllium	5.00	4.981		ug/Sample		100	80 - 120
Cadmium	5.00	5.054		ug/Sample		101	80 - 120
Chromium	20.0	20.34		ug/Sample		102	80 - 120
Cobalt	10.0	10.17		ug/Sample		102	80 - 120
Copper	25.0	24.98		ug/Sample		100	80 - 120
Lead	10.0	9.997		ug/Sample		100	80 - 120
Manganese	10.0	9.929		ug/Sample		99	80 - 120

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCS 140-73444/15-A
Matrix: Air
Analysis Batch: 73674

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	50.0	51.06		ug/Sample		102	80 - 120
Selenium	15.0	14.55		ug/Sample		97	80 - 120
Silver	5.00	4.956		ug/Sample		99	80 - 120
Thallium	40.0	40.16		ug/Sample		100	80 - 120
Vanadium	20.0	20.11		ug/Sample		101	80 - 120
Zinc	50.0	51.54		ug/Sample		103	80 - 120

Lab Sample ID: LCSD 140-73444/16-A
Matrix: Air
Analysis Batch: 73674

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	49.12		ug/Sample		98	80 - 120	1	20
Arsenic	10.0	10.43		ug/Sample		104	80 - 120	2	20
Barium	10.0	10.10		ug/Sample		101	80 - 120	1	20
Beryllium	5.00	4.879		ug/Sample		98	80 - 120	2	20
Cadmium	5.00	4.949		ug/Sample		99	80 - 120	2	20
Chromium	20.0	20.08		ug/Sample		100	80 - 120	1	20
Cobalt	10.0	9.939		ug/Sample		99	80 - 120	2	20
Copper	25.0	24.55		ug/Sample		98	80 - 120	2	20
Lead	10.0	9.935		ug/Sample		99	80 - 120	1	20
Manganese	10.0	9.701		ug/Sample		97	80 - 120	2	20
Nickel	50.0	49.94		ug/Sample		100	80 - 120	2	20
Selenium	15.0	14.07		ug/Sample		94	80 - 120	3	20
Silver	5.00	4.828		ug/Sample		97	80 - 120	3	20
Thallium	40.0	39.19		ug/Sample		98	80 - 120	2	20
Vanadium	20.0	19.83		ug/Sample		99	80 - 120	1	20
Zinc	50.0	50.39		ug/Sample		101	80 - 120	2	20

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: MB 140-73444/14-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		05/22/23 08:00	05/26/23 10:43	1

Lab Sample ID: LCS 140-73444/15-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.899		ug/Sample		98	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source (Continued)

Lab Sample ID: LCSD 140-73444/16-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73444

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			5.00	4.904		ug/Sample		98	80 - 120	0	20

Lab Sample ID: MB 140-73511/1-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73581

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0600	ug/Sample		05/25/23 10:30	05/26/23 11:13	1

Lab Sample ID: LCS 140-73511/2-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73581

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	5.011		ug/Sample		100	80 - 120		

Lab Sample ID: 140-31777-8 MS
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 73581

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		2.00	2.038		ug/Sample		102	80 - 120		

Lab Sample ID: 140-31777-8 MSD
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 73581

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		2.00	2.002		ug/Sample		100	80 - 120	2	20

Lab Sample ID: MB 140-73513/1-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73582

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0200	0.00600	ug/Sample		05/25/23 08:20	05/26/23 11:54	1

Lab Sample ID: LCS 140-73513/2-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73582

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.500	0.5031		ug/Sample		101	80 - 120		

Lab Sample ID: 140-31777-9 MS
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 73582

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.800	0.7830		ug/Sample		98	80 - 120		

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-31777-9 MSD
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 73582

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.800	0.7823		ug/Sample		98	80 - 120	0	20

Lab Sample ID: MB 140-73515/1-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	0.0220	ug/Sample		05/25/23 10:30	05/26/23 12:37	1

Lab Sample ID: LCS 140-73515/2-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.25	1.233		ug/Sample		99	80 - 120

Lab Sample ID: 140-31777-10 MS
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 73583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.35		1.40	2.854		ug/Sample		107	80 - 120

Lab Sample ID: 140-31777-10 MSD
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 73583

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.35		1.40	2.890		ug/Sample		110	80 - 120	1	20

Lab Sample ID: MB 140-73593/1-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73595

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		05/25/23 10:30	05/26/23 13:23	1

Lab Sample ID: LCS 140-73593/2-B
Matrix: Air
Analysis Batch: 73672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	10.0	10.20		ug/Sample		102	80 - 120

Lab Sample ID: 140-31777-7 MS
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 4
Prep Type: Total/NA
Prep Batch: 73595

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		2.00	2.114		ug/Sample		106	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-31777-7 MSD
Matrix: Air
Analysis Batch: 73672

Client Sample ID: VF29-2,CONTAINER 4
Prep Type: Total/NA
Prep Batch: 73595

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		2.00	2.085		ug/Sample		104	80 - 120	1	20

Client Sample ID: VF29-1,CONTAINER 1,3

Lab Sample ID: 140-31777-1

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 12:02	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73674	05/26/23 14:30	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 10:55	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-1,CONTAINER 4

Lab Sample ID: 140-31777-2

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 16:12	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:28	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-1,CONTAINER 5A

Lab Sample ID: 140-31777-3

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	95 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:23	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-1,CONTAINER 5B

Lab Sample ID: 140-31777-4

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	380 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:59	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-1,CONTAINER 5C

Lab Sample ID: 140-31777-5

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:42	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 1,3

Lab Sample ID: 140-31777-6

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 12:07	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73674	05/26/23 14:35	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 10:58	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 4

Lab Sample ID: 140-31777-7

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 16:29	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:31	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5A

Lab Sample ID: 140-31777-8

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:26	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5B

Lab Sample ID: 140-31777-9

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:02	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5C

Lab Sample ID: 140-31777-10

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:45	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-3,CONTAINER 1,3

Lab Sample ID: 140-31777-11

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 12:22	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73674	05/26/23 14:50	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:06	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-3,CONTAINER 4

Lab Sample ID: 140-31777-12

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 16:44	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:38	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-3,CONTAINER 5A — Lab Sample ID: 140-31777-13

Date Collected: 05/11/23 00:00 — **Matrix: Air**
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:34	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-3,CONTAINER 5B — Lab Sample ID: 140-31777-14

Date Collected: 05/11/23 00:00 — **Matrix: Air**
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:09	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-3,CONTAINER 5C — Lab Sample ID: 140-31777-15

Date Collected: 05/11/23 00:00 — **Matrix: Air**
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:58	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 12 — Lab Sample ID: 140-31777-16

Date Collected: 05/11/23 00:00 — **Matrix: Air**
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 12:27	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		2			73674	05/26/23 14:55	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:08	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 8A

Lab Sample ID: 140-31777-17

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 12:59	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:11	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 8B

Lab Sample ID: 140-31777-18

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 16:48	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:41	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 9

Lab Sample ID: 140-31777-19

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 16:53	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:43	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 10

Lab Sample ID: 140-31777-20

Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:12	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK, CONTAINER 11

Lab Sample ID: 140-31777-21

Date Collected: 05/11/23 00:00

Matrix: Air

Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	150 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:00	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-73443/13-A

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 11:53	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-73444/14-A

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 10:01	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-73444/14-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 10:43	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-73511/1-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:13	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-73513/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:54	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-73515/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:37	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-73593/1-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:23	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73443/14-A

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 11:58	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73444/15-A

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 10:06	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73444/15-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 10:50	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73511/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:21	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73513/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:57	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73515/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:40	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-73593/2-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:26	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-73443/15-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	73443	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73629	05/25/23 12:13	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-73444/16-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/6010C		1			73674	05/26/23 10:11	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-73444/16-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	73444	05/22/23 08:00	KNC	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	73591	05/25/23 10:30	WSK	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 10:53	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 4
Lab Sample ID: 140-31777-7 MS
Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:33	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 4
Lab Sample ID: 140-31777-7 MSD
Date Collected: 05/11/23 00:00
Matrix: Air
Date Received: 05/16/23 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73593	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	73595	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 13:36	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5A
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-8 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:28	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5A
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-8 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	73511	05/25/23 08:00	LAH	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	73581	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 11:31	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5B
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-9 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:04	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5B
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-9 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	400 mL	73513	05/24/23 07:50	LAH	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	73582	05/25/23 08:20	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:07	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: VF29-2,CONTAINER 5C
Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-10 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:52	WSK	EET KNX
	Instrument ID: ADT									

Lab Chronicle

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Client Sample ID: VF29-2,CONTAINER 5C

Date Collected: 05/11/23 00:00
Date Received: 05/16/23 09:15

Lab Sample ID: 140-31777-10 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	280 mL	73515	05/25/23 09:20	LAH	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	73583	05/25/23 10:30	LAH	EET KNX
Total/NA	Analysis	29/7470A		1			73672	05/26/23 12:55	WSK	EET KNX
	Instrument ID: ADT									

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-31777-1

Laboratory: Eurofins Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-16-23
California	State	2423	06-30-23
Colorado	State	TN00009	02-29-24
Connecticut	State	PH-0223	09-30-23
Florida	NELAP	E87177	06-30-23
Georgia (DW)	State	906	07-27-25
Hawaii	State	NA	07-27-23
Kansas	NELAP	E-10349	10-31-23
Kentucky (DW)	State	90101	12-31-23
Louisiana	NELAP	83979	06-30-23
Louisiana (All)	NELAP	83979	06-30-23
Louisiana (DW)	State	LA019	12-31-23
Maryland	State	277	03-31-24
Michigan	State	9933	07-27-25
Nevada	State	TN00009	07-31-23
New Hampshire	NELAP	2999	01-17-24
New Jersey	NELAP	TN001	06-30-23
New York	NELAP	10781	03-31-24
North Carolina (DW)	State	21705	07-31-23
North Carolina (WW/SW)	State	64	12-31-23
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-23
Oregon	NELAP	TNI0189	01-01-24
Pennsylvania	NELAP	68-00576	12-01-23
Tennessee	State	02014	07-27-25
Texas	NELAP	T104704380-22-17	08-31-23
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	525-22-279-18762	10-06-25
Utah	NELAP	TN00009	07-31-23
Virginia	NELAP	460176	09-14-23
Washington	State	C593	01-19-24
West Virginia (DW)	State	9955C	12-31-23
West Virginia DEP	State	345	04-30-24
Wisconsin	State	998044300	08-31-23

METALS

COVER PAGE
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG No.:

Project: FMMI - Method 29

Client Sample ID	Lab Sample ID
VF29-1,CONTAINER 1,3	140-31777-1
VF29-1,CONTAINER 4	140-31777-2
VF29-1,CONTAINER 5A	140-31777-3
VF29-1,CONTAINER 5B	140-31777-4
VF29-1,CONTAINER 5C	140-31777-5
VF29-2,CONTAINER 1,3	140-31777-6
VF29-2,CONTAINER 4	140-31777-7
VF29-2,CONTAINER 5A	140-31777-8
VF29-2,CONTAINER 5B	140-31777-9
VF29-2,CONTAINER 5C	140-31777-10
VF29-3,CONTAINER 1,3	140-31777-11
VF29-3,CONTAINER 4	140-31777-12
VF29-3,CONTAINER 5A	140-31777-13
VF29-3,CONTAINER 5B	140-31777-14
VF29-3,CONTAINER 5C	140-31777-15
BLANK, CONTAINER 12	140-31777-16
BLANK, CONTAINER 8A	140-31777-17
BLANK, CONTAINER 8B	140-31777-18
BLANK, CONTAINER 9	140-31777-19
BLANK, CONTAINER 10	140-31777-20
BLANK, CONTAINER 11	140-31777-21

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-1,CONTAINER 1,3 Lab Sample ID: 140-31777-1

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.36	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	8.97	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	4.85	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	3.23	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	3.46	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	17.1	2.50	0.210	ug/Sample		B	1	29/6010C
7439-92-1	Lead	16.7	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	1.23	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	3.56	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	2.30	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	0.224	1.00	0.0810	ug/Sample	J		1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	0.126	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	21.1	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	0.114	0.200	0.0840	ug/Sample	J		1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-1,CONTAINER 4 Lab Sample ID: 140-31777-2

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	1.99	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	2.75	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.528	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	6.30	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.585	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	0.817	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.469	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	2.34	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	4.46	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-1,CONTAINER 5A
Lab Sample ID: 140-31777-3
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.380	0.114	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-1,CONTAINER 5B
Lab Sample ID: 140-31777-4
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.127	0.152	0.0456	ug/Sample	J		1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-1,CONTAINER 5C
Lab Sample ID: 140-31777-5
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	10.4	0.275	0.121	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-2,CONTAINER 1,3 | Lab Sample ID: 140-31777-6

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG ID.:

Matrix: Air | Date Sampled: 05/11/2023 00:00

Reporting Basis: WET | Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.35	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	6.82	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	3.30	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	3.08	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	2.45	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	9.77	2.50	0.210	ug/Sample		B	1	29/6010C
7439-92-1	Lead	13.8	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	1.35	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.854	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	2.64	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	0.100	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	17.1	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	0.0899	0.200	0.0840	ug/Sample	J		1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-2,CONTAINER 4 | Lab Sample ID: 140-31777-7

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG ID.:

Matrix: Air | Date Sampled: 05/11/2023 00:00

Reporting Basis: WET | Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	1.06	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.485	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	5.10	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.821	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	105	1.50	0.180	ug/Sample			1	29/6010C
7440-02-0	Nickel	0.627	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	1.02	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	4.39	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-2,CONTAINER 5A
Lab Sample ID: 140-31777-8
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-2,CONTAINER 5B
Lab Sample ID: 140-31777-9

Lab Name: Eurofins Knoxville
Job No.: 140-31777-1

SDG ID.:

Matrix: Air
Date Sampled: 05/11/2023 00:00

Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.160	0.0480	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-2,CONTAINER 5C
Lab Sample ID: 140-31777-10
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	1.35	0.280	0.123	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-3,CONTAINER 1,3 Lab Sample ID: 140-31777-11

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	3.20	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	9.39	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	3.22	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	4.34	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	2.45	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	11.1	2.50	0.210	ug/Sample		B	1	29/6010C
7439-92-1	Lead	21.2	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	1.22	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.588	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	2.79	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	0.111	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	22.9	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-3,CONTAINER 4 | Lab Sample ID: 140-31777-12

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG ID.:

Matrix: Air | Date Sampled: 05/11/2023 00:00

Reporting Basis: WET | Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	2.21	1.00	0.150	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.473	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	6.58	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	1.08	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.527	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	3.01	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	2.79	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-3,CONTAINER 5A
Lab Sample ID: 140-31777-13
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-3,CONTAINER 5B
Lab Sample ID: 140-31777-14
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.158	0.0474	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: VF29-3,CONTAINER 5C
Lab Sample ID: 140-31777-15
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	1.27	0.280	0.123	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 12 | Lab Sample ID: 140-31777-16

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG ID.:

Matrix: Air | Date Sampled: 05/11/2023 00:00

Reporting Basis: WET | Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	2.27	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	1.33	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	0.418	2.50	0.210	ug/Sample	J	B	1	29/6010C
7439-92-1	Lead	ND	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	0.832	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	ND	8.00	0.500	ug/Sample			2	29/6010C
7782-49-2	Selenium	2.76	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	0.0920	2.50	0.0730	ug/Sample	J		1	29/6010C
7440-66-6	Zinc	1.56	2.00	0.900	ug/Sample	J		1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 8A
Lab Sample ID: 140-31777-17
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.890	ug/Sample			1	29/6010C
7440-39-3	Barium	ND	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	1.00	ug/Sample			1	29/6010C
7440-50-8	Copper	0.430	2.50	0.210	ug/Sample	J	B	1	29/6010C
7439-92-1	Lead	ND	1.00	0.470	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	ND	4.00	0.250	ug/Sample			1	29/6010C
7782-49-2	Selenium	ND	1.00	0.660	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.480	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 8B
Lab Sample ID: 140-31777-18
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG ID.:
Matrix: Air
Date Sampled: 05/11/2023 00:00
Reporting Basis: WET
Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	0.276	1.00	0.150	ug/Sample	J		1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	ND	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.180	ug/Sample			1	29/6010C
7440-02-0	Nickel	0.308	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	0.559	1.00	0.390	ug/Sample	J		1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 9 Lab Sample ID: 140-31777-19

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	0.157	1.00	0.150	ug/Sample	J		1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	ND	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	0.235	1.50	0.180	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	0.332	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	0.477	1.00	0.390	ug/Sample	J		1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 10 Lab Sample ID: 140-31777-20

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.0400	0.0120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK, CONTAINER 11 Lab Sample ID: 140-31777-21

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG ID.:

Matrix: Air Date Sampled: 05/11/2023 00:00

Reporting Basis: WET Date Received: 05/16/2023 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.150	0.0660	ug/Sample			1	29/7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01162

Analyte	ICV 140-73629/4 05/25/2023 10:40				CCV 140-73629/9 05/25/2023 11:05				CCV 140-73629/21 05/25/2023 12:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	242.9		250	97	488.9		500	98	494.2		500	99
Arsenic	254.6		250	102	493.0		500	99	497.8		500	100
Barium	1010		1000	101	2008		2000	100	2025		2000	101
Beryllium	1043		1000	104	2041		2000	102	2064		2000	103
Cadmium	254.4		250	102	505.3		500	101	509.7		500	102
Chromium	1029		1000	103	2035		2000	102	2036		2000	102
Cobalt	996.9		1000	100	2000		2000	100	2011		2000	101
Copper	970.7		1000	97	1953		2000	98	1950		2000	97
Lead	252.7		250	101	500.8		500	100	505.7		500	101
Manganese	1023		1000	102	2025		2000	101	2038		2000	102
Nickel	1015		1000	102	2012		2000	101	2026		2000	101
Selenium	249.2		250	100	494.5		500	99	504.8		500	101
Silver	494.9		500	99	983.8		1000	98	985.9		1000	99
Thallium	531.1		500	106	1008		1000	101	1016		1000	102
Vanadium	1003		1000	100	2006		2000	100	2019		2000	101
Zinc	1014		1000	101	2008		2000	100	2013		2000	101
Phosphorus	987.9		1000	99	1972		2000	99	1983		2000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01162

Analyte	CCV 140-73629/33 05/25/2023 13:02				CCV 140-73629/59 05/25/2023 15:12				CCV 140-73629/72 05/25/2023 16:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	496.0		500	99	487.1		500	97	509.0		500	102
Arsenic	502.7		500	101	502.4		500	100	515.4		500	103
Barium	2052		2000	103	2049		2000	102	2068		2000	103
Beryllium	2107		2000	105	2112		2000	106	2128		2000	106
Cadmium	517.7		500	104	522.1		500	104	526.3		500	105
Chromium	2085		2000	104	2103		2000	105	2106		2000	105
Cobalt	2036		2000	102	2040		2000	102	2065		2000	103
Copper	1970		2000	98	1954		2000	98	2016		2000	101
Lead	513.8		500	103	519.1		500	104	522.8		500	105
Manganese	2074		2000	104	2084		2000	104	2093		2000	105
Nickel	2052		2000	103	2059		2000	103	2086		2000	104
Selenium	509.3		500	102	507.5		500	102	535.7		500	107
Silver	1000		1000	100	996.7		1000	100	1019		1000	102
Thallium	1025		1000	103	1027		1000	103	1038		1000	104
Vanadium	2065		2000	103	2083		2000	104	2091		2000	105
Zinc	2005		2000	100	2015		2000	101	2071		2000	104
Phosphorus	1994		2000	100	1988		2000	99	2059		2000	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01162

Analyte	CCV 140-73629/84 05/25/2023 17:18											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	508.1		500	102								
Arsenic	513.8		500	103								
Barium	2073		2000	104								
Beryllium	2153		2000	108								
Cadmium	529.3		500	106								
Chromium	2140		2000	107								
Cobalt	2070		2000	104								
Copper	1993		2000	100								
Lead	526.4		500	105								
Manganese	2122		2000	106								
Nickel	2091		2000	105								
Selenium	531.0		500	106								
Silver	1018		1000	102								
Thallium	1046		1000	105								
Vanadium	2108		2000	105								
Zinc	2066		2000	103								
Phosphorus	2057		2000	103								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90XXCCVLP_01135

Analyte	CCVL 140-73629/3 05/25/2023 10:35				ICV 140-73629/4 05/25/2023 10:40							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	248.2		250	99	242.9		250	97				
Arsenic	248.6		250	99	254.6		250	102				
Barium	1013		1000	101	1010		1000	101				
Beryllium	1069		1000	107	1043		1000	104				
Cadmium	257.5		250	103	254.4		250	102				
Chromium	1041		1000	104	1029		1000	103				
Cobalt	1015		1000	102	996.9		1000	100				
Copper	979.4		1000	98	970.7		1000	97				
Lead	255.9		250	102	252.7		250	101				
Manganese	1044		1000	104	1023		1000	102				
Nickel	1024		1000	102	1015		1000	102				
Selenium	249.9		250	100	249.2		250	100				
Silver	497.1		500	99	494.9		500	99				
Thallium	514.0		500	103	531.1		500	106				
Vanadium	1019		1000	102	1003		1000	100				
Zinc	1025		1000	103	1014		1000	101				
Phosphorus	999.2		1000	100	987.9		1000	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01163

Analyte	ICV 140-73674/4 05/26/2023 08:59				CCV 140-73674/11 05/26/2023 09:37				CCV 140-73674/23 05/26/2023 10:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	237.3		250	95	489.3		500	98	488.6		500	98
Arsenic	251.0		250	100	493.6		500	99	491.7		500	98
Barium	977.9		1000	98	1995		2000	100	1996		2000	100
Beryllium	1022		1000	102	2043		2000	102	2019		2000	101
Cadmium	249.6		250	100	504.2		500	101	505.9		500	101
Chromium	1006		1000	101	2022		2000	101	2017		2000	101
Cobalt	977.3		1000	98	1993		2000	100	1998		2000	100
Copper	957.4		1000	96	1964		2000	98	1967		2000	98
Lead	248.7		250	99	507.0		500	101	517.1		500	103
Manganese	997.0		1000	100	2013		2000	101	2001		2000	100
Nickel	995.8		1000	100	2008		2000	100	2012		2000	101
Selenium	246.3		250	99	497.5		500	100	498.9		500	100
Silver	487.5		500	97	985.9		1000	99	988.2		1000	99
Thallium	519.4		500	104	997.4		1000	100	1006		1000	101
Vanadium	983.3		1000	98	2013		2000	101	2016		2000	101
Zinc	992.4		1000	99	1994		2000	100	1994		2000	100
Phosphorus	970.9		1000	97	1960		2000	98	1968		2000	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01163

Analyte	CCV 140-73674/35 05/26/2023 11:37				CCV 140-73674/47 05/26/2023 12:50				CCV 140-73674/51 05/26/2023 13:09			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	488.6		500	98	485.4		500	97	514.0		500	103
Arsenic	499.1		500	100	496.4		500	99	516.9		500	103
Barium	2012		2000	101	2038		2000	102	2059		2000	103
Beryllium	2083		2000	104	2109		2000	105	2140		2000	107
Cadmium	518.3		500	104	519.5		500	104	527.5		500	106
Chromium	2086		2000	104	2091		2000	105	2117		2000	106
Cobalt	2025		2000	101	2027		2000	101	2060		2000	103
Copper	1962		2000	98	1970		2000	99	2032		2000	102
Lead	541.0		500	108	540.9		500	108	550.5		500	110
Manganese	2063		2000	103	2068		2000	103	2089		2000	104
Nickel	2043		2000	102	2046		2000	102	2083		2000	104
Selenium	504.0		500	101	504.7		500	101	548.9		500	110
Silver	998.3		1000	100	1005		1000	101	1030		1000	103
Thallium	1019		1000	102	1013		1000	101	1034		1000	103
Vanadium	2071		2000	104	2084		2000	104	2112		2000	106
Zinc	2012		2000	101	2007		2000	100	2076		2000	104
Phosphorus	1995		2000	100	1985		2000	99	2086		2000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90CVCCVP_01163

Analyte	CCV 140-73674/63 05/26/2023 14:15				CCV 140-73674/74 05/26/2023 15:10							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	509.7		500	102	517.0		500	103				
Arsenic	513.4		500	103	519.4		500	104				
Barium	2034		2000	102	2066		2000	103				
Beryllium	2154		2000	108	2171		2000	109				
Cadmium	522.1		500	104	528.7		500	106				
Chromium	2078		2000	104	2102		2000	105				
Cobalt	2033		2000	102	2062		2000	103				
Copper	1981		2000	99	2015		2000	101				
Lead	539.5		500	108	550.1		500	110				
Manganese	2082		2000	104	2108		2000	105				
Nickel	2058		2000	103	2087		2000	104				
Selenium	543.8		500	109	548.8		500	110				
Silver	1013		1000	101	1026		1000	103				
Thallium	1028		1000	103	1041		1000	104				
Vanadium	2074		2000	104	2101		2000	105				
Zinc	2052		2000	103	2080		2000	104				
Phosphorus	2061		2000	103	2089		2000	104				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90XXICVS_00238 Concentration Units: ug/L

CCV Source: 90XXCCVLP_01136

Analyte	CCVL 140-73674/3 05/26/2023 08:54				ICV 140-73674/4 05/26/2023 08:59							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	242.4		250	97	237.3		250	95				
Arsenic	245.5		250	98	251.0		250	100				
Barium	982.2		1000	98	977.9		1000	98				
Beryllium	1044		1000	104	1022		1000	102				
Cadmium	252.5		250	101	249.6		250	100				
Chromium	1017		1000	102	1006		1000	101				
Cobalt	996.2		1000	100	977.3		1000	98				
Copper	970.1		1000	97	957.4		1000	96				
Lead	257.8		250	103	248.7		250	99				
Manganese	1013		1000	101	997.0		1000	100				
Nickel	1006		1000	101	995.8		1000	100				
Selenium	244.6		250	98	246.3		250	99				
Silver	487.0		500	97	487.5		500	97				
Thallium	502.3		500	100	519.4		500	104				
Vanadium	1001		1000	100	983.3		1000	98				
Zinc	1003		1000	100	992.4		1000	99				
Phosphorus	977.7		1000	98	970.9		1000	97				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90L1HGDayVER_00859 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00977

Analyte	ICV 140-73581/20-A 05/26/2023 10:07				CCV 140-73581/23-A 05/26/2023 10:15				CCV 140-73581/23-A 05/26/2023 10:45			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.504		2.50	100	5.053		5.00	101	5.063		5.00	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90L1HGDayVER_00859 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00977

Analyte	CCV 140-73581/23-A 05/26/2023 11:16				CCV 140-73581/23-A 05/26/2023 11:46				CCV 140-73581/23-A 05/26/2023 12:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.019		5.00	100	4.967		5.00	99	5.078		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

ICV Source: 90L1HGDayVER_00859 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_00977

Analyte	CCV 140-73581/23-A 05/26/2023 12:47				CCV 140-73581/23-A 05/26/2023 13:18				CCV 140-73581/23-A 05/26/2023 13:50			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.995		5.00	100	5.020		5.00	100	5.016		5.00	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73629/8 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01165

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	58.34	J	97	50-150
Arsenic	10.0	9.790	J	98	50-150
Barium	10.0	9.680	J	97	50-150
Beryllium	5.00	5.160		103	50-150
Cadmium	5.00	5.030		101	50-150
Chromium	10.0	9.950	J	100	50-150
Cobalt	50.0	48.79	J	98	50-150
Copper	25.0	24.77	J	99	50-150
Lead	10.0	9.510	J	95	50-150
Manganese	15.0	14.56	J	97	50-150
Nickel	40.0	39.16	J	98	50-150
Selenium	10.0	8.050	J	81	50-150
Silver	10.0	9.640	J	96	50-150
Thallium	10.0	10.93		109	50-150
Vanadium	25.0	24.80	J	99	50-150
Zinc	20.0	21.52		108	50-150

Lab Sample ID: CRI 140-73629/61 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01165

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	61.31		102	50-150
Arsenic	10.0	9.560	J	96	50-150
Barium	10.0	10.42		104	50-150
Beryllium	5.00	5.480		110	50-150
Cadmium	5.00	5.470		109	50-150
Chromium	10.0	10.64		106	50-150
Cobalt	50.0	51.94		104	50-150
Copper	25.0	27.78		111	50-150
Lead	10.0	11.24		112	50-150
Manganese	15.0	15.72		105	50-150
Nickel	40.0	43.02		108	50-150
Selenium	10.0	11.09		111	50-150
Silver	10.0	10.44		104	50-150
Thallium	10.0	8.820	J	88	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73629/61 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01165

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	25.0	26.47		106	50-150
Zinc	20.0	23.12		116	50-150

Lab Sample ID: CRI 140-73629/83 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01165

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	56.50	J	94	50-150
Arsenic	10.0	10.09		101	50-150
Barium	10.0	10.16		102	50-150
Beryllium	5.00	5.220		104	50-150
Cadmium	5.00	5.230		105	50-150
Chromium	10.0	9.950	J	100	50-150
Cobalt	50.0	49.60	J	99	50-150
Copper	25.0	26.64		107	50-150
Lead	10.0	9.610	J	96	50-150
Manganese	15.0	15.39		103	50-150
Nickel	40.0	41.48		104	50-150
Selenium	10.0	12.85		129	50-150
Silver	10.0	10.07		101	50-150
Thallium	10.0	12.14		121	50-150
Vanadium	25.0	25.14		101	50-150
Zinc	20.0	23.78		119	50-150

Lab Sample ID: CRI 140-73674/10 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01166

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	56.48	J	94	50-150
Arsenic	10.0	9.840	J	98	50-150
Barium	10.0	9.580	J	96	50-150
Beryllium	5.00	5.070		101	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73674/10 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01166

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Cadmium	5.00	5.030		101	50-150
Chromium	10.0	9.460	J	95	50-150
Cobalt	50.0	49.10	J	98	50-150
Copper	25.0	25.88		104	50-150
Lead	10.0	9.270	J	93	50-150
Manganese	15.0	14.64	J	98	50-150
Nickel	40.0	40.33		101	50-150
Selenium	10.0	8.490	J	85	50-150
Silver	10.0	9.970	J	100	50-150
Thallium	10.0	9.750	J	98	50-150
Vanadium	25.0	24.56	J	98	50-150
Zinc	20.0	21.19		106	50-150

Lab Sample ID: CRI 140-73674/50 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01166

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	58.19	J	97	50-150
Arsenic	10.0	10.30		103	50-150
Barium	10.0	10.19		102	50-150
Beryllium	5.00	5.220		104	50-150
Cadmium	5.00	5.410		108	50-150
Chromium	10.0	9.840	J	98	50-150
Cobalt	50.0	50.59		101	50-150
Copper	25.0	28.64		115	50-150
Lead	10.0	10.07		101	50-150
Manganese	15.0	15.25		102	50-150
Nickel	40.0	42.39		106	50-150
Selenium	10.0	11.17		112	50-150
Silver	10.0	10.50		105	50-150
Thallium	10.0	11.69		117	50-150
Vanadium	25.0	25.77		103	50-150
Zinc	20.0	21.91		110	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-73674/73 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01166

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	58.78	J	98	50-150
Arsenic	10.0	9.720	J	97	50-150
Barium	10.0	10.25		103	50-150
Beryllium	5.00	5.240		105	50-150
Cadmium	5.00	5.480		110	50-150
Chromium	10.0	10.07		101	50-150
Cobalt	50.0	51.36		103	50-150
Copper	25.0	29.44		118	50-150
Lead	10.0	7.790	J	78	50-150
Manganese	15.0	15.50		103	50-150
Nickel	40.0	43.20		108	50-150
Selenium	10.0	14.17		142	50-150
Silver	10.0	10.81		108	50-150
Thallium	10.0	11.71		117	50-150
Vanadium	25.0	26.03		104	50-150
Zinc	20.0	22.27		111	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Method: 29/7470A Instrument ID: ADT

Lab Sample ID: CRA 140-73581/22-A Concentration Units: ug/L

CRQL Check Standard Source: 90L1HGDayCAL_00977

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.2003		100	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-73629/5 05/25/2023 10:45		CCB 140-73629/10 05/25/2023 11:09		CCB 140-73629/22 05/25/2023 12:08		CCB 140-73629/34 05/25/2023 13:07	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		ND		ND		ND	
Lead	10.0	ND		ND		ND		ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73629/60 05/25/2023 15:17		CCB 140-73629/73 05/25/2023 16:22		CCB 140-73629/85 05/25/2023 17:23			
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND			
Arsenic	10.0	ND		ND		ND			
Barium	10.0	ND		ND		ND			
Beryllium	5.00	ND		ND		ND			
Cadmium	5.00	ND		ND		ND			
Chromium	10.0	ND		ND		ND			
Cobalt	50.0	ND		ND		ND			
Copper	25.0	ND		ND		ND			
Lead	10.0	ND		ND		ND			
Manganese	15.0	ND		ND		ND			
Nickel	40.0	ND		ND		ND			
Selenium	10.0	ND		ND		ND			
Silver	10.0	ND		ND		ND			
Thallium	10.0	ND		ND		ND			
Vanadium	25.0	ND		ND		ND			
Zinc	20.0	ND		ND		ND			
Phosphorus	300	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-73674/5 05/26/2023 09:04		CCB 140-73674/12 05/26/2023 09:41		CCB 140-73674/24 05/26/2023 10:41		CCB 140-73674/36 05/26/2023 11:42	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		ND		ND		ND	
Lead	10.0	ND		ND		ND		ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73674/48 05/26/2023 12:54		CCB 140-73674/52 05/26/2023 13:14		CCB 140-73674/64 05/26/2023 14:20		CCB 140-73674/75 05/26/2023 15:15	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		3.500	J	3.430	J	3.840	J
Lead	10.0	ND		ND		ND		ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-73581/21-A 05/26/2023 10:10		CCB 140-73581/24-A 05/26/2023 10:17		CCB 140-73581/24-A 05/26/2023 10:48		CCB 140-73581/24-A 05/26/2023 11:18	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73581/24-A 05/26/2023 11:49		CCB 140-73581/24-A 05/26/2023 12:19		CCB 140-73581/24-A 05/26/2023 12:50		CCB 140-73581/24-A 05/26/2023 13:20	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-73581/24-A 05/26/2023 13:52							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73443/13-A

Instrument Code: DUO Batch No.: 73629

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	ND			29_6010C
7440-41-7	Beryllium	ND			29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	ND			29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	ND			29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73444/14-A

Instrument Code: DUO Batch No.: 73674

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	ND			29_6010C
7440-41-7	Beryllium	ND			29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	0.2450	J		29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	ND			29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73444/14-B

Instrument Code: ADT Batch No.: 73672

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73511/1-B

Instrument Code: ADT Batch No.: 73672

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73513/1-B

Instrument Code: ADT Batch No.: 73672

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73515/1-B

Instrument Code: ADT Batch No.: 73672

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-73593/1-B

Instrument Code: ADT Batch No.: 73672

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Lab Sample ID: ICSA 140-73629/6 Instrument ID: DUO

Lab File ID: F052523.asc ICS Source: 90XXICSAP_00082

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**6.06**	
Arsenic		**6.20**	
Barium		**2.10**	
Beryllium		**-0.370**	
Cadmium		**3.96**	
Chromium		**4.50**	
Cobalt		**-0.960**	
Copper		**1.04**	
Lead		**7.48**	
Manganese		**-0.0700**	
Nickel		**-5.97**	
Selenium		**-2.01**	
Silver		**-1.85**	
Thallium		**-5.46**	
Vanadium		**4.49**	
Zinc		**5.83**	
Aluminum	*500000*	*497420*	*99*
Boron		*-30.4*	
Calcium	*500000*	*459060*	*92*
Iron	*200000*	*182450*	*91*
Lithium		*9.72*	
Magnesium	*500000*	*496420*	*99*
Molybdenum		*-0.410*	
Phosphorus		*1.86*	
Potassium		*-37.1*	
Silicon		*-71.4*	
Sodium		*52.9*	
Strontium		*3.89*	
Tin		*2.46*	
Titanium		*11.6*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Lab Sample ID: ICSAB 140-73629/7 Instrument ID: DUO

Lab File ID: F052523.asc ICS Source: 90XXICSABP_00119

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**600**	**599**	**100**
Arsenic	**100**	**103**	**103**
Barium	**500**	**501**	**100**
Beryllium	**500**	**518**	**104**
Cadmium	**1000**	**966**	**97**
Chromium	**500**	**493**	**99**
Cobalt	**500**	**485**	**97**
Copper	**500**	**513**	**103**
Lead	**50.0**	**50.4**	**101**
Manganese	**500**	**504**	**101**
Nickel	**1000**	**965**	**96**
Selenium	**50.0**	**46.3**	**93**
Silver	**200**	**204**	**102**
Thallium	**100**	**94.7**	**95**
Vanadium	**500**	**501**	**100**
Zinc	**1000**	**1010**	**101**
Aluminum	*250000*	*250060*	*100*
Boron	*1000*	*977*	*98*
Calcium	*250000*	*243700*	*97*
Iron	*100000*	*97398*	*97*
Lithium	*1000*	*996*	*100*
Magnesium	*250000*	*254230*	*102*
Molybdenum	*1000*	*976*	*98*
Phosphorus	*1000*	*967*	*97*
Potassium	*10000*	*9912*	*99*
Silicon	*1000*	*873*	*87*
Sodium	*10000*	*9995*	*100*
Strontium	*1000*	*976*	*98*
Tin	*1000*	*968*	*97*
Titanium	*1000*	*998*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Lab Sample ID: ICSA 140-73674/8 Instrument ID: DUO

Lab File ID: F052623.asc ICS Source: 90XXICSASiP_00075

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**12.7**	
Arsenic		**9.32**	
Barium		**2.34**	
Beryllium		**-0.480**	
Cadmium		**3.17**	
Chromium		**6.25**	
Cobalt		**-9.77**	
Copper		**1.05**	
Lead		**-9.84**	
Manganese		**0.540**	
Nickel		**-15.7**	
Selenium		**3.73**	
Silver		**-1.12**	
Thallium		**-8.15**	
Vanadium		**5.61**	
Zinc		**8.38**	
Aluminum	*500000*	*476060*	*95*
Boron		*-5.62*	
Calcium	*500000*	*447170*	*89*
Iron	*200000*	*177340*	*89*
Lithium		*9.26*	
Magnesium	*500000*	*480970*	*96*
Molybdenum		*-0.860*	
Phosphorus		*-21.5*	
Potassium		*-71.1*	
Silicon	*900000*	*776910*	*86*
Sodium		*58.9*	
Strontium		*4.53*	
Tin		*-1.56*	
Titanium		*11.2*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Lab Sample ID: ICSAB 140-73674/9 Instrument ID: DUO

Lab File ID: F052623.asc ICS Source: 90XXICSABP_00119

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**600**	**585**	**98**
Arsenic	**100**	**99.2**	**99**
Barium	**500**	**489**	**98**
Beryllium	**500**	**501**	**100**
Cadmium	**1000**	**948**	**95**
Chromium	**500**	**477**	**95**
Cobalt	**500**	**474**	**95**
Copper	**500**	**508**	**102**
Lead	**50.0**	**46.3**	**93**
Manganese	**500**	**485**	**97**
Nickel	**1000**	**945**	**94**
Selenium	**50.0**	**46.4**	**93**
Silver	**200**	**201**	**100**
Thallium	**100**	**91.7**	**92**
Vanadium	**500**	**491**	**98**
Zinc	**1000**	**985**	**98**
Aluminum	*250000*	*240360*	*96*
Boron	*1000*	*949*	*95*
Calcium	*250000*	*234990*	*94*
Iron	*100000*	*92605*	*93*
Lithium	*1000*	*992*	*99*
Magnesium	*250000*	*242120*	*97*
Molybdenum	*1000*	*967*	*97*
Phosphorus	*1000*	*946*	*95*
Potassium	*10000*	*9669*	*97*
Sodium	*10000*	*9721*	*97*
Strontium	*1000*	*976*	*98*
Tin	*1000*	*931*	*93*
Titanium	*1000*	*955*	*95*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 4 MS
Lab ID: 140-31777-7 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	2.114		ND		2.00	106	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5A MS
Lab ID: 140-31777-8 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	2.038		ND		2.00	102	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5B MS
Lab ID: 140-31777-9 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.7830		ND		0.800	98	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5C MS
Lab ID: 140-31777-10 MS
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	2.854		1.35		1.40	107	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 4 MSD
Lab ID: 140-31777-7 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.085		2.00	104	80-120	1	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5A MSD
Lab ID: 140-31777-8 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.002		2.00	100	80-120	2	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5B MSD
Lab ID: 140-31777-9 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.7823		0.800	98	80-120	0	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 5C MSD
Lab ID: 140-31777-10 MSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.890		1.40	110	80-120	1	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 1,3 PDS | Lab ID: 140-31777-6 PDS

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	49.26		2.35	J	50.0	94	75-125		29/6010C
Arsenic	28.11		6.82		20.0	106	75-125		29/6010C
Barium	13.10		3.30		10.0	98	75-125		29/6010C
Beryllium	4.881		ND		5.00	98	75-125		29/6010C
Cadmium	7.727		3.08		5.00	93	75-125		29/6010C
Chromium	22.54		2.45		20.0	100	75-125		29/6010C
Cobalt	19.56		ND		20.0	98	75-125		29/6010C
Copper	33.58		9.77		25.0	95	75-125		29/6010C
Lead	34.76		13.8		20.0	105	75-125		29/6010C
Manganese	11.06		1.35	J	10.0	97	75-125		29/6010C
Nickel	105.8		0.854	J	100	105	75-125		29/6010C
Selenium	33.21		2.64		30.0	102	75-125		29/6010C
Silver	4.861		ND		5.00	97	75-125		29/6010C
Thallium	79.61		ND		80.0	100	75-125		29/6010C
Vanadium	20.04		0.100	J	20.0	100	75-125		29/6010C
Zinc	64.05		17.1		50.0	94	75-125		29/6010C
Mercury	1.088		0.0899	J	1.00	100	75-125		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 4 PDS | Lab ID: 140-31777-7 PDS

Lab Name: Eurofins Knoxville | Job No.: 140-31777-1

SDG No.:

Matrix: Air | Concentration Units: ug/Sample

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	46.72		ND		50.0	93	75-125		29/6010C
Arsenic	9.150		ND		10.0	92	75-125		29/6010C
Barium	10.77		1.06		10.0	97	75-125		29/6010C
Beryllium	4.972		ND		5.00	99	75-125		29/6010C
Cadmium	4.861		ND		5.00	97	75-125		29/6010C
Chromium	20.31		0.485	J	20.0	99	75-125		29/6010C
Cobalt	9.662		ND		10.0	97	75-125		29/6010C
Copper	28.67		5.10		25.0	94	75-125		29/6010C
Lead	10.09		0.821	J	10.0	93	75-125		29/6010C
Manganese	109.7		105		10.0	NC	75-125		29/6010C
Nickel	49.08		0.627	J	50.0	97	75-125		29/6010C
Selenium	13.86		1.02		15.0	86	75-125		29/6010C
Silver	4.575		ND		5.00	92	75-125		29/6010C
Thallium	37.10		ND		40.0	93	75-125		29/6010C
Vanadium	19.54		ND		20.0	98	75-125		29/6010C
Zinc	51.44		4.39		50.0	94	75-125		29/6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 1,3 PDSD
Lab ID: 140-31777-6 PDSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	51.16		50.0	98	75-125	4			29/6010C
Arsenic	28.43		20.0	108	75-125	1			29/6010C
Barium	13.75		10.0	105	75-125	5			29/6010C
Beryllium	5.179		5.00	104	75-125	6			29/6010C
Cadmium	8.107		5.00	100	75-125	5			29/6010C
Chromium	24.05		20.0	108	75-125	6			29/6010C
Cobalt	19.59		20.0	98	75-125	0.2			29/6010C
Copper	35.23		25.0	102	75-125	5			29/6010C
Lead	34.69		20.0	105	75-125	0.2			29/6010C
Manganese	11.69		10.0	103	75-125	6			29/6010C
Nickel	105.8		100	105	75-125	0			29/6010C
Selenium	33.45		30.0	103	75-125	0.7			29/6010C
Silver	5.203		5.00	104	75-125	7			29/6010C
Thallium	79.62		80.0	100	75-125	0			29/6010C
Vanadium	21.33		20.0	106	75-125	6			29/6010C
Zinc	67.51		50.0	101	75-125	5			29/6010C
Mercury	1.075		1.00	99	75-125	1			29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: VF29-2,CONTAINER 4 PDSD
Lab ID: 140-31777-7 PDSD
Lab Name: Eurofins Knoxville
Job No.: 140-31777-1
SDG No.:
Matrix: Air
Concentration Units: ug/Sample

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	47.79		50.0	96	75-125	2			29/6010C
Arsenic	9.859		10.0	99	75-125	7			29/6010C
Barium	11.28		10.0	102	75-125	5			29/6010C
Beryllium	5.237		5.00	105	75-125	5			29/6010C
Cadmium	5.120		5.00	102	75-125	5			29/6010C
Chromium	21.21		20.0	104	75-125	4			29/6010C
Cobalt	10.15		10.0	102	75-125	5			29/6010C
Copper	29.76		25.0	99	75-125	4			29/6010C
Lead	10.67		10.0	98	75-125	6			29/6010C
Manganese	111.8		10.0	NC	75-125	2			29/6010C
Nickel	51.68		50.0	102	75-125	5			29/6010C
Selenium	14.53		15.0	90	75-125	5			29/6010C
Silver	4.800		5.00	96	75-125	5			29/6010C
Thallium	38.75		40.0	97	75-125	4			29/6010C
Vanadium	20.50		20.0	102	75-125	5			29/6010C
Zinc	53.89		50.0	99	75-125	5			29/6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73443/14-A

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	47.53		95	80	120		29/6010C
Arsenic	10.0	9.492		95	80	120		29/6010C
Barium	10.0	9.957		100	80	120		29/6010C
Beryllium	5.00	5.157		103	80	120		29/6010C
Cadmium	5.00	4.910		98	80	120		29/6010C
Chromium	20.0	19.91		100	80	120		29/6010C
Cobalt	10.0	9.848		98	80	120		29/6010C
Copper	25.0	23.74		95	80	120		29/6010C
Lead	10.0	9.570		96	80	120		29/6010C
Manganese	10.0	9.807		98	80	120		29/6010C
Nickel	50.0	49.41		99	80	120		29/6010C
Selenium	15.0	13.65		91	80	120		29/6010C
Silver	5.00	4.677		94	80	120		29/6010C
Thallium	40.0	38.41		96	80	120		29/6010C
Vanadium	20.0	19.61		98	80	120		29/6010C
Zinc	50.0	49.41		99	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-73443/15-A

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	48.47		50.0	97	80-120	2	20		29/6010C
Arsenic	9.696		10.0	97	80-120	2	20		29/6010C
Barium	10.08		10.0	101	80-120	1	20		29/6010C
Beryllium	5.222		5.00	104	80-120	1	20		29/6010C
Cadmium	4.982		5.00	100	80-120	1	20		29/6010C
Chromium	20.38		20.0	102	80-120	2	20		29/6010C
Cobalt	9.990		10.0	100	80-120	1	20		29/6010C
Copper	24.31		25.0	97	80-120	2	20		29/6010C
Lead	9.901		10.0	99	80-120	3	20		29/6010C
Manganese	9.964		10.0	100	80-120	2	20		29/6010C
Nickel	50.14		50.0	100	80-120	1	20		29/6010C
Selenium	13.82		15.0	92	80-120	1	20		29/6010C
Silver	4.800		5.00	96	80-120	3	20		29/6010C
Thallium	38.96		40.0	97	80-120	1	20		29/6010C
Vanadium	20.06		20.0	100	80-120	2	20		29/6010C
Zinc	50.08		50.0	100	80-120	1	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73444/15-A

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	49.85		100	80	120		29/6010C
Arsenic	10.0	10.63		106	80	120		29/6010C
Barium	10.0	10.21		102	80	120		29/6010C
Beryllium	5.00	4.981		100	80	120		29/6010C
Cadmium	5.00	5.054		101	80	120		29/6010C
Chromium	20.0	20.34		102	80	120		29/6010C
Cobalt	10.0	10.17		102	80	120		29/6010C
Copper	25.0	24.98		100	80	120		29/6010C
Lead	10.0	9.997		100	80	120		29/6010C
Manganese	10.0	9.929		99	80	120		29/6010C
Nickel	50.0	51.06		102	80	120		29/6010C
Selenium	15.0	14.55		97	80	120		29/6010C
Silver	5.00	4.956		99	80	120		29/6010C
Thallium	40.0	40.16		100	80	120		29/6010C
Vanadium	20.0	20.11		101	80	120		29/6010C
Zinc	50.0	51.54		103	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-73444/16-A

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00023

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	49.12		50.0	98	80-120	1	20		29/6010C
Arsenic	10.43		10.0	104	80-120	2	20		29/6010C
Barium	10.10		10.0	101	80-120	1	20		29/6010C
Beryllium	4.879		5.00	98	80-120	2	20		29/6010C
Cadmium	4.949		5.00	99	80-120	2	20		29/6010C
Chromium	20.08		20.0	100	80-120	1	20		29/6010C
Cobalt	9.939		10.0	99	80-120	2	20		29/6010C
Copper	24.55		25.0	98	80-120	2	20		29/6010C
Lead	9.935		10.0	99	80-120	1	20		29/6010C
Manganese	9.701		10.0	97	80-120	2	20		29/6010C
Nickel	49.94		50.0	100	80-120	2	20		29/6010C
Selenium	14.07		15.0	94	80-120	3	20		29/6010C
Silver	4.828		5.00	97	80-120	3	20		29/6010C
Thallium	39.19		40.0	98	80-120	2	20		29/6010C
Vanadium	19.83		20.0	99	80-120	1	20		29/6010C
Zinc	50.39		50.0	101	80-120	2	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73444/15-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00090

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.899		98	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-73444/16-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00090

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	4.904		5.00	98	80-120	0	20		29/7470A

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73511/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00977

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.011		100	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73513/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00977

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.500	0.5031		101	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73515/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00977

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.25	1.233		99	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-73593/2-B

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_00977

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	10.0	10.20		102	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-31777-6

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-31777-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.35	J	ND		NC		29/6010C
Arsenic	6.82		ND		NC		29/6010C
Barium	3.30		ND		NC		29/6010C
Beryllium	ND		ND		NC		29/6010C
Cadmium	3.08		3.375		NC		29/6010C
Chromium	2.45		2.415	J	NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	9.77		10.54	J	NC		29/6010C
Lead	13.8		11.25		NC		29/6010C
Manganese	1.35	J	1.370	J	NC		29/6010C
Nickel	0.854	J	ND		NC		29/6010C
Selenium	2.64		ND		NC		29/6010C
Silver	ND		0.4650	J	NC		29/6010C
Thallium	ND		ND		NC		29/6010C
Vanadium	0.100	J	ND		NC		29/6010C
Zinc	17.1		17.97		NC		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-31777-7

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-31777-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	ND		ND		NC		29/6010C
Arsenic	ND		ND		NC		29/6010C
Barium	1.06		1.225	J	NC		29/6010C
Beryllium	ND		ND		NC		29/6010C
Cadmium	ND		ND		NC		29/6010C
Chromium	0.485	J	ND		NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	5.10		5.925	J	NC		29/6010C
Lead	0.821	J	ND		NC		29/6010C
Manganese	105		111.9		6.8		29/6010C
Nickel	0.627	J	ND		NC		29/6010C
Selenium	1.02		ND		NC		29/6010C
Silver	ND		ND		NC		29/6010C
Thallium	ND		ND		NC		29/6010C
Vanadium	ND		ND		NC		29/6010C
Zinc	4.39		5.420	J	NC		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:04

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	0.84
Arsenic	189.042	1	0.39
Barium	455.403	1	0.15
Beryllium	313.042	0.5	0.047
Cadmium	226.502	0.5	0.053
Chromium	267.716	1	0.35
Cobalt	228.616	5	0.1
Copper	324.754	2.5	0.58
Lead	220.353	1	0.48
Manganese	257.610	1.5	0.18
Nickel	231.604	4	0.26
Selenium	196.090	1	0.39
Silver	328.068	1	0.35
Thallium	190.856	1	0.34
Vanadium	292.402	2.5	0.1
Zinc	213.856	2	0.94

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:11

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	1.1
Arsenic	189.042	1	0.89
Barium	455.403	1	0.86
Beryllium	313.042	0.5	0.016
Cadmium	226.502	0.5	0.28
Chromium	267.716	1	0.36
Cobalt	228.616	5	1
Copper	324.754	2.5	0.21
Lead	220.353	1	0.47
Manganese	257.61	1.5	0.12
Nickel	231.604	4	0.25
Selenium	196.09	1	0.66
Silver	328.068	1	0.081
Thallium	190.856	1	0.48
Vanadium	292.402	2.5	0.073
Zinc	213.856	2	0.9

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:47

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.4	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:48

Prep Method: AT Prep (Empty)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.06

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:36

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.084

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:37

Prep Method: AT Prep (HCl)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.05	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:51

Prep Method: AT Prep (KMnO4)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.02	0.006

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Aluminum	308.215														
Antimony	206.833									0.016177					
Arsenic	189.042									0		-0.000097			
Barium	455.403														
Beryllium	313.042														
Boron	249.678								0			0			
Cadmium	226.502											0.000077			
Chromium	267.716	0													
Cobalt	228.616														
Copper	324.754											-0.000081			
Lead	220.353	-0.000024							-0.000426		0	0.000014			
Manganese	257.610											0			0
Nickel	231.604											0			
Selenium	196.090											-0.000078			
Silicon	250.690								0.008472						
Silver	328.068														
Sodium	589.592														
Strontium	421.552						0								
Thallium	190.856								0.003758	0		0			
Titanium	334.941						0								
Tungsten	207.911														
Vanadium	292.402									-0.001247		0			
Zinc	213.856										0.000759	0.000102			

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V
Aluminum	308.215		0.028204												0.051626
Antimony	206.833										-0.002691		0		-0.002687
Arsenic	189.042		0							-0.000027					
Barium	455.403														
Beryllium	313.042														0.000266
Boron	249.678														
Cadmium	226.502				-0.000088										
Chromium	267.716	0													
Cobalt	228.616		-0.001775							-0.000008			0.002074		
Copper	324.754														
Lead	220.353		-0.001244							0.000093			0		
Manganese	257.610														
Nickel	231.604		0							-0.000012				0	
Selenium	196.090	0.000675								0.000010					
Silicon	250.690										0				
Silver	328.068														-0.000526
Sodium	589.592														
Strontium	421.552														
Thallium	190.856	-0.000836								-0.000014			-0.000803		0.001751
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402		0												
Zinc	213.856				0.006512										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-31777-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 04/26/2023

Analyte	Wave Length	W	Zn												
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	249.678														
Cadmium	226.502														
Chromium	267.716														
Cobalt	228.616														
Copper	324.754														
Lead	220.353														
Manganese	257.610														
Nickel	231.604														
Selenium	196.090														
Silicon	250.690														
Silver	328.068														
Sodium	589.592														
Strontium	421.552														
Thallium	190.856														
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402														
Zinc	213.856														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Knoxville Job No: 140-31777-1

SDG No.:

Instrument ID: DUO Date: 03/21/2022 14:56

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		40000	29/6010C
Arsenic		30000	29/6010C
Barium		30000	29/6010C
Beryllium		4000	29/6010C
Cadmium		40000	29/6010C
Chromium		40000	29/6010C
Cobalt		40000	29/6010C
Copper		40000	29/6010C
Lead		90000	29/6010C
Manganese		20000	29/6010C
Nickel		80000	29/6010C
Selenium		30000	29/6010C
Silver		3000	29/6010C
Thallium		80000	29/6010C
Vanadium		20000	29/6010C
Zinc		10000	29/6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31777-2	05/22/2023 08:00	73443	1		100
140-31777-7	05/22/2023 08:00	73443	1		100
140-31777-12	05/22/2023 08:00	73443	1		100
140-31777-18	05/22/2023 08:00	73443	1		100
140-31777-19	05/22/2023 08:00	73443	1		100
MB 140-73443/13-A	05/22/2023 08:00	73443	1		100
LCS 140-73443/14-A	05/22/2023 08:00	73443	1		100
LCSD 140-73443/15-A	05/22/2023 08:00	73443	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31777-1	05/22/2023 08:00	73444	1		100
140-31777-6	05/22/2023 08:00	73444	1		100
140-31777-11	05/22/2023 08:00	73444	1		100
140-31777-16	05/22/2023 08:00	73444	1		100
140-31777-17	05/22/2023 08:00	73444	1		100
MB 140-73444/14-A	05/22/2023 08:00	73444	1		100
LCS 140-73444/15-A	05/22/2023 08:00	73444	1		100
LCSD 140-73444/16-A	05/22/2023 08:00	73444	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-31777-1	05/22/2023 08:00	73444	1		100
140-31777-6	05/22/2023 08:00	73444	1		100
140-31777-11	05/22/2023 08:00	73444	1		100
140-31777-16	05/22/2023 08:00	73444	1		100
140-31777-17	05/22/2023 08:00	73444	1		100
MB 140-73444/14-B	05/22/2023 08:00	73444	1		100
LCS 140-73444/15-B	05/22/2023 08:00	73444	1		100
LCSD 140-73444/16-B	05/22/2023 08:00	73444	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (Empty)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-73511/1-B	05/25/2023 10:30	73581		2.5	50
LCS 140-73511/2-B	05/25/2023 10:30	73581		2.5	50
140-31777-3	05/25/2023 10:30	73581		2.5	50
140-31777-8	05/25/2023 10:30	73581		2.5	50
140-31777-8 MS	05/25/2023 10:30	73581		2.5	50
140-31777-8 MSD	05/25/2023 10:30	73581		2.5	50
140-31777-13	05/25/2023 10:30	73581		2.5	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (KMnO4)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-73513/1-B	05/25/2023 08:20	73582		25	50
LCS 140-73513/2-B	05/25/2023 08:20	73582		25	50
140-31777-4	05/25/2023 08:20	73582		25	50
140-31777-9	05/25/2023 08:20	73582		25	50
140-31777-9 MS	05/25/2023 08:20	73582		25	50
140-31777-9 MSD	05/25/2023 08:20	73582		25	50
140-31777-14	05/25/2023 08:20	73582		25	50
140-31777-20	05/25/2023 08:20	73582		25	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (HCl)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-73515/1-B	05/25/2023 10:30	73583		10	50
LCS 140-73515/2-B	05/25/2023 10:30	73583		10	50
140-31777-5	05/25/2023 10:30	73583		10	50
140-31777-10	05/25/2023 10:30	73583		10	50
140-31777-10 MS	05/25/2023 10:30	73583		10	50
140-31777-10 MSD	05/25/2023 10:30	73583		10	50
140-31777-15	05/25/2023 10:30	73583		10	50
140-31777-21	05/25/2023 10:30	73583		10	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 140-73593/1-B	05/25/2023 10:30	73595		2.5	50
LCS 140-73593/2-B	05/25/2023 10:30	73595		2.5	50
140-31777-2	05/25/2023 10:30	73595		2.5	50
140-31777-7	05/25/2023 10:30	73595		2.5	50
140-31777-7 MS	05/25/2023 10:30	73595		2.5	50
140-31777-7 MSD	05/25/2023 10:30	73595		2.5	50
140-31777-12	05/25/2023 10:30	73595		2.5	50
140-31777-18	05/25/2023 10:30	73595		2.5	50
140-31777-19	05/25/2023 10:30	73595		2.5	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/25/2023 10:25 End Date: 05/25/2023 17:23

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn									
ICIS 140-73629/1	1		10:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			10:30																									
CCVL 140-73629/3	1		10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICV 140-73629/4	1		10:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICB 140-73629/5	1		10:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICSA 140-73629/6	1		10:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICSAB 140-73629/7	1		10:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CRI 140-73629/8	1		11:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 140-73629/9	1		11:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73629/10	1		11:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			11:14																									
ZZZZZZ			11:20																									
ZZZZZZ			11:24																									
ZZZZZZ			11:29																									
ZZZZZZ			11:34																									
ZZZZZZ			11:39																									
ZZZZZZ			11:44																									
ZZZZZZ			11:49																									
MB 140-73443/13-A	1	T	11:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
LCS 140-73443/14-A	1	T	11:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 140-73629/21	1		12:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73629/22	1		12:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
LCSD 140-73443/15-A	1	T	12:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			12:18																									
ZZZZZZ			12:23																									
ZZZZZZ			12:28																									
ZZZZZZ			12:33																									
ZZZZZZ			12:38																									
ZZZZZZ			12:43																									
ZZZZZZ			12:47																									
ZZZZZZ			12:52																									
ZZZZZZ			12:57																									
CCV 140-73629/33	1		13:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73629/34	1		13:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			13:12																									
ZZZZZZ			13:17																									
ZZZZZZ			13:22																									
ZZZZZZ			13:27																									
ZZZZZZ			13:32																									
ZZZZZZ			13:37																									
ZZZZZZ			13:42																									
ZZZZZZ			13:46																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/25/2023 10:25 End Date: 05/25/2023 17:23

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn								
ZZZZZZ			13:51																								
ZZZZZZ			13:56																								
CCV 140-73629/45			14:01																								
ZZZZZZ			14:06																								
CCB 140-73629/47			14:13																								
ZZZZZZ			14:18																								
ZZZZZZ			14:23																								
ZZZZZZ			14:28																								
ZZZZZZ			14:33																								
ZZZZZZ			14:38																								
ZZZZZZ			14:43																								
ZZZZZZ			14:48																								
ZZZZZZ			14:53																								
ZZZZZZ			14:57																								
ZZZZZZ			15:02																								
ZZZZZZ			15:07																								
CCV 140-73629/59	1		15:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73629/60	1		15:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 140-73629/61	1		15:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			15:28																								
ZZZZZZ			15:33																								
ZZZZZZ			15:38																								
ZZZZZZ			15:43																								
ZZZZZZ			15:48																								
ZZZZZZ			15:53																								
ZZZZZZ			15:58																								
ZZZZZZ			16:03																								
ZZZZZZ			16:07																								
140-31777-2	1	T	16:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73629/72	1		16:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73629/73	1		16:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-7	1	T	16:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-7 PDS	1	T	16:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-7 PDSD	1	T	16:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-12	1	T	16:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-18	1	T	16:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-19	1	T	16:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
140-31777-7 SD	5	T	16:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			17:03																								
ZZZZZZ			17:08																								
CRI 140-73629/83	1		17:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73629/84	1		17:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/25/2023 10:25 End Date: 05/25/2023 17:23

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn											
CCB 140-73629/85	1		17:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/26/2023 08:44 End Date: 05/26/2023 15:20

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn								
ICIS 140-73674/1	1		08:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			08:49																								
CCVL 140-73674/3	1		08:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 140-73674/4	1		08:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICB 140-73674/5	1		09:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			09:09																								
ZZZZZZ			09:14																								
ICSA 140-73674/8	1		09:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 140-73674/9	1		09:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 140-73674/10	1		09:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 140-73674/11	1		09:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73674/12	1		09:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			09:46																								
ZZZZZZ			09:52																								
ZZZZZZ			09:56																								
MB 140-73444/14-A	1	T	10:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 140-73444/15-A	1	T	10:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCSD 140-73444/16-A	1	T	10:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			10:16																								
ZZZZZZ			10:21																								
ZZZZZZ			10:26																								
ZZZZZZ			10:31																								
CCV 140-73674/23	1		10:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73674/24	1		10:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			10:46																								
ZZZZZZ			10:51																								
ZZZZZZ			10:56																								
ZZZZZZ			11:01																								
ZZZZZZ			11:06																								
ZZZZZZ			11:12																								
ZZZZZZ			11:17																								
ZZZZZZ			11:22																								
ZZZZZZ			11:27																								
ZZZZZZ			11:32																								
CCV 140-73674/35	1		11:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 140-73674/36	1		11:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			11:47																								
ZZZZZZ			11:52																								
ZZZZZZ			11:57																								
140-31777-1	1	T	12:02	X		X	X	X		X	X	X			X			X	X								
140-31777-6	1	T	12:07	X		X	X	X		X	X	X			X			X	X								
140-31777-6 PDS	1	T	12:12	X		X	X	X		X	X	X			X			X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 05/26/2023 08:44 End Date: 05/26/2023 15:20

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn									
140-31777-6 PDSD	1	T	12:17	X		X	X	X		X	X	X			X			X	X									
140-31777-11	1	T	12:22	X		X	X	X		X	X	X			X			X	X									
140-31777-16	1	T	12:27	X		X	X	X		X	X	X			X			X	X									
140-31777-6 SD	5	T	12:45	X		X	X	X		X	X	X			X			X	X									
CCV 140-73674/47	1		12:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73674/48	1		12:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
140-31777-17	1	T	12:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CRI 140-73674/50	1		13:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 140-73674/51	1		13:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73674/52	1		13:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			13:26																									
ZZZZZZ			13:31																									
ZZZZZZ			13:36																									
ZZZZZZ			13:41																									
ZZZZZZ			13:45																									
ZZZZZZ			13:50																									
ZZZZZZ			13:55																									
ZZZZZZ			14:00																									
ZZZZZZ			14:05																									
ZZZZZZ			14:10																									
CCV 140-73674/63	1		14:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73674/64	1		14:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			14:25																									
140-31777-1	2	T	14:30		X				X				X	X		X	X											
140-31777-6	2	T	14:35		X				X				X	X		X	X											
140-31777-6 PDS	2	T	14:40		X				X				X	X		X	X											
140-31777-6 PDSD	2	T	14:45		X				X				X	X		X	X											
140-31777-11	2	T	14:50		X				X				X	X		X	X											
140-31777-16	2	T	14:55		X				X				X	X		X	X											
140-31777-6 SD	10	T	15:00		X				X				X	X		X	X											
CRI 140-73674/73	1		15:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 140-73674/74	1		15:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 140-73674/75	1		15:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			15:20																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/26/2023 09:49 End Date: 05/26/2023 14:02

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			09:49	
ZZZZZZ			09:52	
ZZZZZZ			09:54	
ZZZZZZ			09:57	
ZZZZZZ			10:00	
ZZZZZZ			10:02	
ZZZZZZ			10:05	
ICV 140-73581/20-A	1		10:07	X
ICB 140-73581/21-A	1		10:10	X
CRA 140-73581/22-A	1		10:12	X
CCV 140-73581/23-A	1		10:15	X
CCB 140-73581/24-A	1		10:17	X
ZZZZZZ			10:20	
ZZZZZZ			10:22	
ZZZZZZ			10:25	
ZZZZZZ			10:27	
ZZZZZZ			10:30	
ZZZZZZ			10:33	
ZZZZZZ			10:35	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
MB 140-73444/14-B	1	T	10:43	X
CCV 140-73581/23-A	1		10:45	X
CCB 140-73581/24-A	1		10:48	X
LCS 140-73444/15-B	1	T	10:50	X
LCSD 140-73444/16-B	1	T	10:53	X
140-31777-1	1	T	10:55	X
140-31777-6	1	T	10:58	X
140-31777-6 PDS	1	T	11:00	X
140-31777-6 PDSD	1	T	11:03	X
140-31777-11	1	T	11:06	X
140-31777-16	1	T	11:08	X
140-31777-17	1	T	11:11	X
MB 140-73511/1-B	1	T	11:13	X
CCV 140-73581/23-A	1		11:16	X
CCB 140-73581/24-A	1		11:18	X
LCS 140-73511/2-B	1	T	11:21	X
140-31777-3	1	T	11:23	X
140-31777-8	1	T	11:26	X
140-31777-8 MS	1	T	11:28	X
140-31777-8 MSD	1	T	11:31	X
140-31777-13	1	T	11:34	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/26/2023 09:49 End Date: 05/26/2023 14:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:36																									
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:44																									
CCV 140-73581/23-A	1		11:46	X																								
CCB 140-73581/24-A	1		11:49	X																								
ZZZZZZ			11:51																									
MB 140-73513/1-B	1	T	11:54	X																								
LCS 140-73513/2-B	1	T	11:57	X																								
140-31777-4	1	T	11:59	X																								
140-31777-9	1	T	12:02	X																								
140-31777-9 MS	1	T	12:04	X																								
140-31777-9 MSD	1	T	12:07	X																								
140-31777-14	1	T	12:09	X																								
140-31777-20	1	T	12:12	X																								
ZZZZZZ			12:14																									
CCV 140-73581/23-A	1		12:17	X																								
CCB 140-73581/24-A	1		12:19	X																								
ZZZZZZ			12:22																									
ZZZZZZ			12:24																									
ZZZZZZ			12:27																									
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:35																									
MB 140-73515/1-B	1	T	12:37	X																								
LCS 140-73515/2-B	1	T	12:40	X																								
140-31777-5	1	T	12:42	X																								
140-31777-10	1	T	12:45	X																								
CCV 140-73581/23-A	1		12:47	X																								
CCB 140-73581/24-A	1		12:50	X																								
140-31777-10 MS	1	T	12:52	X																								
140-31777-10 MSD	1	T	12:55	X																								
140-31777-15	1	T	12:58	X																								
140-31777-21	1	T	13:00	X																								
ZZZZZZ			13:03																									
ZZZZZZ			13:05																									
ZZZZZZ			13:08																									
ZZZZZZ			13:10																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
CCV 140-73581/23-A	1		13:18	X																								
CCB 140-73581/24-A	1		13:20	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 05/26/2023 09:49 End Date: 05/26/2023 14:02

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
MB 140-73593/1-B	1	T	13:23	X																								
LCS 140-73593/2-B	1	T	13:26	X																								
140-31777-2	1	T	13:28	X																								
140-31777-7	1	T	13:31	X																								
140-31777-7 MS	1	T	13:33	X																								
140-31777-7 MSD	1	T	13:36	X																								
140-31777-12	1	T	13:38	X																								
140-31777-18	1	T	13:41	X																								
140-31777-19	1	T	13:43	X																								
CCV 140-73581/23-A			13:46																									
CCV 140-73581/23-A	1		13:50	X																								
CCB 140-73581/24-A	1		13:52	X																								
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
CCV 140-73581/23-A			14:00																									
CCB 140-73581/24-A			14:02																									

Prep Types:
T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.: Analysis Batch No.: 73629

ICP Instrument ID: DUO Start Date: 05/25/2023 End Date: 05/25/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
ICIS 140-73629/1	10:25										
CCVL 140-73629/3	10:35	100		99							
ICV 140-73629/4	10:40	100		101							
ICB 140-73629/5	10:45	101		100							
ICSA 140-73629/6	10:50	95		96							
ICSAB 140-73629/7	10:55	97		97							
CRI 140-73629/8	11:00	101		101							
CCV 140-73629/9	11:05	99		100							
CCB 140-73629/10	11:09	102		101							
MB 140-73443/13-A	11:53	100		101							
LCS 140-73443/14-A	11:58	100		100							
CCV 140-73629/21	12:03	100		101							
CCB 140-73629/22	12:08	102		102							
LCSD 140-73443/15-A	12:13	99		99							
CCV 140-73629/33	13:02	101		101							
CCB 140-73629/34	13:07	104		103							
CCV 140-73629/59	15:12	100		99							
CCB 140-73629/60	15:17	103		101							
CRI 140-73629/61	15:23	99		97							
140-31777-2	16:12	102		102							
CCV 140-73629/72	16:17	98		98							
CCB 140-73629/73	16:22	100		99							
140-31777-7	16:29	100		99							
140-31777-7 PDS	16:34	100		100							
140-31777-7 PDSD	16:39	98		99							
140-31777-12	16:44	101		101							
140-31777-18	16:48	99		98							
140-31777-19	16:53	100		99							
140-31777-7 SD	16:58	100		98							
CRI 140-73629/83	17:13	101		98							
CCV 140-73629/84	17:18	97		96							
CCB 140-73629/85	17:23	100		98							
IS Name on Instrument											

15A-IN
ICP INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.: Analysis Batch No.: 73629

ICP Instrument ID: DUO Start Date: 05/25/2023 End Date: 05/25/2023

Analyte	Wavelength	Internal Standard Used:				
		Element Y 224.306	Element Y 371.030	Element Y 371.030	Element	Element
Antimony	206.833	X				
Arsenic	189.042	X				
Barium	455.403			X		
Beryllium	313.042		X			
Cadmium	226.502	X				
Chromium	267.716		X			
Cobalt	228.616	X				
Copper	324.754		X			
Lead	220.353	X				
Manganese	257.610		X			
Nickel	231.604	X				
Selenium	196.090	X				
Silver	328.068		X			
Thallium	190.856	X				
Vanadium	292.402		X			
Zinc	213.856	X				
Aluminum	308.215			X		
Boron	249.678		X			
Calcium	317.933			X		
Iron	259.940			X		
Lithium	670.784			X		
Magnesium	279.079			X		
Molybdenum	202.030	X				
Phosphorus	178.284	X				
Potassium	766.490			X		
Silicon	250.690			X		
Sodium	589.592			X		
Strontium	421.552			X		
Tin	189.989	X				
Titanium	334.941			X		
Internal Standard Name on Instrument		Y_2243A	Y_3710A	Y_3710R		

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.: Analysis Batch No.: 73674

ICP Instrument ID: DUO Start Date: 05/26/2023 End Date: 05/26/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
ICIS 140-73674/1	08:44										
CCVL 140-73674/3	08:54	98		98							
ICV 140-73674/4	08:59	98		99							
ICB 140-73674/5	09:04	99		99							
ICSA 140-73674/8	09:22	93		94							
ICSAB 140-73674/9	09:27	95		96							
CRI 140-73674/10	09:32	98		98							
CCV 140-73674/11	09:37	96		97							
CCB 140-73674/12	09:41	99		99							
MB 140-73444/14-A	10:01	98		99							
LCS 140-73444/15-A	10:06	96		97							
LCSD 140-73444/16-A	10:11	97		99							
CCV 140-73674/23	10:36	97		98							
CCB 140-73674/24	10:41	99		99							
CCV 140-73674/35	11:37	96		95							
CCB 140-73674/36	11:42	98		96							
140-31777-1	12:02	100		99							
140-31777-6	12:07	100		98							
140-31777-6 PDS	12:12	100		98							
140-31777-6 PDSD	12:17	98		96							
140-31777-11	12:22	100		98							
140-31777-16	12:27	99		98							
140-31777-6 SD	12:45	99		97							
CCV 140-73674/47	12:50	96		95							
CCB 140-73674/48	12:54	99		97							
140-31777-17	12:59	97		96							
CRI 140-73674/50	13:04	94		92							
CCV 140-73674/51	13:09	91		91							
CCB 140-73674/52	13:14	95		93							
CCV 140-73674/63	14:15	93		92							
CCB 140-73674/64	14:20	94		93							
140-31777-1	14:30	94		93							
140-31777-6	14:35	94		93							
140-31777-6 PDS	14:40	93		92							
140-31777-6 PDSD	14:45	93		92							
140-31777-11	14:50	94		94							
140-31777-16	14:55	93		92							
140-31777-6 SD	15:00	93		92							
CRI 140-73674/73	15:05	93		92							
CCV 140-73674/74	15:10	91		91							
CCB 140-73674/75	15:15	93		92							
IS Name on Instrument											

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.: Analysis Batch No.: 73674

ICP Instrument ID: DUO Start Date: 05/26/2023 End Date: 05/26/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q

15A-IN
ICP INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.: Analysis Batch No.: 73674

ICP Instrument ID: DUO Start Date: 05/26/2023 End Date: 05/26/2023

Analyte	Wavelength	Internal Standard Used:				
		Element Y 224.306	Element Y 371.030	Element Y 371.030	Element	Element
Antimony	206.833	X				
Arsenic	189.042	X				
Barium	455.403			X		
Beryllium	313.042		X			
Cadmium	226.502	X				
Chromium	267.716		X			
Cobalt	228.616	X				
Copper	324.754		X			
Lead	220.353		X			
Manganese	257.610		X			
Nickel	231.604	X				
Selenium	196.090	X				
Silver	328.068		X			
Thallium	190.856	X				
Vanadium	292.402		X			
Zinc	213.856	X				
Aluminum	308.215			X		
Boron	249.678		X			
Calcium	317.933			X		
Iron	259.940			X		
Lithium	670.784			X		
Magnesium	279.079			X		
Molybdenum	202.030	X				
Phosphorus	178.284	X				
Potassium	766.490			X		
Silicon	250.690			X		
Sodium	589.592			X		
Strontium	421.552			X		
Tin	189.989	X				
Titanium	334.941			X		
Internal Standard Name on Instrument		Y_2243A	Y_3710A	Y_3710R		

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73443 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	BH_pH	BH_IV	90SPKNX10P 00023	90SPKNX8P 00022
140-31777-A-2	VF29-1,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	320 mL		
140-31777-A-7	VF29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	320 mL		
140-31777-A-12	VF29-3,CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	330 mL		
140-31777-A-18	BLANK, CONTAINER 8B	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	5 SU	100 mL		
140-31777-A-19	BLANK, CONTAINER 9	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	100 mL		
MB 140-73443/13		AT Prep (BH), 29/6010C		1 Sample	100 mL				
LCS 140-73443/14		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL
LCSD 140-73443/15		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00023	AnalysisComment				
140-31777-A-2	VF29-1,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31777-A-7	VF29-2,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31777-A-12	VF29-3,CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-31777-A-18	BLANK, CONTAINER 8B	AT Prep (BH), 29/6010C	T		add 1ml HN03 to pH<2				
140-31777-A-19	BLANK, CONTAINER 9	AT Prep (BH), 29/6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73443 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00023	AnalysisComment				
MB 140-73443/13		AT Prep (BH), 29/6010C							
LCS 140-73443/14		AT Prep (BH), 29/6010C		1 mL					
LCSD 140-73443/15		AT Prep (BH), 29/6010C		1 mL					

Batch Notes	
Start date/time for BH digestion	05/22/2023 08:10
End date/time for BH digestion	05/24/2023 15:30
Nitric Acid ID	588169 16ml
Hydrogen Peroxide ID	576522 0.540ml
Hydrochloric Acid ID	586104 8ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	5-22 A,B 5-23 B 5-24 B
Oven, Bath or Block Temperature 1	5-22 A 92 B 92 5-23 B 95 5-24 B 95 Degrees C
Thermometer ID	A metals 15, B metals 6
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot# LRS4801 DOE 111524

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73444 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00090	90SPKNX10P 00023
140-31777-A-1	VF29-1,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	100 mL	<2 SU		
140-31777-A-6	VF29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	105 mL	<2 SU		
140-31777-A-11	VF29-3,CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	100 mL	<2 SU		
140-31777-A-16	BLANK, CONTAINER 12	AT Prep (FH), 29/6010C	T	1 Sample	100 mL				
140-31777-A-17	BLANK, CONTAINER 8A	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-73444/14		AT Prep (FH), 29/6010C		1 Sample	100 mL				
LCS 140-73444/15		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-73444/16		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31777-A-1	VF29-1,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31777-A-6	VF29-2,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31777-A-11	VF29-3,CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-31777-A-16	BLANK, CONTAINER 12	AT Prep (FH), 29/6010C	T			filter only			
140-31777-A-17	BLANK, CONTAINER 8A	AT Prep (FH), 29/6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73444 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
MB 140-73444/14		AT Prep (FH), 29/6010C							
LCS 140-73444/15		AT Prep (FH), 29/6010C		1 mL	1 mL				
LCSD 140-73444/16		AT Prep (FH), 29/6010C		1 mL	1 mL				

Batch Notes	
Microwave Oven ID	cem3
Program Name	Air1600 1600W
Start date/time for FH digestion	05/22/2023 08:30
End date/time for FH digestion	05/24/2023 10:00
Nitric Acid ID	587063 4ml
Hydrofluoric Acid ID	576265 3ml
Hydrochloric Acid ID	586104 5ml
0.1N HNO3 ID	577998 20ml
Boric Acid ID	554088 2ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	5-22 A 5-23 B
Oven, Bath or Block Temperature 1	5-22 A 92 5-23 B 95 Degrees C
Thermometer ID	A metals 15; B metals 6
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot# LRS4801 DOE 111524

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73444 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00090	90SPKNX10P 00023
140-31777-A-1	VF29-1,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	100 mL	<2 SU		
140-31777-A-6	VF29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	105 mL	<2 SU		
140-31777-A-11	VF29-3,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	100 mL	<2 SU		
140-31777-A-16	BLANK, CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL				
140-31777-A-17	BLANK, CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-73444/14		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL				
LCS 140-73444/15		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-73444/16		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31777-A-1	VF29-1,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73444 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/24/23 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00022	90SPKNX9P 00023	AnalysisComment			
140-31777-A-6	VF29-2,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						
140-31777-A-11	VF29-3,CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						
140-31777-A-16	BLANK, CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T			filter only			
140-31777-A-17	BLANK, CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T						
MB 140-73444/14		AT Prep (FH), AT Prep FH, 29/7470A							
LCS 140-73444/15		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				
LCSD 140-73444/16		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73444 Batch Start Date: 05/22/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (FH) Batch End Date: 05/24/23 16:00

Batch Notes	
Microwave Oven ID	cem3
Program Name	Air1600 1600W
Start date/time for FH digestion	05/22/2023 08:30
End date/time for FH digestion	05/24/2023 10:00
Nitric Acid ID	587063 4ml
Hydrofluoric Acid ID	576265 3ml
Hydrochloric Acid ID	586104 5ml
0.1N HNO3 ID	577998 20ml
Boric Acid ID	554088 2ml
Filter Paper ID	01228505-2285-G
Hot Plate ID	5-22 A 5-23 B
Oven, Bath or Block Temperature 1	5-22 A 92 5-23 B 95 Degrees C
Thermometer ID	A metals 15; B metals 6
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot# LRS4801 DOE 111524

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73511 Batch Start Date: 05/25/23 08:00 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/25/23 08:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-73511/1		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				
LCS 140-73511/2		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				
140-31777-A-3	VF29-1,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	95 mL	pH<2. pH strip lot # LRS 4801.			
140-31777-A-8	VF29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			
140-31777-A-8 MS	VF29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			
140-31777-A-8 MSD	VF29-2,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			
140-31777-A-13	VF29-3,CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS 4801.			

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73511 Batch Start Date: 05/25/23 08:00 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/25/23 08:15

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73513 Batch Start Date: 05/24/23 07:50 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/24/23 09:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-73513/1		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				
LCS 140-73513/2		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				
140-31777-A-4	VF29-1,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	380 mL	pH<2. pH strip lot # LRS-4801.			
140-31777-A-9	VF29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS-4801.			
140-31777-A-9 MS	VF29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS-4801.			
140-31777-A-9 MSD	VF29-2,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	400 mL	pH<2. pH strip lot # LRS-4801.			
140-31777-A-14	VF29-3,CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	395 mL	pH<2. pH strip lot # LRS-4801.			
140-31777-A-20	BLANK, CONTAINER 10	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	100 mL	pH<2. pH strip lot # LRS-4801.			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73513 Batch Start Date: 05/24/23 07:50 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/24/23 09:15

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73515 Batch Start Date: 05/25/23 09:20 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/25/23 10:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 140-73515/1		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				
LCS 140-73515/2		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				
140-31777-A-5	VF29-1,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH<2. pH strip lot # LRS4801.			
140-31777-A-10	VF29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	280 mL	pH<2. pH strip lot # LRS4801.			
140-31777-A-10 MS	VF29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	280 mL	pH<2. pH strip lot # LRS4801.			
140-31777-A-10 MSD	VF29-2,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	280 mL	pH<2. pH strip lot # LRS4801.			
140-31777-A-15	VF29-3,CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	280 mL	pH<2. pH strip lot # LRS4801.			
140-31777-A-21	BLANK, CONTAINER 11	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	150 mL	pH<2. pH strip lot # LRS4801.			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73581 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (Empty) Batch End Date: 05/25/23 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00977	90L1HGDayVER 00859		
MB 140-73511/1-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL				
LCS 140-73511/2-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL	2.5 mL			
140-31777-A-3-A	VF29-1,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-31777-A-8-A	VF29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-31777-A-8-B MS	VF29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-31777-A-8-C MSD	VF29-2,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-31777-A-13-A	VF29-3,CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
ICV 140-73581/20		AT Prep (Empty), 29/7470A		50 mL	50 mL		1.25 mL		
ICB 140-73581/21		AT Prep (Empty), 29/7470A		50 mL	50 mL				
CRA 140-73581/22		AT Prep (Empty), 29/7470A		50 mL	50 mL	0.1 mL			
CCV 140-73581/23		AT Prep (Empty), 29/7470A		50 mL	50 mL	2.5 mL			
CCB 140-73581/24		AT Prep (Empty), 29/7470A		50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73581 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (Empty) Batch End Date: 05/25/23 16:30

Batch Notes	
Uncorrected Temperature	90 in @ 11:15 Celsius
Uncorrected Temperature 2	90 out @ 13:15 Celsius
Digestion Tube/Cup ID	022023
Hot Block ID	G
Thermometer ID	Metals 24
Lot # of Nitric Acid	588127 1.25mL
Lot # of hydrochloric acid	588133 2.0mL
Sulfuric Acid Lot Number	586150 2.5mL
Potassium Permanganate ID	585314 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	585240 3.0mL
Pipette/Syringe/Dispenser ID	Met015_MET016_P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73582 Batch Start Date: 05/25/23 08:20 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (KMnO4) Batch End Date: 05/25/23 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00977			
MB 140-73513/1-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL				
LCS 140-73513/2-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL	2.5 mL			
140-31777-A-4-A	VF29-1,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31777-A-9-A	VF29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31777-A-9-B MS	VF29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-31777-A-9-C MSD	VF29-2,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-31777-A-14-A	VF29-3,CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-31777-A-20-A	BLANK, CONTAINER 10	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73582 Batch Start Date: 05/25/23 08:20 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (KMnO4) Batch End Date: 05/25/23 16:30

Batch Notes	
Uncorrected Temperature	90 in @ 11:15 Degrees C
Uncorrected Temperature 2	90 out @ 13:15 Degrees C
Digestion Tube/Cup ID	022023
Hot Block ID	G
Thermometer ID	Metals 24
Lot # of Nitric Acid	588127 1.25mL
Lot # of hydrochloric acid	588133 2.0mL
Sulfuric Acid Lot Number	586150 2.5mL
Potassium Permanganate ID	585314 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	585240 3.0mL
Pipette/Syringe/Dispenser ID	MET016
Filter ID	17612847

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73583 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (HCl) Batch End Date: 05/25/23 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	ImpingerVol	KMnO4_HCLRinse	InitialAmount	FinalAmount	90L1HGDayCAL 00977	
MB 140-73515/1-A		AT Prep (HCl), 29/7470A				10 mL	50 mL		
LCS 140-73515/2-A		AT Prep (HCl), 29/7470A				10 mL	50 mL	2.5 mL	
140-31777-A-5-A	VF29-1,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL		
140-31777-A-10-A	VF29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	230 mL	50 mL	10 mL	50 mL		
140-31777-A-10-B MS	VF29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	230 mL	50 mL	10 mL	50 mL	0.5 mL	
140-31777-A-10-C MSD	VF29-2,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	230 mL	50 mL	10 mL	50 mL	0.5 mL	
140-31777-A-15-A	VF29-3,CONTAINER 5C	AT Prep (HCl), 29/7470A	T	230 mL	50 mL	10 mL	50 mL		
140-31777-A-21-A	BLANK, CONTAINER 11	AT Prep (HCl), 29/7470A	T	100 mL	50 mL	10 mL	50 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73583 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (HCl) Batch End Date: 05/25/23 16:30

Batch Notes	
Uncorrected Temperature	95 in @ 11:15 Celsius
Uncorrected Temperature 2	95 out @ 13:15 Celsius
Digestion Tube/Cup ID	022023
Hot Block ID	F
Thermometer ID	Metals 12
Lot # of Nitric Acid	588127 1.25mL
Lot # of hydrochloric acid	588133 2.0mL
Hydrochloric Acid ID	578838 50.0mL
Sulfuric Acid Lot Number	586150 2.5mL
Potassium Permanganate ID	585314 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	585240 3.0mL
Pipette/Syringe/Dispenser ID	MET016_MET017
Filter ID	17612847

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73591 Batch Start Date: 05/25/23 10:30 Batch Analyst: Kincaid, Whitney S

Batch Method: AT Prep FH Batch End Date: 05/25/23 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
140-31777-A-1-A	VF29-1,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31777-A-6-A	VF29-2,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31777-A-11-A	VF29-3,CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31777-A-16-A	BLANK, CONTAINER 12	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-31777-A-17-A	BLANK, CONTAINER 8A	AT Prep FH, 29/7470A	T	5 mL	50 mL				
MB 140-73444/14-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCS 140-73444/15-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCSD 140-73444/16-A		AT Prep FH, 29/7470A		5 mL	50 mL				

Batch Notes	
Uncorrected Temperature	95 in @ 11:15 Degrees C
Uncorrected Temperature 2	95 out @ 13:15 Degrees C
Digestion Tube/Cup ID	022023
Hot Block ID	F
Thermometer ID	Metals 12
Nitric Acid ID	588127 1.25mL
Hydrochloric Acid ID	588133 2.0mL
Sulfuric Acid ID	586150 2.5mL
Potassium Permanganate ID	585314 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	585240 3.0mL
Pipette/Syringe/Dispenser ID	P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73593 Batch Start Date: 05/25/23 09:20 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/25/23 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 140-73593/1		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				
LCS 140-73593/2		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				
140-31777-A-2	VF29-1,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-7	VF29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-7 MS	VF29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-7 MSD	VF29-2,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-12	VF29-3,CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-18	BLANK, CONTAINER 8B	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-31777-A-19	BLANK, CONTAINER 9	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73593 Batch Start Date: 05/25/23 09:20 Batch Analyst: Harrison, Laurel A

Batch Method: Air Train Vol. Batch End Date: 05/25/23 09:30

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73595 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (BH) Batch End Date: 05/25/23 16:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 00977	AnalysisComment		
MB 140-73593/1-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL		12.5mL extra of KMnO4		
LCS 140-73593/2-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL	2.5 mL	12.5mL extra of KMnO4		
140-31777-A-2-B	VF29-1,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		12.5mL extra of KMnO4		
140-31777-A-7-B	VF29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		12.5mL extra of KMnO4		
140-31777-A-7-C MS	VF29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL	12.5mL extra of KMnO4		
140-31777-A-7-D MSD	VF29-2,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL	12.5mL extra of KMnO4		
140-31777-A-12-B	VF29-3,CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		12.5mL extra of KMnO4		
140-31777-A-18-B	BLANK, CONTAINER 8B	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		No extra KMnO4		
140-31777-A-19-B	BLANK, CONTAINER 9	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL		7.5mL extra of KMnO4		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-31777-1

SDG No.:

Batch Number: 73595 Batch Start Date: 05/25/23 10:30 Batch Analyst: Harrison, Laurel A

Batch Method: AT Prep (BH) Batch End Date: 05/25/23 16:30

Batch Notes	
Uncorrected Temperature	95 in @11:15 Celsius
Uncorrected Temperature 2	95 out @ 13:15 Celsius
Digestion Tube/Cup ID	022023
Hot Block ID	F
Thermometer ID	Metals 12
Lot # of Nitric Acid	588127 1.25mL
Lot # of hydrochloric acid	588133 2.0mL
Sulfuric Acid Lot Number	586150 2.5mL
Potassium Permanganate ID	585314 7.5mL
Potassium Persulfate ID	581455 4.0mL
Hydroxylamine Hydrochloride ID	585240 3.0mL
Pipette/Syringe/Dispenser ID	MET016_P-644

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-73327/10-a			
10	10	1	10	1	QC	lcs 140-73327/11-a			
11	11	1	11	1	QC	lcsd 140-73327/12-a			
12	12	1	12	1	Unk	RGT BLANK			
13	13	1	1	2	Unk	mb 140-73484/9-b			
14	14	1	2	2	QC	lcs 140-73484/10-b			
15	15	1	3	2	Unk	mb 140-73332/8-a			
16	16	1	4	2	QC	lcs 140-73332/9-a			
17	17	1	5	2	Unk	mb 140-73443/13-a			
18	18	1	6	2	QC	lcs 140-73443/14-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	QC	lcsd 140-73443/15-a			
22	22	1	10	2	Unk	140-31632-a-3-a			
23	23	1	11	2	Unk	140-31632-a-6-a			
24	24	1	12	2	Unk	140-31632-a-6-a PDS			
25	25	1	1	3	Unk	140-31632-a-6-a PDSD			
26	26	1	2	3	Unk	140-31632-a-9-a			
27	27	1	3	3	Unk	140-31632-a-12-a			
28	28	1	4	3	Unk	140-31632-a-15-a			
29	29	1	5	3	Unk	140-31632-a-18-a			
30	30	1	6	3	Unk	140-31632-a-6-a SD@5	2ML TO 10ML		
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-31632-a-20-a			
34	34	1	10	3	Unk	140-31632-a-21-a			
35	35	1	11	3	Unk	140-31632-a-22-a			
36	36	1	12	3	Unk	140-31709-a-1-e			
37	37	1	1	4	Unk	140-31709-a-1-f du			
38	38	1	2	4	Unk	140-31709-a-1-g ms			
39	39	1	3	4	Unk	140-31709-a-2-c			
40	40	1	4	4	Unk	140-31709-a-3-c			
41	41	1	5	4	Unk	140-31709-a-4-c			
42	42	1	6	4	Unk	140-31709-a-1-e SD@5	2ML TO 10ML		
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB			
45	45	1	9	4	Unk	140-31709-a-5-c			
46	46	1	10	4	Unk	140-31709-a-6-c			
47	47	1	11	4	Unk	140-31759-a-1-a			
48	48	1	12	4	Unk	140-31759-a-2-a			
49	49	1	1	5	Unk	140-31759-a-3-a			
50	50	1	2	5	Unk	140-31759-a-3-b ms			
51	51	1	3	5	Unk	140-31759-a-3-c msd			
52	52	1	4	5	Unk	140-31759-a-4-a			
53	53	1	5	5	Unk	140-31759-a-5-a			
54	54	1	6	5	Unk	140-31759-a-3-a SD@5	2ML TO 10ML		
55	55	1	7	5	QC	CRI			
56	56	1	8	5	QC	CCV			
57	57	1	9	5	Unk	CCB			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	140-31774-a-2-a			
59	59	1	11	5	Unk	140-31774-a-7-a			
60	60	1	12	5	Unk	140-31774-a-12-a			
61	61	2	1	1	Unk	140-31774-a-18-a			
62	62	2	2	1	Unk	140-31774-a-23-a			
63	63	2	3	1	Unk	140-31774-a-28-a			
64	64	2	4	1	Unk	140-31774-a-28-a PDS			
65	65	2	5	1	Unk	31774-a-28-a PDSD			
66	66	2	6	1	Unk	140-31774-a-33-a			
67	67	2	7	1	Unk	140-31777-a-2-a			
68	68	2	8	1	QC	CCV			
69	69	2	9	1	Unk	CCB			
70	70	2	10	1	Unk	140-31777-a-7-a			
71	71	2	11	1	Unk	140-31777-a-7-a PDS			
72	72	2	12	1	Unk	140-31777-a-7-a PDSD			
73	73	2	1	2	Unk	140-31777-a-12-a			
74	74	2	2	2	Unk	140-31777-a-18-a			
75	75	2	3	2	Unk	140-31777-a-19-a			
76	76	2	4	2	Unk	140-31777-a-7-a SD@5	2ML TO 10ML		
77	77	2	5	2	Unk	140-31632-a-6-a PDS	Pb 5PPM		
78	78	2	6	2	Unk	140-31632-a-6-a PDSD	Pb 5PPM		
79	79	2	7	2	QC	CRI			
80	80	2	8	2	QC	CCV			
81	81	2	9	2	Unk	CCB			
82	82	2	10	2	Unk	Sample-64			
83	83	2	11	2	Unk	Sample-65			
84	84	2	12	2	Unk	Sample-66			
85	85	2	1	3	Unk	Sample-67			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-73327/10-a			
10	10	1	10	1	QC	lcs 140-73327/11-a			
11	11	1	11	1	QC	lcsd 140-73327/12-a			
12	12	1	12	1	Unk	RGT BLANK			
13	13	1	1	2	Unk	mb 140-73484/9-b			
14	14	1	2	2	QC	lcs 140-73484/10-b			
15	15	1	3	2	Unk	mb 140-73332/8-a			
16	16	1	4	2	QC	lcs 140-73332/9-a			
17	17	1	5	2	Unk	mb 140-73443/13-a			
18	18	1	6	2	QC	lcs 140-73443/14-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	QC	lcsd 140-73443/15-a			
22	22	1	10	2	Unk ✓	140-31632-a-3-a			
23	23	1	11	2	Unk	140-31632-a-6-a		45924	
24	24	1	12	2	Unk	140-31632-a-6-a PDS	>4x Rev. (5ppm) 0.5/1000/10		
25	25	1	1	3	Unk	140-31632-a-6-a PDSD	>4x Rev		
26	26	1	2	3	Unk	140-31632-a-9-a			
27	27	1	3	3	Unk	140-31632-a-12-a			
28	28	1	4	3	Unk	140-31632-a-15-a			
29	29	1	5	3	Unk	140-31632-a-18-a			
30	30	1	6	3	Unk	140-31632-a-6-a SD@5	2ML TO 10ML		
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-31632-a-20-a			
34	34	1	10	3	Unk	140-31632-a-21-a			
35	35	1	11	3	Unk	140-31632-a-22-a			
36	36	1	12	3	Unk ✓	140-31709-a-1-e			
37	37	1	1	4	Unk	140-31709-a-1-f du	DUP-RPD 45923		
38	38	1	2	4	Unk	140-31709-a-1-g ms			
39	39	1	3	4	Unk	140-31709-a-2-c			
40	40	1	4	4	Unk	140-31709-a-3-c			
41	41	1	5	4	Unk	140-31709-a-4-c			
42	42	1	6	4	Unk	140-31709-a-1-e SD@5	2ML TO 10ML		
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB	Cd, TL- Rev		
45	45	1	9	4	Unk	140-31709-a-5-c			
46	46	1	10	4	Unk	140-31709-a-6-c			
47	47	1	11	4	Unk ✓	140-31759-a-1-a			
48	48	1	12	4	Unk	140-31759-a-2-a			
49	49	1	1	5	Unk	140-31759-a-3-a			
50	50	1	2	5	Unk	140-31759-a-3-b ms			
51	51	1	3	5	Unk	140-31759-a-3-c msd			
52	52	1	4	5	Unk	140-31759-a-4-a			
53	53	1	5	5	Unk	140-31759-a-5-a			
54	54	1	6	5	Unk	140-31759-a-3-a SD@5	2ML TO 10ML		
55	55	1	7	5	QC	CRI	-TL- Rev		
56	56	1	8	5	QC	CCV			
57	57	1	9	5	Unk	CCB			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk ✓	140-31774-a-2-a			
59	59	1	11	5	Unk	140-31774-a-7-a			
60	60	1	12	5	Unk	140-31774-a-12-a			
61	61	2	1	1	Unk	140-31774-a-18-a			
62	62	2	2	1	Unk	140-31774-a-23-a			
63	63	2	3	1	Unk	140-31774-a-28-a			
64	64	2	4	1	Unk	140-31774-a-28-a PDS			
65	65	2	5	1	Unk	31774-a-28-a PDSD			
66	66	2	6	1	Unk	140-31774-a-33-a			
67	67	2	7	1	Unk ✓	140-31777-a-2-a			
68	68	2	8	1	QC	CCV			
69	69	2	9	1	Unk	CCB			
70	70	2	10	1	Unk	140-31777-a-7-a			
71	71	2	11	1	Unk	140-31777-a-7-a PDS	7 4X		
72	72	2	12	1	Unk	140-31777-a-7-a PDSD			
73	73	2	1	2	Unk	140-31777-a-12-a			
74	74	2	2	2	Unk	140-31777-a-18-a			
75	75	2	3	2	Unk	140-31777-a-19-a			
76	76	2	4	2	Unk	140-31777-a-7-a SD@5	2ML TO 10ML		
77	77	2	5	2	QC	CRI			
78	78	2	6	2	QC	CCV			
79	79	2	7	2	Unk	CCB			
80	80	2	8	2	Unk	Sample-64			
81	81	2	9	2	Unk	Sample-65			
82	82	2	10	2	Unk	Sample-66			
83	83	2	11	2	Unk	Sample-67			

FO52523
SI- 293
CCVL- 1135
ICV- 238
ICSA- 82
ICSAB- 119
CRI- 1165
CCV- 1162
Y- 163
H2O- 55

Pb 50ppm - 6

M-12 = Pb
PM-10 = As, Mn, Pb
Waste = Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K
Mg, Mn, Mo, Na, Ni, (P), Pb, Sb, Se, (Sn), Tl, V, Zn

B½ 774 = As, Be, Cd, Cr, Pb

777 = Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni,
Pb, Sb, Se, Tl, V, Zn [(P)]

4103 2872 - 5334
76086 53260 - 98912
13529 9470 - 17588

5_12_Prep Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73327

Analyst: Collins, Kerry N

Batch Open: 5/17/2023 8:20:00AM

Batch End: 5/18/2023 5:00:00PM

Preparation, Stationary Source

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31632-A-3 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-3-A
2	140-31632-A-6 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-6-A
3	140-31632-A-9 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-9-A
4	140-31632-A-12 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-12-A
5	140-31632-A-15 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-15-A
6	140-31632-A-18 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-18-A
7	140-31632-A-20 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-20-A
8	140-31632-A-21 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-21-A
9	140-31632-A-22 (5_12_6010B)	N/A (140-31632-1)	Air Train	1 Sample	100 mL	5/19/23	13_Days	4		140-31632-A-22-A
10	MB~140-73327/10 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-73327/10-A
11	LCS~140-73327/11 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-73327/11-A
12	LCSD~140-73327/12 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-73327/12-A

IO_3.1_PM10_PrP Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73485 Analyst: Collins, Kerry N Batch Open: 5/22/2023 12:00:00PM

Batch End: 5/22/2023 4:00:00PM

Preparation, Filter Material

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31709-A-1-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-1-E
2	140-31709-A-1-C~DU (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-1-F DU
3	140-31709-A-1-D~MS (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-1-G MS
4	140-31709-A-2-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-2-C
5	140-31709-A-3-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-3-C
6	140-31709-A-4-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-4-C
7	140-31709-A-5-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-5-C
8	140-31709-A-6-B (6010C)	N/A (140-31709-1)	Filter to Air	0.2222 Filte	50 mL	5/22/23	8_Days	4		140-31709-A-6-C
9	MB~140-73484/9-A N/A	N/A		0.2222 Filte	50 mL	N/A	N/A	N/A		MB 140-73484/9-B
10	LCS~140-73484/10-A N/A	N/A		0.2222 Filte	50 mL	N/A	N/A	N/A		LCS 140-73484/10-B
11	rgt~blank N/A	N/A			50 mL	N/A	N/A	N/A		140-0/0-F

3050B Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73332

Analyst: Mcdevitt, Jenna D

Batch Open: 5/17/2023 9:00:00AM

Batch End: 5/17/2023 5:00:00PM

Preparation, Metals

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31759-A-1 (6010C)	N/A (140-31759-1)	Waste	0.509 g	50 mL	5/25/23	8_Days	4		
2	140-31759-A-2 (6010C)	N/A (140-31759-1)	Waste	0.499 g	50 mL	5/25/23	8_Days	4		
3	140-31759-A-3 (6010C)	N/A (140-31759-1)	Waste	0.504 g	50 mL	5/25/23	8_Days	4		
4	140-31759-A-3~MS (6010C)	N/A (140-31759-1)	Waste	0.498 g	50 mL	5/25/23	8_Days	4		
5	140-31759-A-3~MSD (6010C)	N/A (140-31759-1)	Waste	0.500 g	50 mL	5/25/23	8_Days	4		
6	140-31759-A-4 (6010C)	N/A (140-31759-1)	Waste	0.494 g	50 mL	5/25/23	8_Days	4		
7	140-31759-A-5 (6010C)	N/A (140-31759-1)	Waste	0.502 g	50 mL	5/25/23	8_Days	4		
8	MB~140-73332/8 N/A	N/A		0.500 g	50 mL	N/A	N/A	N/A		
9	LCS~140-73332/9 N/A	N/A		0.500 g	50 mL	N/A	N/A	N/A		

5/31/2023 10:32 AM

29_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73443 Analyst: Collins, Kerry N Batch Open: 5/22/2023 8:00:00AM

Batch End: 5/24/2023 4:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31774-A-2 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-2-A
2	140-31774-A-7 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-7-A
3	140-31774-A-12 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-12-A
4	140-31774-A-18 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-18-A
5	140-31774-A-23 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-23-A
6	140-31774-A-28 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-28-A
7	140-31774-A-33 (29_6010C)	N/A (140-31774-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-33-A
8	140-31777-A-2 (29_6010C)	N/A (140-31777-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Days	4		140-31777-A-2-A
9	140-31777-A-7 (29_6010C)	N/A (140-31777-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Days	4		140-31777-A-7-A
10	140-31777-A-12 (29_6010C)	N/A (140-31777-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Days	4		140-31777-A-12-A
11	140-31777-A-18 (29_6010C)	N/A (140-31777-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Days	4		140-31777-A-18-A
12	140-31777-A-19 (29_6010C)	N/A (140-31777-1)	Air Train Ba	1 Sample	100 mL	5/26/23	8_Days	4		140-31777-A-19-A
	MB~140-73443/13 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-73443/13-A

29_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73443 Analyst: Collins, Kerry N Batch Open: 5/22/2023 8:00:00AM

Batch End: 5/24/2023 4:00:00PM

14	LCS~140-73443/14 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	
15	LCSD~140-73443/15 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	

Sample Name: ICIS Acquired: 5/25/2023 10:25:27 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00048	.00028	-.00422	.00228	.00832	.00012
Stddev	.00003	.00006	.00017	.00010	.00020	.00003
%RSD	6.1105	23.119	3.9946	4.2640	2.4635	30.220
#1	-.00047	.00021	-.00406	.00239	.00819	.00011
#2	-.00051	.00028	-.00421	.00225	.00856	.00008
#3	-.00046	.00034	-.00439	.00220	.00822	.00015

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00977	-.00323	-.00538	.00018	.00540	.00132
Stddev	.00029	.00028	.00013	.00005	.00004	.00012
%RSD	2.9908	8.5467	2.4073	26.319	.70579	9.1944
#1	.00964	-.00342	-.00542	.00012	.00545	.00130
#2	.01011	-.00336	-.00549	.00020	.00538	.00121
#3	.00957	-.00292	-.00524	.00020	.00538	.00144

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00058	-.00216	-.00017	.00043	.00202	.00064
Stddev	.00039	.00069	.00010	.00003	.00006	.00013
%RSD	67.138	31.912	56.673	6.5831	2.7273	20.606
#1	-.00070	-.00228	-.00008	.00046	.00206	.00067
#2	-.00090	-.00142	-.00027	.00043	.00204	.00050
#3	-.00015	-.00279	-.00017	.00041	.00196	.00076

Sample Name: ICIS Acquired: 5/25/2023 10:25:27 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00387	-.00020	.00048	-.00006	.00204	.00502
Stddev	.00085	.00033	.00014	.00002	.00009	.00016
%RSD	21.932	168.29	29.139	33.714	4.6525	3.1705
#1	.00474	.00013	.00034	-.00005	.00204	.00494
#2	.00304	-.00019	.00062	-.00008	.00213	.00491
#3	.00382	-.00053	.00047	-.00005	.00194	.00520

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00259	.00435	.00198	-.00263	.00006	-.00208
Stddev	.00009	.00032	.00030	.00024	.00007	.00005
%RSD	3.4639	7.4123	15.371	9.0489	119.72	2.4685
#1	.00269	.00468	.00179	-.00291	.00014	-.00202
#2	.00252	.00433	.00183	-.00254	.00004	-.00213
#3	.00257	.00403	.00233	-.00246	.00000	-.00208

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.00004	.02133
Stddev	.00006	.00006
%RSD	145.63	.30151
#1	.00010	.02127
#2	.00001	.02132
#3	.00000	.02140

Sample Name: ICIS Acquired: 5/25/2023 10:25:27 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4064.4	76010.	13603.
Stddev	10.7	333.	162.
%RSD	.26212	.43853	1.1927
#1	4054.7	75660.	13662.
#2	4062.7	76046.	13419.
#3	4075.8	76323.	13727.

Sample Name: S1 Acquired: 5/25/2023 10:30:26 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.23904	.99241	.14170	.32024	19.047	20.240
Stddev	.00054	.00471	.00018	.00201	.246	.079
%RSD	.22498	.47459	.12510	.62680	1.2936	.38946
#1	.23854	.98775	.14150	.31793	18.790	20.182
#2	.23961	.99717	.14180	.32119	19.282	20.208
#3	.23897	.99231	.14180	.32159	19.068	20.330

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	20.155	3.1990	6.7520	.43106	1.0645	4.1945
Stddev	.147	.0092	.0080	.00327	.0038	.0279
%RSD	.73178	.28802	.11849	.75782	.36024	.66628
#1	20.009	3.1919	6.7505	.42785	1.0638	4.1623
#2	20.152	3.1957	6.7449	.43095	1.0686	4.2092
#3	20.304	3.2094	6.7607	.43438	1.0610	4.2121

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.6949	5.2652	1.6620	2.8207	3.1530	.05207
Stddev	.0132	.0302	.0176	.0155	.0060	.00053
%RSD	.35743	.57376	1.0586	.55089	.19001	1.0222
#1	3.6929	5.2697	1.6431	2.8054	3.1573	.05230
#2	3.7090	5.2929	1.6648	2.8202	3.1557	.05244
#3	3.6828	5.2330	1.6780	2.8364	3.1462	.05146

Sample Name: S1 Acquired: 5/25/2023 10:30:26 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.544	5.5562	.32210	.01178	.29593	.15150
Stddev	.430	.0064	.00044	.00013	.00189	.00086
%RSD	2.2005	.11575	.13606	1.0922	.63763	.56536
#1	19.049	5.5511	.32167	.01167	.29418	.15226
#2	19.755	5.5541	.32255	.01176	.29567	.15166
#3	19.827	5.5634	.32209	.01192	.29793	.15057

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.10173	.07212	1.2697	22.257	1.3362	.14287
Stddev	.00033	.00014	.0046	.339	.0024	.00032
%RSD	.32826	.19949	.36284	1.5240	.18279	.22335
#1	.10210	.07224	1.2656	21.949	1.3334	.14309
#2	.10162	.07217	1.2689	22.620	1.3373	.14250
#3	.10146	.07196	1.2747	22.201	1.3380	.14301

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.79771	11.745
Stddev	.00316	.014
%RSD	.39610	.11607
#1	.79451	11.742
#2	.79779	11.734
#3	.80083	11.760

Sample Name: S1 Acquired: 5/25/2023 10:30:26 Type: Cal
Method: MT0007(v23) HF 042423(v6) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3917.2	75128.	13782.
Stddev	16.6	299.	180.
%RSD	.42302	.39847	1.3087
#1	3899.9	75471.	13955.
#2	3918.6	74918.	13795.
#3	3932.9	74997.	13595.

Sample Name: CCVL Acquired: 5/25/2023 10:35:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49712	12.650	.24858	1.0130	1.0134	1.0690
Stddev	.00199	.074	.00137	.0029	.0036	.0069
%RSD	.40024	.58220	.55175	.29165	.35036	.65009
#1	.49485	12.588	.24702	1.0100	1.0094	1.0612
#2	.49791	12.732	.24960	1.0159	1.0161	1.0746
#3	.49859	12.631	.24911	1.0133	1.0146	1.0711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.717	.25750	1.0150	1.0411	.97943	13.078
Stddev	.121	.00025	.0014	.0061	.00107	.054
%RSD	.46891	.09587	.14263	.58228	.10949	.41409
#1	25.579	.25775	1.0161	1.0360	.97820	13.015
#2	25.801	.25749	1.0155	1.0397	.98013	13.102
#3	25.770	.25725	1.0133	1.0478	.97996	13.115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/25/2023 10:35:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.160	.99496	25.424	1.0443	1.0115	24.993
Stddev	.061	.00234	.163	.0035	.0006	.995
%RSD	.24370	.23516	.63979	.33876	.06434	3.9791
#1	25.126	.99229	25.237	1.0402	1.0122	26.123
#2	25.230	.99598	25.528	1.0457	1.0109	24.252
#3	25.122	.99662	25.508	1.0468	1.0116	24.604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.990	1.0241	.99920	.26370	.25587	.24821
Stddev	.076	.0010	.00464	.00218	.00188	.00039
%RSD	.30441	.09786	.46472	.82538	.73621	.15543
#1	24.906	1.0252	.99559	.26275	.25523	.24815
#2	25.009	1.0238	1.0044	.26215	.25438	.24863
#3	25.055	1.0233	.99757	.26619	.25799	.24786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/25/2023 10:35:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24986	1.0046	1.0232	1.0026	1.0199	.51396
Stddev	.00230	.0088	.0039	.0029	.0069	.00264
%RSD	.91917	.87823	.38112	.29294	.67550	.51338
#1	.24721	.99655	1.0277	.99975	1.0125	.51688
#2	.25113	1.0141	1.0210	1.0056	1.0261	.51174
#3	.25125	1.0033	1.0209	1.0025	1.0211	.51327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.0194	1.0254
Stddev	.0042	.0022
%RSD	.40945	.21158
#1	1.0152	1.0272
#2	1.0196	1.0259
#3	1.0235	1.0230
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCVL Acquired: 5/25/2023 10:35:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4054.2	75270.	13536.
Stddev	8.4	210.	26.
%RSD	.20747	.27850	.19489
#1	4044.7	75509.	13566.
#2	4057.3	75116.	13519.
#3	4060.7	75185.	13521.

Sample Name: ICV Acquired: 5/25/2023 10:40:25 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49488	12.361	.25463	1.0155	1.0103	1.0434
Stddev	.00128	.058	.00143	.0040	.0023	.0012
%RSD	.25832	.46570	.56050	.39332	.22975	.11929
#1	.49561	12.300	.25627	1.0109	1.0087	1.0434
#2	.49564	12.414	.25398	1.0177	1.0130	1.0422
#3	.49341	12.370	.25365	1.0180	1.0094	1.0447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.395	.25438	.99689	1.0292	.97065	12.718
Stddev	.139	.00030	.00095	.0009	.00276	.085
%RSD	.54757	.11969	.09547	.08412	.28464	.66600
#1	25.301	.25473	.99758	1.0300	.97211	12.624
#2	25.555	.25418	.99729	1.0283	.97238	12.789
#3	25.329	.25423	.99581	1.0292	.96747	12.741
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/25/2023 10:40:25 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.420	.98008	24.810	1.0226	.97554	25.241
Stddev	.028	.00301	.182	.0009	.00374	.794
%RSD	.11265	.30749	.73453	.08571	.38288	3.1466
#1	24.390	.97787	24.651	1.0217	.97966	26.084
#2	24.445	.97885	25.009	1.0229	.97459	25.132
#3	24.424	.98351	24.771	1.0234	.97237	24.507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.423	1.0151	.98789	.25976	.25268	.24292
Stddev	.044	.0013	.00321	.00151	.00149	.00125
%RSD	.18117	.12430	.32537	.58167	.58972	.51647
#1	24.374	1.0166	.99158	.26058	.25399	.24424
#2	24.461	1.0144	.98575	.25801	.25298	.24276
#3	24.432	1.0143	.98633	.26068	.25106	.24175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/25/2023 10:40:25 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24922	.97096	.99666	.98818	1.0156	.53107
Stddev	.00062	.01765	.00184	.00250	.0044	.00249
%RSD	.24882	1.8177	.18495	.25260	.43285	.46794
#1	.24922	.99036	.99465	.98546	1.0129	.53356
#2	.24984	.96670	.99827	.99037	1.0207	.53106
#3	.24860	.95584	.99706	.98870	1.0133	.52859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.0029	1.0144
Stddev	.0009	.0014
%RSD	.08895	.13944
#1	1.0034	1.0158
#2	1.0034	1.0143
#3	1.0019	1.0130
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: ICV Acquired: 5/25/2023 10:40:25 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4082.1	76536.	13589.
Stddev	14.0	132.	88.
%RSD	.34280	.17227	.64922
#1	4068.9	76413.	13559.
#2	4080.6	76675.	13519.
#3	4096.8	76519.	13688.

Sample Name: ICB Acquired: 5/25/2023 10:45:14 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	.01213	.00072	-.00393	.00022	.00006
Stddev	.00015	.00922	.00037	.00034	.00008	.00002
%RSD	72.704	76.004	51.938	8.6182	35.007	38.762
#1	-.00009	.01996	.00076	-.00386	.00015	.00009
#2	-.00015	.01445	.00107	-.00363	.00031	.00004
#3	-.00037	.00197	.00033	-.00429	.00020	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00288	-.00001	.00003	-.00064	-.00034	.00070
Stddev	.00230	.00004	.00012	.00028	.00015	.00157
%RSD	79.998	299.09	491.83	43.016	44.553	224.48
#1	.00308	-.00005	.00013	-.00086	-.00033	.00191
#2	.00507	.00002	.00006	-.00033	-.00020	.00128
#3	.00048	-.00001	-.00011	-.00073	-.00050	-.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/25/2023 10:45:14 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01680	.00060	.01664	-.00001	-.00000	F .37882
Stddev	.00607	.00046	.00985	.00004	.00006	.35994
%RSD	36.107	77.380	59.226	533.73	1947.1	95.016
#1	.01041	.00052	.00665	.00001	.00006	.01193
#2	.02248	.00109	.01690	-.00005	-.00005	.73139
#3	.01751	.00018	.02635	.00002	-.00003	.39316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00576	.00003	.00022	-.00006	-.00037	.00035
Stddev	.00344	.00011	.00077	.00183	.00052	.00166
%RSD	59.711	323.25	359.29	2951.4	141.26	480.71
#1	.00934	-.00009	-.00050	-.00044	-.00022	-.00137
#2	.00247	.00012	.00104	-.00167	.00006	.00044
#3	.00548	.00008	.00010	.00193	-.00095	.00196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/25/2023 10:45:14 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00274	F -.06937	.00014	.00002	-.00023	-.00047
Stddev	.00237	.00304	.00014	.00012	.00058	.00099
%RSD	86.228	4.3791	102.17	468.99	252.10	212.43
#1	-.00457	-.06725	-.00000	.00014	-.00090	-.00159
#2	-.00007	-.07285	.00027	-.00010	.00020	.00027
#3	-.00359	-.06800	.00014	.00004	-.00000	-.00007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00012	-.00003
Stddev	.00019	.00006
%RSD	158.74	213.53
#1	-.00029	-.00002
#2	-.00016	-.00010
#3	.00009	.00003
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICB Acquired: 5/25/2023 10:45:14 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4103.0	76086.	13529.
Stddev	11.0	437.	38.
%RSD	.26909	.57470	.28370
#1	4108.0	76513.	13571.
#2	4110.7	76105.	13519.
#3	4090.4	75640.	13496.

Sample Name: ICSA Acquired: 5/25/2023 10:50:12 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00185	497.42	.00620	-.03039	.00210	-.00037
Stddev	.00057	.60	.00221	.00058	.00007	.00001
%RSD	31.046	.12108	35.618	1.9048	3.3239	2.9780
#1	-.00250	497.67	.00504	-.03094	.00217	-.00036
#2	-.00143	496.73	.00875	-.02978	.00209	-.00037
#3	-.00161	497.85	.00481	-.03046	.00203	-.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	459.06	.00396	-.00096	.00450	.00104	182.45
Stddev	2.31	.00024	.00006	.00004	.00051	3.05
%RSD	.50294	6.1702	6.3289	.88703	48.671	1.6735
#1	457.56	.00394	-.00100	.00445	.00138	181.79
#2	457.90	.00421	-.00089	.00453	.00046	179.78
#3	461.72	.00373	-.00098	.00452	.00128	185.78
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 5/25/2023 10:50:12 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03713	.00972	496.42	-.00007	-.00041	-.00359
Stddev	.00753	.00049	1.88	.00013	.00031	.22414
%RSD	20.274	5.0130	.37953	191.13	75.533	6248.9
#1	-.03023	.00997	495.55	-.00020	-.00018	-.02075
#2	-.04516	.00915	495.12	.00007	-.00076	-.21866
#3	-.03601	.01002	498.58	-.00008	-.00029	.22865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05293	-.00597	.00186	.01486	.00748	.00606
Stddev	.00231	.00036	.00251	.00364	.00152	.00214
%RSD	4.3684	6.0476	134.97	24.504	20.309	35.310
#1	.05109	-.00563	.00307	.01066	.00815	.00748
#2	.05218	-.00635	.00353	.01703	.00855	.00709
#3	.05553	-.00594	-.00103	.01689	.00574	.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 5/25/2023 10:50:12 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00201	-.07141	.00246	.00389	.01160	-.00546
Stddev	.00230	.00645	.00059	.00009	.00019	.00691
%RSD	114.09	9.0391	23.978	2.2679	1.6186	126.41
#1	-.00279	-.07454	.00312	.00391	.01138	-.00389
#2	-.00382	-.07570	.00228	.00396	.01173	.00052
#3	.00057	-.06398	.00198	.00379	.01168	-.01302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00449	.00583
Stddev	.00030	.00033
%RSD	6.7654	5.6617
#1	.00467	.00585
#2	.00414	.00616
#3	.00466	.00550
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSA Acquired: 5/25/2023 10:50:12 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3848.8	72594.	13767.
Stddev	2.1	217.	77.
%RSD	.05426	.29893	.56168
#1	3847.2	72365.	13732.
#2	3848.0	72620.	13855.
#3	3851.1	72797.	13713.

Sample Name: ICSAB Acquired: 5/25/2023 10:55:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20423	250.06	.10255	.97695	.50137	.51791
Stddev	.00043	.24	.00124	.00140	.00039	.00035
%RSD	.20988	.09679	1.2042	.14320	.07757	.06665
#1	.20386	249.88	.10159	.97599	.50096	.51781
#2	.20413	249.98	.10395	.97629	.50142	.51830
#3	.20470	250.34	.10213	.97855	.50174	.51763
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	243.70	.96562	.48503	.49261	.51340	97.398
Stddev	1.70	.00039	.00089	.00103	.00103	.063
%RSD	.69781	.04024	.18367	.20829	.20027	.06463
#1	245.23	.96546	.48550	.49186	.51431	97.336
#2	241.87	.96533	.48401	.49378	.51359	97.396
#3	244.01	.96606	.48559	.49219	.51229	97.462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/25/2023 10:55:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.9119	.99632	254.23	.50381	.97621	10.074
Stddev	.0278	.00161	.48	.00047	.00202	.884
%RSD	.28013	.16134	.18741	.09283	.20643	8.7735
#1	9.9019	.99758	253.69	.50371	.97854	11.080
#2	9.9433	.99451	254.42	.50432	.97497	9.4202
#3	9.8905	.99686	254.59	.50340	.97513	9.7228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.9945	.96491	.96662	.05397	.05042	.59864
Stddev	.0099	.00110	.00641	.00431	.00108	.00199
%RSD	.09943	.11389	.66341	7.9836	2.1517	.33168
#1	9.9999	.96597	.97381	.05431	.05161	.60030
#2	9.9831	.96378	.96457	.05810	.04948	.59644
#3	10.001	.96499	.96149	.04950	.05017	.59919
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/25/2023 10:55:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04626	.87287	.96805	.97595	.99776	.09474
Stddev	.00300	.00470	.00244	.00081	.00169	.00665
%RSD	6.4941	.53888	.25178	.08285	.16981	7.0167
#1	.04837	.87460	.96525	.97581	.99622	.10238
#2	.04282	.86754	.96930	.97681	.99958	.09026
#3	.04758	.87646	.96962	.97521	.99748	.09159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.50144	1.0102
Stddev	.00092	.0023
%RSD	.18332	.22569
#1	.50045	1.0123
#2	.50227	1.0078
#3	.50159	1.0104
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSAB Acquired: 5/25/2023 10:55:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3936.0	73533.	13602.
Stddev	5.3	191.	25.
%RSD	.13560	.25920	.18086
#1	3930.5	73448.	13574.
#2	3941.1	73751.	13619.
#3	3936.6	73399.	13614.

Sample Name: CRI Acquired: 5/25/2023 11:00:14 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00964	.22456	.00979	.18766	.00968	.00516
Stddev	.00027	.02420	.00069	.00152	.00012	.00001
%RSD	2.8368	10.775	7.0885	.81076	1.2639	.12678
#1	.00939	.25029	.01055	.18938	.00957	.00517
#2	.00994	.22112	.00965	.18649	.00981	.00517
#3	.00959	.20226	.00918	.18711	.00967	.00516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1117	.00503	.04879	.00995	.02477	.10787
Stddev	.0166	.00007	.00008	.00066	.00050	.00202
%RSD	.32508	1.4459	.15763	6.6774	2.0207	1.8762
#1	5.0938	.00495	.04871	.01045	.02491	.11019
#2	5.1147	.00504	.04886	.00919	.02518	.10691
#3	5.1267	.00510	.04882	.01020	.02421	.10651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 11:00:14 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7814	.04707	4.8344	.01456	.03843	6.2659
Stddev	.0078	.00152	.0044	.00009	.00035	.1277
%RSD	.16305	3.2313	.09078	.64485	.90049	2.0379
#1	4.7754	.04558	4.8298	.01455	.03870	6.1191
#2	4.7786	.04700	4.8349	.01447	.03855	6.3266
#3	4.7902	.04862	4.8385	.01466	.03804	6.3519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8451	.03916	.28949	.01061	.00951	.05834
Stddev	.0259	.00015	.00328	.00270	.00034	.00011
%RSD	.53390	.37914	1.1344	25.408	3.5501	.19381
#1	4.8189	.03903	.28570	.01263	.00917	.05837
#2	4.8707	.03913	.29128	.00755	.00984	.05821
#3	4.8456	.03932	.29148	.01167	.00952	.05843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 11:00:14 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00805	.38340	.09771	.04749	.04923	.01093
Stddev	.00034	.00133	.00075	.00016	.00028	.00062
%RSD	4.2724	.34798	.77244	.33783	.56878	5.6421
#1	.00769	.38249	.09761	.04738	.04913	.01105
#2	.00810	.38493	.09851	.04767	.04955	.01148
#3	.00837	.38277	.09701	.04741	.04901	.01026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02480	.02152
Stddev	.00012	.00011
%RSD	.49768	.49837
#1	.02478	.02156
#2	.02469	.02159
#3	.02493	.02139
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/25/2023 11:00:14 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4120.0	76476.	13662.
Stddev	15.7	489.	29.
%RSD	.38013	.63947	.21351
#1	4102.0	76082.	13654.
#2	4127.1	76323.	13694.
#3	4130.8	77023.	13638.

Sample Name: CCV Acquired: 5/25/2023 11:05:09 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98383	24.899	.49303	1.9684	2.0083	2.0413
Stddev	.00641	.238	.00342	.0165	.0146	.0191
%RSD	.65179	.95745	.69376	.83915	.72557	.93771
#1	.98109	24.718	.49284	1.9560	2.0067	2.0334
#2	.97924	24.809	.48971	1.9620	1.9946	2.0274
#3	.99115	25.169	.49654	1.9871	2.0236	2.0632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.304	.50530	1.9997	2.0347	1.9525	25.571
Stddev	.356	.00436	.0161	.0070	.0156	.183
%RSD	.69384	.86224	.80356	.34588	.79633	.71657
#1	51.213	.50417	1.9945	2.0318	1.9492	25.474
#2	51.003	.50162	1.9868	2.0296	1.9389	25.457
#3	51.697	.51011	2.0177	2.0427	1.9695	25.782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 11:05:09 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.873	1.9592	50.655	2.0250	2.0123	49.761
Stddev	.300	.0133	.285	.0103	.0133	1.009
%RSD	.61371	.67985	.56277	.50703	.66290	2.0267
#1	48.697	1.9555	50.456	2.0187	2.0126	50.370
#2	48.703	1.9481	50.528	2.0195	1.9987	48.596
#3	49.219	1.9740	50.982	2.0368	2.0254	50.315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.361	2.0123	1.9722	.51357	.50081	.48886
Stddev	.334	.0145	.0153	.00159	.00212	.00350
%RSD	.67655	.71955	.77465	.31038	.42345	.71654
#1	49.238	2.0094	1.9717	.51279	.49889	.48801
#2	49.107	1.9995	1.9572	.51541	.50046	.48585
#3	49.740	2.0281	1.9878	.51252	.50309	.49271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 11:05:09 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49449	1.9363	2.0040	1.9726	2.0208	1.0081
Stddev	.00335	.0017	.0170	.0140	.0130	.0084
%RSD	.67793	.08645	.84797	.70924	.64397	.83238
#1	.49298	1.9349	1.9961	1.9703	2.0194	1.0093
#2	.49216	1.9358	1.9924	1.9599	2.0085	.99912
#3	.49833	1.9382	2.0235	1.9876	2.0344	1.0158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0057	2.0082
Stddev	.0102	.0158
%RSD	.50643	.78482
#1	2.0004	2.0045
#2	1.9994	1.9947
#3	2.0175	2.0255
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 11:05:09 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4032.6	76043.	13619.
Stddev	24.8	182.	51.
%RSD	.61498	.23891	.37673
#1	4027.5	76094.	13585.
#2	4059.5	76193.	13678.
#3	4010.7	75841.	13594.

Sample Name: CCB Acquired: 5/25/2023 11:09:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.01527	.00092	-.00590	.00010	.00005
Stddev	.00013	.02534	.00082	.00131	.00012	.00004
%RSD	148.13	166.00	89.383	22.140	119.43	81.332
#1	.00021	.02969	.00141	-.00450	.00018	.00010
#2	-.00005	.03010	.00138	-.00610	-.00004	.00004
#3	.00012	-.01399	-.00003	-.00709	.00017	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00724	.00011	.00004	-.00012	-.00022	.00210
Stddev	.00158	.00003	.00010	.00011	.00022	.00097
%RSD	21.845	27.177	252.03	92.997	99.808	46.234
#1	.00900	.00014	-.00005	-.00017	-.00025	.00114
#2	.00674	.00010	.00015	-.00020	.00001	.00209
#3	.00596	.00009	.00001	.00001	-.00042	.00308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 11:09:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00998	.00051	.01113	.00005	-.00008	F .98580
Stddev	.01222	.00110	.01201	.00003	.00016	.28613
%RSD	122.46	214.66	107.90	64.023	197.21	29.025
#1	.00409	-.00066	-.00228	.00008	.00008	.80546
#2	-.01795	.00154	.02089	.00002	-.00008	.83622
#3	-.01607	.00067	.01477	.00004	-.00025	1.3157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00646	.00011	.00061	.00013	.00043	-.00034
Stddev	.00114	.00017	.00021	.00216	.00040	.00157
%RSD	17.631	156.59	34.230	1716.2	94.601	467.98
#1	.00653	-.00004	.00070	.00140	.00020	.00142
#2	.00529	.00030	.00076	.00135	.00018	-.00083
#3	.00757	.00007	.00037	-.00237	.00089	-.00160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 11:09:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00095	F -.12159	.00024	-.00001	-.00028	-.00051
Stddev	.00275	.00408	.00033	.00009	.00042	.00272
%RSD	288.17	3.3540	137.80	1311.0	148.30	538.82
#1	-.00196	-.11690	-.00004	-.00001	.00008	.00164
#2	.00132	-.12352	.00016	.00008	-.00019	-.00357
#3	.00349	-.12433	.00059	-.00010	-.00075	.00041
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00019	-.00000
Stddev	.00016	.00016
%RSD	83.421	39114.
#1	.00017	.00017
#2	.00004	-.00004
#3	.00036	-.00013
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 11:09:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4149.9	77057.	13699.
Stddev	7.5	74.	167.
%RSD	.18044	.09609	1.2178
#1	4141.3	76985.	13774.
#2	4154.9	77054.	13816.
#3	4153.7	77133.	13508.

Sample Name: mb 140-73327/10-a Acquired: 5/25/2023 11:14:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.02868	-.00624	.01218	.00029	.00002
Stddev	.00041	.01709	.00015	.00029	.00020	.00001
%RSD	419.30	59.594	2.3235	2.4077	69.656	81.334
#1	.00020	.00950	-.00641	.01252	.00051	.00003
#2	.00007	.04229	-.00619	.01207	.00012	.00002
#3	-.00056	.03425	-.00613	.01197	.00023	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02888	-.00034	-.00054	-.00217	.00013	-.00615
Stddev	.00674	.00002	.00005	.00021	.00107	.00305
%RSD	23.348	4.4932	9.9891	9.8736	793.45	49.511
#1	.03667	-.00033	-.00048	-.00236	.00121	-.00268
#2	.02502	-.00033	-.00058	-.00223	.00012	-.00836
#3	.02495	-.00036	-.00056	-.00194	-.00093	-.00742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73327/10-a Acquired: 5/25/2023 11:14:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00780	-.00025	.02816	.00019	.00034	.92985
Stddev	.01391	.00108	.01192	.00001	.00029	.46959
%RSD	178.20	439.70	42.321	6.2277	85.377	50.502
#1	-.00809	.00094	.03545	.00018	.00052	.45446
#2	.01777	-.00118	.03462	.00020	.00049	.94165
#3	.01373	-.00050	.01441	.00018	.00001	1.3934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03571	-.00060	.00363	-.00184	.00209	.00943
Stddev	.00258	.00022	.00024	.00193	.00040	.00049
%RSD	7.2215	37.474	6.5872	104.86	18.943	5.1982
#1	.03851	-.00049	.00372	-.00004	.00220	.00919
#2	.03518	-.00085	.00382	-.00160	.00242	.00911
#3	.03344	-.00044	.00336	-.00388	.00165	.00999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73327/10-a Acquired: 5/25/2023 11:14:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00543	.28787	.00370	-.00011	-.00003	-.00352
Stddev	.00086	.01287	.00018	.00005	.00080	.00133
%RSD	15.881	4.4697	4.9746	42.751	3004.1	37.647
#1	.00619	.29747	.00391	-.00006	-.00074	-.00206
#2	.00561	.29290	.00358	-.00013	-.00018	-.00385
#3	.00449	.27325	.00362	-.00016	.00084	-.00465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00027	.00394
Stddev	.00015	.00014
%RSD	56.517	3.4637
#1	.00009	.00404
#2	.00036	.00399
#3	.00035	.00378
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73327/10-a Acquired: 5/25/2023 11:14:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4031.8	74893.	13259.
Stddev	25.7	2368.	493.
%RSD	.63826	3.1620	3.7184
#1	4011.9	72159.	12690.
#2	4022.8	76271.	13549.
#3	4060.9	76250.	13538.

Sample Name: lcs 140-73327/11-a Acquired: 5/25/2023 11:20:00 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04680	2.0581	.08918	.94897	.10443	.05018
Stddev	.00035	.0125	.00079	.00254	.00040	.00024
%RSD	.75520	.60784	.88780	.26746	.38614	.47972
#1	.04692	2.0649	.08903	.94935	.10401	.05001
#2	.04641	2.0437	.09004	.94626	.10481	.05007
#3	.04708	2.0658	.08848	.95129	.10447	.05046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.587	.05002	.10138	.20677	.25097	1.0371
Stddev	.364	.00016	.00011	.00132	.00074	.0035
%RSD	.70484	.32137	.10779	.63816	.29346	.33891
#1	51.172	.05005	.10145	.20558	.25124	1.0359
#2	51.850	.05017	.10144	.20655	.25154	1.0410
#3	51.739	.04985	.10125	.20819	.25014	1.0343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73327/11-a Acquired: 5/25/2023 11:20:00 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.484	.10092	10.006	.10102	.51283	52.159
Stddev	.188	.00098	.100	.00055	.00093	.555
%RSD	.38733	.96612	.99933	.54565	.18043	1.0639
#1	48.505	.10150	9.9165	.10068	.51308	52.046
#2	48.660	.10148	10.114	.10072	.51361	52.762
#3	48.287	.09980	9.9880	.10165	.51181	51.670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.299	.50919	4.5489	.09474	.09823	.48212
Stddev	.191	.00217	.0271	.00050	.00078	.00517
%RSD	.38706	.42682	.59638	.52694	.79755	1.0713
#1	49.381	.51046	4.5668	.09418	.09778	.48805
#2	49.434	.51042	4.5622	.09513	.09779	.47972
#3	49.080	.50668	4.5177	.09492	.09914	.47860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73327/11-a Acquired: 5/25/2023 11:20:00 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13236	F 6.5279	.48946	.50001	.10766	.37736
Stddev	.00420	.0314	.00221	.00220	.00104	.00114
%RSD	3.1699	.48132	.45066	.43979	.96639	.30104
#1	.13179	6.4972	.49193	.49907	.10692	.37860
#2	.13682	6.5600	.48878	.50253	.10885	.37637
#3	.12848	6.5266	.48768	.49844	.10723	.37710
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20467	.49223
Stddev	.00099	.00204
%RSD	.48324	.41465
#1	.20400	.49395
#2	.20421	.49277
#3	.20581	.48997
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73327/11-a Acquired: 5/25/2023 11:20:00 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3844.7	73005.	12970.
Stddev	40.7	443.	105.
%RSD	1.0583	.60688	.81121
#1	3805.5	72568.	12870.
#2	3841.9	73454.	12959.
#3	3886.7	72992.	13080.

Sample Name: lcsd 140-73327/12-a Acquired: 5/25/2023 11:24:43 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04707	2.0242	.08835	.90683	.10425	.05038
Stddev	.00024	.0059	.00056	.00256	.00045	.00014
%RSD	.51755	.29281	.63681	.28209	.43513	.26875
#1	.04680	2.0176	.08778	.90900	.10455	.05051
#2	.04714	2.0291	.08835	.90749	.10447	.05038
#3	.04728	2.0259	.08891	.90401	.10373	.05024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.491	.05006	.10131	.20690	.25051	1.0370
Stddev	.105	.00018	.00040	.00052	.00112	.0010
%RSD	.20468	.35998	.39341	.25012	.44558	.10162
#1	51.413	.05011	.10176	.20741	.25154	1.0358
#2	51.611	.05020	.10117	.20693	.25067	1.0379
#3	51.448	.04985	.10100	.20637	.24933	1.0373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73327/12-a Acquired: 5/25/2023 11:24:43 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.412	.10007	9.9450	.10147	.51379	51.714
Stddev	.104	.00031	.0324	.00037	.00128	.312
%RSD	.21392	.30738	.32613	.36268	.24923	.60391
#1	48.372	.09976	9.9105	.10189	.51526	51.795
#2	48.530	.10038	9.9497	.10129	.51318	51.978
#3	48.335	.10007	9.9749	.10122	.51293	51.369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.130	.50947	4.5538	.09614	.09793	.48506
Stddev	.230	.00150	.0271	.00145	.00098	.00378
%RSD	.46745	.29527	.59424	1.5087	1.0034	.77890
#1	49.142	.51101	4.5808	.09772	.09689	.48942
#2	49.354	.50939	4.5539	.09581	.09884	.48262
#3	48.895	.50800	4.5267	.09488	.09805	.48315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73327/12-a Acquired: 5/25/2023 11:24:43 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13294	5.9369	.49034	.49994	.10739	.37818
Stddev	.00283	.0511	.00183	.00173	.00076	.00305
%RSD	2.1289	.86086	.37229	.34663	.70411	.80637
#1	.13612	5.8779	.49199	.49962	.10701	.37976
#2	.13201	5.9667	.49064	.50181	.10689	.38010
#3	.13069	5.9661	.48838	.49839	.10826	.37466
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20491	.48992
Stddev	.00078	.00205
%RSD	.37877	.41763
#1	.20555	.49225
#2	.20404	.48913
#3	.20513	.48840
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-73327/12-a Acquired: 5/25/2023 11:24:43 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3851.0	73002.	13053.
Stddev	47.7	908.	134.
%RSD	1.2384	1.2434	1.0288
#1	3797.2	72030.	12906.
#2	3867.7	73148.	13083.
#3	3888.1	73828.	13169.

Sample Name: RGT BLANK Acquired: 5/25/2023 11:29:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.01661	.00203	-.00333	.00013	-.00003
Stddev	.00029	.00827	.00054	.00041	.00009	.00001
%RSD	278.84	49.755	26.508	12.184	70.409	27.735
#1	.00023	.01496	.00241	-.00295	.00003	-.00002
#2	-.00026	.00930	.00226	-.00329	.00014	-.00004
#3	-.00029	.02558	.00141	-.00376	.00021	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01462	.00014	.00026	-.00058	.00055	-.00014
Stddev	.00099	.00007	.00006	.00036	.00040	.00107
%RSD	6.7743	48.501	23.102	62.207	72.023	748.60
#1	.01562	.00018	.00031	-.00017	.00032	-.00042
#2	.01364	.00019	.00019	-.00076	.00032	.00104
#3	.01459	.00006	.00028	-.00082	.00101	-.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: RGT BLANK Acquired: 5/25/2023 11:29:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00820	.00028	.01756	.00008	-.00008	.42511
Stddev	.01114	.00068	.00480	.00005	.00011	.43120
%RSD	135.88	241.14	27.345	58.268	138.54	101.43
#1	.02054	.00006	.02159	.00010	-.00020	.91419
#2	.00519	-.00026	.01883	.00012	-.00004	.09975
#3	-.00113	.00105	.01225	.00003	.00000	.26139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02305	.00042	-.00018	-.00027	.00029	-.00258
Stddev	.00541	.00008	.00034	.00174	.00115	.00073
%RSD	23.474	17.925	190.22	651.11	396.68	28.180
#1	.02497	.00049	-.00013	-.00061	-.00086	-.00275
#2	.02723	.00043	-.00054	.00162	.00028	-.00321
#3	.01694	.00034	.00014	-.00181	.00145	-.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: RGT BLANK Acquired: 5/25/2023 11:29:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	-.11479	.00091	-.00002	-.00010	.00202
Stddev	.00064	.01335	.00015	.00006	.00080	.00123
%RSD	93.116	11.628	16.676	255.21	805.09	60.854
#1	-.00088	-.10610	.00092	-.00000	-.00097	.00097
#2	.00003	-.10812	.00105	-.00009	.00009	.00173
#3	-.00121	-.13016	.00075	.00002	.00059	.00338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00025	.00051
Stddev	.00014	.00004
%RSD	55.985	8.1400
#1	.00009	.00047
#2	.00033	.00052
#3	.00032	.00055
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: RGT BLANK Acquired: 5/25/2023 11:29:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4195.9	77675.	13686.
Stddev	12.8	331.	130.
%RSD	.30436	.42590	.94984
#1	4210.5	78052.	13562.
#2	4190.6	77431.	13674.
#3	4186.7	77543.	13822.

Sample Name: mb 140-73484/9-b Acquired: 5/25/2023 11:34:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.07283	.00201	.06866	.00764	-.00001
Stddev	.00046	.01534	.00194	.00038	.00008	.00002
%RSD	565.77	21.065	96.843	.55648	1.0498	237.83
#1	.00061	.07710	.00425	.06851	.00755	.00001
#2	-.00012	.08558	.00091	.06837	.00771	-.00004
#3	-.00024	.05581	.00086	.06909	.00764	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5790	.00015	.00190	.00385	.00379	.06746
Stddev	.0123	.00006	.00007	.00039	.00032	.00108
%RSD	.78016	41.761	3.8074	10.050	8.4799	1.6021
#1	1.5651	.00008	.00183	.00349	.00391	.06657
#2	1.5832	.00021	.00191	.00380	.00342	.06866
#3	1.5886	.00016	.00197	.00426	.00403	.06714
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73484/9-b Acquired: 5/25/2023 11:34:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11446	.00102	.15327	.00165	.00097	F 7.4125
Stddev	.02185	.00110	.00652	.00006	.00015	.3935
%RSD	19.093	107.64	4.2543	3.9155	15.340	5.3089
#1	.13715	.00048	.14687	.00161	.00097	7.2986
#2	.09356	.00228	.15303	.00162	.00111	7.0886
#3	.11267	.00030	.15990	.00172	.00082	7.8505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						5.0000
Low Limit						-5.0000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 7.0708	.00196	.26744	.00152	-.00031	-.00280
Stddev	.0452	.00032	.00332	.00124	.00041	.00136
%RSD	.63887	16.098	1.2419	81.820	134.04	48.425
#1	7.0337	.00232	.26377	.00052	-.00017	-.00307
#2	7.0575	.00186	.26832	.00112	-.00077	-.00401
#3	7.1211	.00171	.27024	.00292	.00001	-.00133
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	5.0000					
Low Limit	-5.0000					

Sample Name: mb 140-73484/9-b Acquired: 5/25/2023 11:34:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00230	F 1.3355	.00285	.00236	.00357	.00237
Stddev	.00154	.0172	.00024	.00003	.00095	.00244
%RSD	66.955	1.2902	8.4199	1.1826	26.674	102.90
#1	-.00366	1.3240	.00312	.00238	.00439	.00384
#2	-.00062	1.3273	.00272	.00233	.00253	.00372
#3	-.00262	1.3553	.00270	.00238	.00380	-.00045
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00040	.01027
Stddev	.00013	.00003
%RSD	31.641	.30937
#1	.00046	.01023
#2	.00049	.01029
#3	.00026	.01028
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73484/9-b Acquired: 5/25/2023 11:34:30 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4160.6	77517.	13797.
Stddev	14.6	497.	36.
%RSD	.35143	.64164	.26080
#1	4174.2	78044.	13816.
#2	4162.3	77453.	13820.
#3	4145.2	77055.	13756.

Sample Name: lcs 140-73484/10-b Acquired: 5/25/2023 11:39:26 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04398	1.8660	.09303	1.0265	.10777	.04638
Stddev	.00059	.0268	.00127	.0176	.00094	.00069
%RSD	1.3526	1.4376	1.3599	1.7110	.87274	1.4853
#1	.04331	1.8372	.09434	1.0079	.10683	.04572
#2	.04418	1.8903	.09294	1.0287	.10777	.04632
#3	.04444	1.8705	.09182	1.0428	.10871	.04710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.605	.04476	.08896	.18250	.21593	.97256
Stddev	.402	.00061	.00092	.00171	.00270	.01177
%RSD	.88144	1.3696	1.0330	.93609	1.2527	1.2102
#1	45.142	.04411	.08794	.18055	.21296	.96085
#2	45.804	.04484	.08923	.18319	.21656	.97244
#3	45.868	.04533	.08971	.18375	.21825	.98439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73484/10-b Acquired: 5/25/2023 11:39:26 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.788	.08763	8.9014	.08919	.43621	51.044
Stddev	.424	.00103	.1143	.00120	.00434	.557
%RSD	.99066	1.1779	1.2837	1.3426	.99476	1.0906
#1	42.363	.08734	8.7698	.08802	.43152	50.407
#2	42.789	.08678	8.9754	.08914	.43703	51.288
#3	43.211	.08878	8.9589	.09041	.44009	51.437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.680	.44564	4.7825	.09298	.08856	.43488
Stddev	.522	.00471	.0395	.00366	.00160	.00485
%RSD	1.0508	1.0568	.82659	3.9398	1.8041	1.1152
#1	49.215	.44048	4.7376	.08949	.08671	.43166
#2	49.581	.44674	4.7980	.09267	.08942	.43253
#3	50.245	.44971	4.8119	.09679	.08954	.44046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73484/10-b Acquired: 5/25/2023 11:39:26 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13793	F 13.065	.43650	.42742	.09524	.35999
Stddev	.00169	.137	.00529	.00500	.00167	.00345
%RSD	1.2269	1.0491	1.2113	1.1701	1.7520	.95935
#1	.13598	12.908	.43085	.42294	.09332	.35601
#2	.13896	13.158	.43731	.42651	.09615	.36179
#3	.13885	13.131	.44133	.43282	.09626	.36217
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.17409	.47725
Stddev	.00164	.00494
%RSD	.94100	1.0352
#1	.17307	.47202
#2	.17322	.47790
#3	.17598	.48183
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73484/10-b Acquired: 5/25/2023 11:39:26 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4104.7	76869.	13874.
Stddev	34.2	914.	96.
%RSD	.83332	1.1886	.69090
#1	4142.5	77657.	13953.
#2	4095.7	77082.	13767.
#3	4075.9	75867.	13901.

Sample Name: mb 140-73332/8-a Acquired: 5/25/2023 11:44:13 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	.01793	-.00189	-.00628	.00007	-.00004
Stddev	.00033	.01264	.00114	.00049	.00003	.00001
%RSD	57.240	70.508	59.951	7.7296	41.081	28.322
#1	.00096	.03000	-.00132	-.00589	.00005	-.00004
#2	.00047	.01901	-.00116	-.00613	.00010	-.00005
#3	.00032	.00478	-.00320	-.00682	.00005	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07401	-.00002	-.00016	-.00051	.00022	.01236
Stddev	.00325	.00009	.00011	.00024	.00031	.00173
%RSD	4.3952	375.11	66.675	47.812	142.34	13.957
#1	.07776	-.00009	-.00029	-.00028	.00035	.01434
#2	.07233	.00008	-.00010	-.00048	.00044	.01119
#3	.07193	-.00005	-.00010	-.00076	-.00014	.01156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73332/8-a Acquired: 5/25/2023 11:44:13 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02311	.00081	.01161	.00039	.00016	.31734
Stddev	.01322	.00072	.00824	.00003	.00026	.59899
%RSD	57.214	88.717	70.996	8.7893	168.97	188.75
#1	.03678	.00074	.00813	.00041	.00045	.92310
#2	.02215	.00013	.00568	.00041	.00007	-.27465
#3	.01039	.00157	.02103	.00035	-.00005	.30357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02958	.00061	.01195	-.00140	.00077	.00071
Stddev	.00346	.00015	.00052	.00198	.00035	.00119
%RSD	11.708	25.073	4.3270	141.76	45.709	169.30
#1	.03291	.00053	.01197	-.00351	.00064	.00114
#2	.02983	.00078	.01245	-.00109	.00049	-.00065
#3	.02600	.00050	.01142	.00041	.00116	.00162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73332/8-a Acquired: 5/25/2023 11:44:13 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00090	-.13777	.01166	-.00002	.00069	-.00121
Stddev	.00156	.00545	.00060	.00003	.00061	.00089
%RSD	172.60	3.9526	5.1246	196.67	87.800	73.417
#1	-.00000	-.13214	.01194	-.00003	.00139	-.00212
#2	.00270	-.13814	.01097	-.00004	.00026	-.00034
#3	.00001	-.14301	.01207	.00002	.00043	-.00119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00003	.00147
Stddev	.00049	.00009
%RSD	1468.1	6.3140
#1	.00002	.00146
#2	-.00045	.00139
#3	.00053	.00157
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73332/8-a Acquired: 5/25/2023 11:44:13 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4109.2	77127.	13774.
Stddev	11.6	91.	85.
%RSD	.28181	.11762	.61899
#1	4095.9	77118.	13676.
#2	4116.5	77041.	13827.
#3	4115.3	77222.	13821.

Sample Name: lcs 140-73332/9-a Acquired: 5/25/2023 11:49:11 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04906	2.0057	.09937	.96274	.10295	.05232
Stddev	.00051	.0097	.00154	.00438	.00019	.00016
%RSD	1.0348	.48371	1.5523	.45458	.18664	.31153
#1	.04847	2.0162	.10076	.96461	.10314	.05250
#2	.04938	1.9972	.09771	.96587	.10275	.05227
#3	.04932	2.0036	.09963	.95774	.10295	.05219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.650	.05089	.10193	.20577	.24748	1.0436
Stddev	.097	.00003	.00009	.00067	.00049	.0029
%RSD	.18760	.06110	.08342	.32408	.19785	.28183
#1	51.758	.05086	.10189	.20502	.24805	1.0453
#2	51.571	.05089	.10186	.20629	.24720	1.0402
#3	51.621	.05092	.10202	.20602	.24720	1.0452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73332/9-a Acquired: 5/25/2023 11:49:11 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.889	.10070	10.055	.10152	.51172	50.848
Stddev	.119	.00036	.049	.00041	.00148	.128
%RSD	.24333	.36220	.48928	.40800	.28999	.25238
#1	49.026	.10112	10.093	.10175	.51334	50.837
#2	48.828	.10044	9.9996	.10177	.51139	50.725
#3	48.813	.10055	10.072	.10104	.51043	50.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.688	.51258	4.9604	.10197	.09911	.49834
Stddev	.151	.00112	.0092	.00069	.00264	.00110
%RSD	.30393	.21908	.18456	.67274	2.6632	.22081
#1	49.862	.51365	4.9702	.10207	.10197	.49960
#2	49.613	.51141	4.9520	.10260	.09860	.49787
#3	49.590	.51270	4.9591	.10124	.09677	.49755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73332/9-a Acquired: 5/25/2023 11:49:11 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14049	F 3.2980	.50933	.49319	.10705	.40020
Stddev	.00270	.0182	.00239	.00062	.00087	.00307
%RSD	1.9200	.55141	.46946	.12549	.81710	.76745
#1	.14355	3.3108	.51206	.49365	.10739	.40044
#2	.13946	3.3060	.50761	.49343	.10605	.40314
#3	.13845	3.2772	.50833	.49249	.10770	.39701
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		-20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20291	.50885
Stddev	.00028	.00128
%RSD	.13895	.25108
#1	.20265	.51032
#2	.20321	.50797
#3	.20288	.50827
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73332/9-a Acquired: 5/25/2023 11:49:11 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4062.5	76612.	13642.
Stddev	13.5	591.	167.
%RSD	.33286	.77104	1.2238
#1	4047.6	75967.	13450.
#2	4074.1	76745.	13740.
#3	4065.8	77125.	13738.

Sample Name: mb 140-73443/13-a Acquired: 5/25/2023 11:53:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.01562	-.00082	.00371	.00016	-.00004
Stddev	.00022	.00930	.00115	.00031	.00005	.00001
%RSD	119.69	59.568	140.69	8.2525	28.550	37.048
#1	-.00006	.02234	.00050	.00386	.00015	-.00004
#2	.00036	.01951	-.00162	.00391	.00021	-.00005
#3	.00024	.00500	-.00133	.00336	.00012	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15805	-.00005	-.00015	-.00062	.00071	.00595
Stddev	.00376	.00004	.00007	.00019	.00044	.00170
%RSD	2.3762	71.077	47.640	30.801	62.325	28.614
#1	.16183	-.00006	-.00007	-.00078	.00116	.00408
#2	.15799	-.00001	-.00017	-.00041	.00070	.00742
#3	.15432	-.00009	-.00020	-.00068	.00027	.00636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73443/13-a Acquired: 5/25/2023 11:53:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03011	.00033	.01903	.00023	.00018	1.2329
Stddev	.01395	.00081	.01055	.00003	.00013	.6034
%RSD	46.326	247.78	55.454	14.732	68.000	48.941
#1	.04516	.00088	.03031	.00022	.00015	1.2382
#2	.02756	-.00060	.00940	.00021	.00032	.62690
#3	.01762	.00069	.01738	.00027	.00008	1.8337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04704	.00076	.00167	.00036	.00071	.00243
Stddev	.00468	.00017	.00057	.00109	.00139	.00207
%RSD	9.9590	21.597	34.061	301.36	194.36	85.143
#1	.05204	.00078	.00164	-.00036	.00216	.00101
#2	.04276	.00092	.00111	.00162	-.00060	.00480
#3	.04632	.00059	.00225	-.00017	.00057	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73443/13-a Acquired: 5/25/2023 11:53:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00170	-.06444	.00229	.00005	.00038	-.00067
Stddev	.00050	.00774	.00043	.00003	.00071	.00154
%RSD	29.441	12.015	18.673	73.051	186.40	230.90
#1	.00143	-.05675	.00232	.00008	-.00040	-.00240
#2	.00228	-.06434	.00185	.00006	.00057	.00055
#3	.00140	-.07224	.00270	.00001	.00098	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00029	.00818
Stddev	.00018	.00004
%RSD	63.096	.43141
#1	.00017	.00814
#2	.00020	.00820
#3	.00050	.00820
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73443/13-a Acquired: 5/25/2023 11:53:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4078.1	76822.	13508.
Stddev	4.7	453.	95.
%RSD	.11643	.58950	.70023
#1	4073.2	76366.	13415.
#2	4082.7	76828.	13505.
#3	4078.5	77271.	13604.

Sample Name: lcs 140-73443/14-a Acquired: 5/25/2023 11:58:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04677	1.9411	.09492	.93558	.09957	.05157
Stddev	.00023	.0236	.00085	.00418	.00055	.00015
%RSD	.48808	1.2166	.89430	.44684	.54829	.28211
#1	.04677	1.9368	.09472	.93083	.09895	.05140
#2	.04701	1.9666	.09420	.93869	.09979	.05163
#3	.04655	1.9199	.09586	.93723	.09998	.05167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.066	.04910	.09848	.19909	.23735	1.0034
Stddev	.182	.00010	.00026	.00057	.00124	.0092
%RSD	.36397	.19529	.26594	.28473	.52271	.91923
#1	49.856	.04909	.09821	.19904	.23868	.99280
#2	50.169	.04901	.09873	.19969	.23623	1.0095
#3	50.174	.04920	.09851	.19856	.23714	1.0080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73443/14-a Acquired: 5/25/2023 11:58:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.498	.09742	9.7060	.09807	.49113	50.129
Stddev	.318	.00071	.0504	.00034	.00031	.686
%RSD	.66911	.73039	.51894	.34699	.06251	1.3688
#1	47.141	.09717	9.6502	.09769	.49090	50.231
#2	47.749	.09686	9.7480	.09818	.49102	49.398
#3	47.604	.09822	9.7197	.09834	.49148	50.759
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.235	.49408	4.7090	.09760	.09570	.47527
Stddev	.214	.00130	.0096	.00257	.00143	.00281
%RSD	.44273	.26279	.20481	2.6327	1.4918	.59072
#1	48.005	.49403	4.7137	.09743	.09730	.47845
#2	48.426	.49282	4.6979	.10025	.09525	.47312
#3	48.276	.49541	4.7154	.09512	.09455	.47425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73443/14-a Acquired: 5/25/2023 11:58:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13648	5.1785	.47580	.47825	.10271	.38410
Stddev	.00106	.0164	.00205	.00246	.00094	.00355
%RSD	.77624	.31606	.43118	.51342	.91829	.92439
#1	.13531	5.1608	.47433	.47543	.10225	.38622
#2	.13676	5.1817	.47493	.47936	.10380	.38000
#3	.13738	5.1931	.47814	.47995	.10209	.38608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19610	.49410
Stddev	.00086	.00041
%RSD	.43729	.08377
#1	.19572	.49434
#2	.19550	.49362
#3	.19708	.49433
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73443/14-a Acquired: 5/25/2023 11:58:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4065.7	76340.	13592.
Stddev	22.1	505.	91.
%RSD	.54251	.66097	.66852
#1	4041.7	75812.	13503.
#2	4070.6	76393.	13590.
#3	4085.0	76817.	13684.

Sample Name: CCV Acquired: 5/25/2023 12:03:37 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98593	25.127	.49781	1.9675	2.0245	2.0643
Stddev	.00209	.110	.00056	.0034	.0072	.0079
%RSD	.21237	.43706	.11346	.17300	.35584	.38337
#1	.98835	25.025	.49815	1.9651	2.0172	2.0555
#2	.98477	25.243	.49812	1.9660	2.0316	2.0664
#3	.98468	25.114	.49716	1.9714	2.0248	2.0709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.193	.50965	2.0113	2.0363	1.9496	25.856
Stddev	.103	.00012	.0011	.0102	.0026	.065
%RSD	.19761	.02394	.05545	.50049	.13354	.25296
#1	52.083	.50976	2.0119	2.0481	1.9526	25.784
#2	52.209	.50967	2.0100	2.0313	1.9482	25.911
#3	52.288	.50952	2.0120	2.0297	1.9479	25.874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 12:03:37 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.759	1.9671	51.884	2.0381	2.0483	51.014
Stddev	.113	.0055	.092	.0026	.0031	.832
%RSD	.22808	.28124	.17646	.12862	.15078	1.6303
#1	49.632	1.9617	51.799	2.0409	2.0515	51.344
#2	49.849	1.9728	51.872	2.0375	2.0454	50.067
#3	49.798	1.9667	51.980	2.0358	2.0479	51.629
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.262	2.0255	1.9825	.51927	.50565	.49415
Stddev	.112	.0015	.0026	.00504	.00237	.00277
%RSD	.22303	.07601	.13249	.96966	.46792	.56113
#1	50.210	2.0270	1.9798	.52468	.50682	.49721
#2	50.391	2.0239	1.9851	.51842	.50292	.49181
#3	50.185	2.0256	1.9827	.51472	.50720	.49344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 12:03:37 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50481	1.8681	1.9859	1.9898	2.0405	1.0156
Stddev	.00055	.0058	.0016	.0090	.0118	.0055
%RSD	.10960	.31145	.07855	.45382	.57701	.53713
#1	.50534	1.8627	1.9874	1.9807	2.0270	1.0153
#2	.50424	1.8673	1.9843	1.9987	2.0481	1.0103
#3	.50487	1.8743	1.9860	1.9899	2.0466	1.0212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0190	2.0129
Stddev	.0062	.0029
%RSD	.30850	.14391
#1	2.0262	2.0129
#2	2.0154	2.0100
#3	2.0154	2.0158
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 12:03:37 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4070.4	76959.	13551.
Stddev	8.1	348.	71.
%RSD	.19885	.45163	.52071
#1	4062.5	76573.	13472.
#2	4078.7	77248.	13608.
#3	4070.1	77055.	13573.

Sample Name: CCB Acquired: 5/25/2023 12:08:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.00684	.00005	-.00937	.00020	-.00001
Stddev	.00014	.01114	.00020	.00153	.00016	.00004
%RSD	41.149	162.71	387.72	16.299	80.916	489.29
#1	.00048	-.00599	.00024	-.00808	.00037	.00003
#2	.00034	.01255	.00008	-.00898	.00005	-.00001
#3	.00020	.01397	-.00016	-.01106	.00017	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00580	.00008	.00007	-.00020	-.00004	.00230
Stddev	.00176	.00003	.00013	.00042	.00035	.00120
%RSD	30.310	30.237	186.88	208.96	879.91	52.170
#1	.00775	.00006	.00017	-.00026	.00036	.00333
#2	.00532	.00011	.00010	.00025	-.00024	.00258
#3	.00434	.00008	-.00007	-.00058	-.00024	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 12:08:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02798	-.00010	.01858	.00004	-.00002	.26394
Stddev	.02722	.00077	.01373	.00008	.00018	.31875
%RSD	97.285	775.77	73.899	198.85	957.97	120.77
#1	.01059	-.00040	.03432	.00013	.00000	.11618
#2	.05936	-.00068	.01230	.00001	.00015	.62976
#3	.01400	.00078	.00911	-.00002	-.00020	.04589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00504	.00023	-.00020	F .00319	.00006	-.00015
Stddev	.00260	.00008	.00139	.00307	.00094	.00026
%RSD	51.706	32.955	698.23	96.219	1623.6	176.13
#1	.00331	.00032	-.00027	.00629	-.00032	-.00037
#2	.00803	.00017	.00123	.00314	.00113	.00014
#3	.00376	.00021	-.00156	.00015	-.00063	-.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/25/2023 12:08:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00110	F -.19036	-.00003	-.00005	-.00063	.00096
Stddev	.00182	.00392	.00029	.00003	.00044	.00213
%RSD	165.08	2.0618	1133.5	66.966	70.032	222.21
#1	.00318	-.19342	-.00018	-.00001	-.00092	-.00113
#2	.00038	-.19172	.00031	-.00006	-.00084	.00089
#3	-.00025	-.18593	-.00020	-.00008	-.00012	.00312
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00001	-.00009
Stddev	.00020	.00008
%RSD	3334.1	85.023
#1	.00012	-.00001
#2	-.00023	-.00010
#3	.00010	-.00017
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 12:08:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4153.0	77224.	13634.
Stddev	23.0	787.	205.
%RSD	.55351	1.0191	1.5022
#1	4158.3	77620.	13665.
#2	4127.8	76318.	13415.
#3	4172.9	77734.	13821.

Sample Name: lcsd 140-73443/15-a Acquired: 5/25/2023 12:13:24 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04800	1.9822	.09696	.98380	.10084	.05222
Stddev	.00062	.0158	.00024	.00902	.00087	.00048
%RSD	1.2908	.79841	.24729	.91673	.85890	.91931
#1	.04872	1.9681	.09669	.99421	.10183	.05277
#2	.04766	1.9993	.09715	.97855	.10020	.05190
#3	.04763	1.9791	.09703	.97863	.10050	.05198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.889	.04982	.09990	.20377	.24309	1.0148
Stddev	.076	.00021	.00063	.00171	.00332	.0021
%RSD	.15008	.41364	.62768	.83846	1.3661	.20385
#1	50.932	.04984	.10025	.20562	.24692	1.0165
#2	50.935	.04961	.09918	.20224	.24100	1.0125
#3	50.801	.05002	.10028	.20346	.24136	1.0154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73443/15-a Acquired: 5/25/2023 12:13:24 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.702	.09835	9.8823	.09964	.50083	50.131
Stddev	.364	.00086	.0192	.00083	.00170	.821
%RSD	.76248	.87929	.19412	.83158	.34014	1.6386
#1	48.095	.09935	9.8602	.10059	.50130	50.785
#2	47.633	.09780	9.8927	.09906	.49894	49.209
#3	47.378	.09791	9.8940	.09926	.50225	50.399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.549	.50144	4.7834	.09999	.09901	.48469
Stddev	.430	.00199	.0204	.00155	.00097	.00428
%RSD	.88669	.39777	.42684	1.5546	.97673	.88347
#1	49.034	.50237	4.7959	.10048	.09797	.48947
#2	48.400	.49915	4.7598	.09825	.09917	.48120
#3	48.213	.50279	4.7945	.10124	.09989	.48341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73443/15-a Acquired: 5/25/2023 12:13:24 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13824	5.5762	.48381	.48173	.10429	.38963
Stddev	.00163	.0384	.00154	.00513	.00286	.00297
%RSD	1.1790	.68807	.31929	1.0655	2.7385	.76113
#1	.13999	5.6154	.48402	.48757	.10753	.38754
#2	.13677	5.5744	.48217	.47972	.10213	.38834
#3	.13796	5.5388	.48524	.47791	.10322	.39303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20061	.50075
Stddev	.00227	.00239
%RSD	1.1335	.47725
#1	.20320	.50257
#2	.19895	.49805
#3	.19968	.50164
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-73443/15-a Acquired: 5/25/2023 12:13:24 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4027.9	75273.	13411.
Stddev	34.8	1127.	42.
%RSD	.86406	1.4976	.31392
#1	3988.4	73980.	13374.
#2	4054.0	75790.	13404.
#3	4041.3	76049.	13457.

Sample Name: 140-31632-a-3-a Acquired: 5/25/2023 12:18:08 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04461	18.501	.03032	1.5527	.89291	.00055
Stddev	.00047	.277	.00194	.0156	.00449	.00001
%RSD	1.0506	1.4991	6.3879	1.0030	.50332	2.5267
#1	.04424	18.219	.02923	1.5377	.88878	.00053
#2	.04445	18.509	.02918	1.5516	.89227	.00056
#3	.04513	18.774	.03256	1.5688	.89770	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	230.80	.19079	.08494	2.8912	2.1148	271.23
Stddev	7.42	.00199	.00060	.0437	.0129	5.35
%RSD	3.2167	1.0452	.70545	1.5115	.60767	1.9737
#1	223.22	.18859	.08434	2.8463	2.1000	267.92
#2	231.12	.19249	.08553	2.8938	2.1212	268.37
#3	238.05	.19128	.08496	2.9336	2.1231	277.41
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-3-a Acquired: 5/25/2023 12:18:08 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.950	.03568	86.349	F 27.303	.16717	23.478
Stddev	.193	.00079	2.250	.387	.00143	.296
%RSD	1.4930	2.2115	2.6055	1.4173	.85640	1.2588
#1	12.792	.03494	84.225	26.880	.16581	23.762
#2	12.892	.03559	86.117	27.391	.16866	23.501
#3	13.166	.03651	88.707	27.639	.16704	23.172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				20.000		
Low Limit				-20.000		

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.658	.81763	1.5295	4.8369	4.9646	.06996
Stddev	.214	.00823	.0105	.0932	.0582	.00161
%RSD	.83453	1.0069	.68356	1.9264	1.1715	2.2957
#1	25.538	.80830	1.5189	4.7445	4.8987	.06945
#2	25.531	.82387	1.5397	4.8353	5.0088	.07176
#3	25.905	.82073	1.5300	4.9308	4.9862	.06867
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-3-a Acquired: 5/25/2023 12:18:08 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01495	9.0930	.60885	.43802	1.2806	.01616
Stddev	.00220	.1527	.00790	.00311	.0138	.00345
%RSD	14.724	1.6798	1.2968	.71101	1.0802	21.338
#1	.01747	8.9493	.59990	.43520	1.2667	.01788
#2	.01392	9.0763	.61483	.43750	1.2808	.01842
#3	.01345	9.2534	.61182	.44136	1.2944	.01219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.31136	F 43.998
Stddev	.00366	.997
%RSD	1.1755	2.2666
#1	.30737	42.862
#2	.31215	44.729
#3	.31456	44.402
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-3-a Acquired: 5/25/2023 12:18:08 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3616.8	71399.	12842.
Stddev	18.9	327.	156.
%RSD	.52260	.45801	1.2116
#1	3606.3	71292.	12901.
#2	3605.4	71766.	12960.
#3	3638.6	71138.	12666.

Sample Name: 140-31632-a-6-a Acquired: 5/25/2023 12:23:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10390	4.9357	.01134	.65912	.24619	.00006
Stddev	.00054	.0323	.00075	.00699	.00077	.00001
%RSD	.52366	.65365	6.6395	1.0599	.31424	22.071
#1	.10329	4.8986	.01051	.65106	.24665	.00006
#2	.10405	4.9564	.01152	.66344	.24663	.00004
#3	.10435	4.9523	.01198	.66286	.24530	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.531	.07844	.04316	1.6130	1.2717	49.823
Stddev	.360	.00009	.00011	.0164	.0034	.537
%RSD	.74216	.11295	.26494	1.0179	.26801	1.0778
#1	48.138	.07847	.04303	1.5953	1.2754	49.210
#2	48.609	.07834	.04324	1.6161	1.2709	50.049
#3	48.845	.07852	.04321	1.6277	1.2688	50.210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a Acquired: 5/25/2023 12:23:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.4012	.00960	12.555	6.6887	.19785	11.454
Stddev	.0929	.00039	.235	.0748	.00028	.416
%RSD	1.4509	4.1080	1.8713	1.1187	.14228	3.6289
#1	6.2963	.00935	12.304	6.6027	.19789	11.932
#2	6.4730	.01005	12.591	6.7242	.19755	11.174
#3	6.4344	.00939	12.770	6.7391	.19810	11.256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.081	1.5337	.59524	1.9947	2.0235	.03502
Stddev	.061	.0015	.00343	.0318	.0025	.00130
%RSD	.55359	.10098	.57674	1.5946	.12211	3.7145
#1	11.010	1.5340	.59371	1.9609	2.0245	.03647
#2	11.119	1.5351	.59918	1.9990	2.0253	.03462
#3	11.113	1.5321	.59285	2.0241	2.0207	.03396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a Acquired: 5/25/2023 12:23:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01595	9.5737	.47647	.08340	.18551	-.00040
Stddev	.00130	.1022	.00119	.00014	.00029	.00116
%RSD	8.1664	1.0674	.25010	.17061	.15838	288.02
#1	.01745	9.4563	.47737	.08352	.18537	-.00010
#2	.01532	9.6229	.47692	.08344	.18532	.00058
#3	.01508	9.6421	.47512	.08325	.18585	-.00168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.04696	F 26.579
Stddev	.00034	.300
%RSD	.72922	1.1295
#1	.04702	26.233
#2	.04659	26.771
#3	.04726	26.733
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-6-a Acquired: 5/25/2023 12:23:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3970.7	76613.	13389.
Stddev	42.7	405.	70.
%RSD	1.0762	.52824	.52458
#1	3923.8	76203.	13375.
#2	3980.9	76624.	13466.
#3	4007.4	77012.	13327.

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 12:28:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15237	7.0986	.10473	1.5389	.35366	.04975
Stddev	.00114	.0057	.00125	.0142	.00210	.00073
%RSD	.75108	.08055	1.1927	.92242	.59373	1.4682
#1	.15311	7.1046	.10331	1.5351	.35577	.04928
#2	.15105	7.0932	.10566	1.5270	.35157	.04938
#3	.15294	7.0982	.10523	1.5546	.35365	.05059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	100.86	.12887	.14540	1.8324	1.5510	52.036
Stddev	.55	.00126	.00115	.0132	.0041	.043
%RSD	.54414	.97623	.79429	.72054	.26463	.08312
#1	100.23	.12832	.14442	1.8359	1.5554	52.033
#2	101.19	.13030	.14667	1.8178	1.5472	52.081
#3	101.17	.12797	.14510	1.8435	1.5504	51.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 12:28:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	56.025	.11152	22.994	6.8656	.72122	62.395
Stddev	.110	.00085	.303	.0883	.00682	.043
%RSD	.19560	.76617	1.3181	1.2859	.94612	.06871
#1	55.934	.11074	22.646	6.9413	.72076	62.438
#2	55.994	.11140	23.197	6.7686	.72826	62.353
#3	56.147	.11243	23.139	6.8868	.71463	62.393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	61.835	2.0428	5.0360	2.1031	2.1331	.50646
Stddev	.254	.0189	.0489	.0259	.0198	.00558
%RSD	.41145	.92631	.97065	1.2334	.92940	1.1027
#1	62.106	2.0410	5.0315	2.1129	2.1352	.50939
#2	61.601	2.0626	5.0870	2.0737	2.1518	.50997
#3	61.799	2.0249	4.9896	2.1227	2.1123	.50002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 12:28:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14148	15.818	.95335	.58618	.29418	.37740
Stddev	.00335	.079	.01032	.00293	.00123	.00554
%RSD	2.3673	.49645	1.0824	.50018	.41678	1.4692
#1	.13963	15.728	.94861	.58507	.29460	.37132
#2	.13947	15.874	.96519	.58396	.29279	.38216
#3	.14535	15.851	.94625	.58950	.29514	.37873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.25074	F 27.455
Stddev	.00291	.358
%RSD	1.1614	1.3033
#1	.24843	27.840
#2	.24978	27.133
#3	.25401	27.393
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 12:28:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3800.3	73261.	12808.
Stddev	61.6	1305.	86.
%RSD	1.6210	1.7817	.66900
#1	3746.2	71789.	12760.
#2	3787.4	74278.	12758.
#3	3867.3	73716.	12907.

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 12:33:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14459	6.6681	.10092	1.4621	.33352	.04722
Stddev	.00088	.0519	.00159	.0142	.00124	.00095
%RSD	.61026	.77819	1.5796	.96829	.37104	2.0107
#1	.14390	6.6161	.09911	1.4475	.33211	.04623
#2	.14558	6.6685	.10212	1.4630	.33404	.04730
#3	.14429	6.7198	.10154	1.4757	.33441	.04812
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	95.083	.12215	.13748	1.7295	1.4636	48.657
Stddev	.834	.00057	.00127	.0172	.0021	.322
%RSD	.87750	.46930	.92660	.99237	.14278	.66135
#1	94.144	.12151	.13609	1.7101	1.4660	48.286
#2	95.367	.12233	.13774	1.7357	1.4620	48.815
#3	95.739	.12261	.13860	1.7427	1.4629	48.868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 12:33:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.822	.10557	21.606	6.4775	.68762	59.516
Stddev	.229	.00091	.223	.0646	.00147	.127
%RSD	.43268	.86620	1.0339	.99720	.21393	.21282
#1	52.564	.10460	21.361	6.4030	.68594	59.586
#2	52.902	.10568	21.657	6.5127	.68823	59.370
#3	53.000	.10642	21.799	6.5169	.68869	59.593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.435	1.9314	4.8110	1.9999	2.0213	.48226
Stddev	.151	.0060	.0035	.0281	.0043	.00175
%RSD	.25829	.31103	.07221	1.4044	.21451	.36212
#1	58.262	1.9248	4.8125	1.9681	2.0189	.48378
#2	58.503	1.9326	4.8070	2.0103	2.0263	.48265
#3	58.540	1.9367	4.8134	2.0213	2.0187	.48035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 12:33:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13304	14.891	.90118	.55259	.27643	.36024
Stddev	.00052	.106	.00381	.00445	.00239	.00524
%RSD	.39204	.71296	.42309	.80612	.86349	1.4548
#1	.13350	14.773	.89722	.54779	.27385	.35419
#2	.13316	14.921	.90150	.55337	.27688	.36333
#3	.13248	14.979	.90482	.55660	.27856	.36320
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.23714	F 25.737
Stddev	.00318	.170
%RSD	1.3393	.65976
#1	.23378	25.757
#2	.23755	25.896
#3	.24010	25.558
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 12:33:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3992.4	77020.	13576.
Stddev	44.4	507.	85.
%RSD	1.1115	.65851	.62635
#1	3943.0	76474.	13481.
#2	4005.4	77110.	13646.
#3	4028.9	77476.	13601.

Sample Name: 140-31632-a-9-a Acquired: 5/25/2023 12:38:18 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16430	1.4400	-.00216	.39525	.13030	-.00002
Stddev	.00068	.0257	.00061	.00497	.00121	.00002
%RSD	.41647	1.7866	28.227	1.2578	.92855	70.866
#1	.16351	1.4105	-.00280	.38991	.12896	-.00004
#2	.16475	1.4579	-.00159	.39975	.13064	-.00001
#3	.16464	1.4516	-.00208	.39610	.13131	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.641	.02410	.02007	.63566	.93518	17.646
Stddev	.331	.00018	.00009	.00698	.00690	.312
%RSD	1.7764	.72668	.43251	1.0983	.73780	1.7690
#1	18.298	.02395	.01998	.62774	.92722	17.308
#2	18.665	.02407	.02014	.63831	.93956	17.706
#3	18.959	.02429	.02011	.64093	.93875	17.924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-9-a Acquired: 5/25/2023 12:38:18 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8982	.00383	4.4970	2.7663	.06673	10.236
Stddev	.0703	.00092	.1280	.0277	.00030	.695
%RSD	1.8027	24.021	2.8467	1.0023	.44467	6.7865
#1	3.8248	.00478	4.3762	2.7348	.06658	9.4347
#2	3.9051	.00375	4.4836	2.7771	.06654	10.598
#3	3.9649	.00295	4.6312	2.7870	.06707	10.674
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.0575	.83757	.14882	.80088	.80332	.01826
Stddev	.1325	.00508	.00210	.00961	.00701	.00138
%RSD	1.4629	.60665	1.4143	1.2002	.87232	7.5559
#1	8.9103	.83172	.15014	.79048	.79533	.01667
#2	9.0952	.84009	.14994	.80275	.80620	.01907
#3	9.1671	.84089	.14640	.80943	.80843	.01904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-9-a Acquired: 5/25/2023 12:38:18 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01083	3.9605	.45764	.03361	.06639	-.00305
Stddev	.00072	.0684	.00340	.00028	.00159	.00176
%RSD	6.6367	1.7278	.74359	.82373	2.4016	57.633
#1	.01132	3.8860	.45373	.03329	.06552	-.00106
#2	.01116	3.9752	.45997	.03372	.06541	-.00371
#3	.01001	4.0205	.45921	.03380	.06823	-.00438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.01720	F 14.463
Stddev	.00018	.077
%RSD	1.0314	.53046
#1	.01737	14.375
#2	.01701	14.503
#3	.01722	14.512
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-9-a Acquired: 5/25/2023 12:38:18 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4024.7	76877.	13545.
Stddev	15.9	445.	174.
%RSD	.39496	.57949	1.2877
#1	4009.1	76636.	13651.
#2	4024.1	76604.	13640.
#3	4040.9	77392.	13343.

Sample Name: 140-31632-a-12-a Acquired: 5/25/2023 12:43:06 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12688	3.6371	.03055	.56643	.20608	.00021
Stddev	.00108	.0039	.00079	.00304	.00058	.00002
%RSD	.84947	.10648	2.5711	.53676	.28300	10.733
#1	.12663	3.6336	.03007	.56426	.20623	.00019
#2	.12594	3.6413	.03012	.56512	.20544	.00022
#3	.12805	3.6366	.03146	.56990	.20658	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	36.836	.05779	.04702	.82630	.68179	58.140
Stddev	.428	.00026	.00023	.00514	.00203	.476
%RSD	1.1616	.45783	.49371	.62232	.29775	.81801
#1	36.385	.05801	.04676	.82286	.68247	57.598
#2	36.887	.05750	.04721	.82383	.67951	58.337
#3	37.236	.05786	.04709	.83221	.68339	58.485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-12-a Acquired: 5/25/2023 12:43:06 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5876	.01041	9.3969	3.7980	.10583	11.330
Stddev	.0466	.00056	.1455	.0265	.00021	.743
%RSD	1.0149	5.3804	1.5488	.69660	.20305	6.5545
#1	4.5338	.01041	9.2314	3.7734	.10559	10.525
#2	4.6158	.01097	9.4542	3.7945	.10591	11.988
#3	4.6131	.00985	9.5051	3.8260	.10599	11.478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.329	.64828	2.2282	1.8805	1.8929	.04055
Stddev	.053	.00120	.0089	.0174	.0027	.00098
%RSD	.46539	.18443	.40074	.92521	.14509	2.4244
#1	11.268	.64741	2.2377	1.8668	1.8932	.04151
#2	11.351	.64778	2.2200	1.8747	1.8900	.04059
#3	11.366	.64964	2.2269	1.9001	1.8955	.03955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-12-a Acquired: 5/25/2023 12:43:06 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01150	5.6978	.62813	.06315	.12563	-.00370
Stddev	.00050	.0606	.00098	.00025	.00127	.00010
%RSD	4.3172	1.0629	.15551	.38992	1.0095	2.7658
#1	.01094	5.6280	.62926	.06306	.12439	-.00374
#2	.01188	5.7368	.62751	.06296	.12558	-.00377
#3	.01167	5.7286	.62763	.06343	.12693	-.00358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.04329	F 39.350
Stddev	.00013	.726
%RSD	.30013	1.8458
#1	.04340	38.512
#2	.04315	39.798
#3	.04332	39.739
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-12-a Acquired: 5/25/2023 12:43:06 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3909.4	75196.	13154.
Stddev	44.3	632.	26.
%RSD	1.1341	.84083	.19655
#1	3860.0	74475.	13131.
#2	3922.3	75659.	13182.
#3	3945.9	75452.	13150.

Sample Name: 140-31632-a-15-a Acquired: 5/25/2023 12:47:56 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01836	4.6646	.00282	.41890	.10511	.00011
Stddev	.00031	.0547	.00052	.00332	.00041	.00001
%RSD	1.6950	1.1731	18.278	.79184	.38679	14.028
#1	.01808	4.6027	.00269	.41646	.10464	.00011
#2	.01829	4.7067	.00239	.41755	.10533	.00011
#3	.01869	4.6843	.00339	.42267	.10537	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.469	.04142	.04153	.73150	.51449	34.728
Stddev	.184	.00015	.00018	.00525	.00095	.303
%RSD	.94268	.36329	.43415	.71755	.18472	.87226
#1	19.263	.04125	.04135	.72615	.51351	34.390
#2	19.615	.04152	.04153	.73172	.51540	34.975
#3	19.528	.04151	.04171	.73664	.51458	34.818
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-15-a Acquired: 5/25/2023 12:47:56 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7408	.00580	4.8626	2.2785	.11212	13.265
Stddev	.0474	.00075	.0915	.0157	.00033	.501
%RSD	1.0003	12.900	1.8820	.69093	.29207	3.7741
#1	4.6886	.00498	4.7570	2.2612	.11202	13.093
#2	4.7527	.00646	4.9194	2.2824	.11248	12.873
#3	4.7811	.00595	4.9113	2.2920	.11185	13.829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.206	1.1365	1.2256	1.2008	1.1997	.02084
Stddev	.048	.0026	.0031	.0149	.0039	.00229
%RSD	.36625	.23158	.25650	1.2366	.32304	11.002
#1	13.151	1.1335	1.2254	1.1873	1.1954	.01912
#2	13.224	1.1376	1.2288	1.1984	1.2028	.02345
#3	13.243	1.1384	1.2225	1.2167	1.2010	.01996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-15-a Acquired: 5/25/2023 12:47:56 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00935	4.8309	.30135	.02902	.06836	-.00352
Stddev	.00135	.0427	.00020	.00017	.00065	.00216
%RSD	14.452	.88450	.06485	.58013	.95649	61.350
#1	.01034	4.7839	.30115	.02883	.06798	-.00596
#2	.00781	4.8415	.30136	.02909	.06799	-.00185
#3	.00989	4.8674	.30154	.02915	.06912	-.00276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02125	F 40.200
Stddev	.00018	.155
%RSD	.86552	.38659
#1	.02107	40.220
#2	.02143	40.036
#3	.02126	40.344
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-15-a Acquired: 5/25/2023 12:47:56 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4032.7	77162.	13503.
Stddev	31.7	751.	100.
%RSD	.78545	.97374	.73865
#1	4000.9	76323.	13508.
#2	4033.0	77390.	13401.
#3	4064.2	77773.	13600.

Sample Name: 140-31632-a-18-a Acquired: 5/25/2023 12:52:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02526	2.1375	.00116	.61189	.24476	.00002
Stddev	.00018	.0226	.00163	.00456	.00087	.00001
%RSD	.70406	1.0563	139.99	.74560	.35578	76.245
#1	.02527	2.1126	-.00034	.61153	.24375	.00003
#2	.02544	2.1566	.00289	.61662	.24520	.00001
#3	.02508	2.1433	.00093	.60752	.24532	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	33.055	.13856	.02648	.93672	.99581	63.535
Stddev	.160	.00102	.00013	.00874	.00648	.552
%RSD	.48350	.73341	.49292	.93331	.65050	.86932
#1	32.872	.13922	.02651	.94110	.99710	62.898
#2	33.170	.13908	.02660	.94242	1.0015	63.817
#3	33.122	.13739	.02634	.92666	.98878	63.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-18-a Acquired: 5/25/2023 12:52:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.8085	.02248	14.007	9.3454	.02897	13.056
Stddev	.0831	.00038	.162	.0637	.00072	.293
%RSD	1.2206	1.7051	1.1595	.68177	2.4722	2.2423
#1	6.7200	.02242	13.821	9.3265	.02948	13.222
#2	6.8205	.02212	14.080	9.4165	.02928	12.718
#3	6.8849	.02288	14.121	9.2933	.02815	13.228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.674	.52701	.47278	3.1484	3.1544	.04654
Stddev	.101	.00501	.00679	.0245	.0289	.00520
%RSD	.79709	.95102	1.4360	.77850	.91684	11.169
#1	12.563	.52956	.47878	3.1546	3.1711	.05073
#2	12.698	.53023	.47415	3.1693	3.1711	.04816
#3	12.761	.52123	.46541	3.1214	3.1210	.04072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-18-a Acquired: 5/25/2023 12:52:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01143	6.1018	.56939	.05491	.11567	.00066
Stddev	.00170	.0820	.00626	.00031	.00047	.00307
%RSD	14.870	1.3445	1.0990	.57058	.40907	465.96
#1	.01301	6.0080	.57343	.05458	.11513	.00305
#2	.01166	6.1370	.57256	.05496	.11597	-.00281
#3	.00963	6.1603	.56218	.05520	.11592	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.03328	F 39.038
Stddev	.00049	.609
%RSD	1.4652	1.5608
#1	.03280	39.726
#2	.03378	38.823
#3	.03326	38.566
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-18-a Acquired: 5/25/2023 12:52:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3895.9	74467.	13124.
Stddev	55.9	1290.	99.
%RSD	1.4345	1.7328	.75167
#1	3842.3	73190.	13019.
#2	3891.6	74440.	13137.
#3	3953.8	75771.	13215.

Sample Name: 140-31632-a-6-a SD@5 Acquired: 5/25/2023 12:57:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02261	1.0218	.00330	.14052	.05117	-.00007
Stddev	.00040	.0133	.00165	.00151	.00039	.00001
%RSD	1.7764	1.3021	50.066	1.0711	.75571	16.939
#1	.02242	1.0128	.00242	.13883	.05088	-.00006
#2	.02307	1.0371	.00520	.14103	.05101	-.00008
#3	.02234	1.0156	.00227	.14171	.05161	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.405	.01680	.00917	.34254	.26112	10.473
Stddev	.074	.00012	.00009	.00082	.00084	.016
%RSD	.70937	.72674	.98743	.23928	.32093	.15338
#1	10.320	.01668	.00925	.34160	.26024	10.459
#2	10.457	.01692	.00907	.34311	.26122	10.491
#3	10.438	.01678	.00917	.34291	.26191	10.468
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a SD@5 Acquired: 5/25/2023 12:57:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3771	.00165	2.7140	1.4439	.03992	3.7470
Stddev	.0152	.00058	.0108	.0032	.00016	.4140
%RSD	1.1044	35.112	.39772	.21961	.38860	11.050
#1	1.3599	.00204	2.7064	1.4403	.03984	3.2727
#2	1.3889	.00193	2.7263	1.4462	.03982	4.0360
#3	1.3824	.00099	2.7092	1.4451	.04010	3.9323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3171	.32609	.13104	.45953	.44021	.00528
Stddev	.0054	.00033	.00165	.00236	.00133	.00118
%RSD	.23258	.10113	1.2567	.51249	.30247	22.412
#1	2.3183	.32579	.13244	.46225	.44144	.00523
#2	2.3112	.32603	.12923	.45822	.44039	.00649
#3	2.3217	.32644	.13146	.45812	.43880	.00413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a SD@5 Acquired: 5/25/2023 12:57:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	1.8044	.10127	.01704	.03833	.00108
Stddev	.00033	.0051	.00057	.00008	.00063	.00186
%RSD	23.040	.28350	.56137	.45708	1.6532	172.09
#1	.00164	1.8000	.10188	.01703	.03839	.00280
#2	.00105	1.8100	.10076	.01697	.03893	-.00090
#3	.00160	1.8031	.10117	.01713	.03767	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00972	8.0338
Stddev	.00017	.0143
%RSD	1.7764	.17843
#1	.00957	8.0217
#2	.00969	8.0300
#3	.00991	8.0496
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31632-a-6-a SD@5 Acquired: 5/25/2023 12:57:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4265.3	79621.	13724.
Stddev	6.6	168.	109.
%RSD	.15552	.21052	.79573
#1	4257.8	79520.	13850.
#2	4270.4	79528.	13653.
#3	4267.6	79814.	13669.

Sample Name: CCV Acquired: 5/25/2023 13:02:47 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0001	25.382	.50271	1.9798	2.0518	2.1067
Stddev	.0021	.062	.00097	.0024	.0039	.0105
%RSD	.20713	.24236	.19223	.12196	.19031	.49732
#1	.99939	25.318	.50339	1.9804	2.0547	2.1159
#2	1.0025	25.441	.50160	1.9772	2.0533	2.1088
#3	.99853	25.387	.50314	1.9819	2.0473	2.0953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.555	.51774	2.0359	2.0848	1.9697	26.129
Stddev	.098	.00033	.0014	.0083	.0024	.020
%RSD	.18358	.06462	.07010	.39907	.12344	.07574
#1	53.644	.51810	2.0368	2.0918	1.9725	26.115
#2	53.449	.51770	2.0366	2.0871	1.9686	26.151
#3	53.572	.51743	2.0342	2.0756	1.9680	26.120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 13:02:47 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.953	1.9841	53.063	2.0735	2.0984	51.893
Stddev	.142	.0065	.092	.0051	.0033	.061
%RSD	.28476	.32791	.17259	.24484	.15592	.11766
#1	49.821	1.9840	53.027	2.0780	2.1001	51.931
#2	50.103	1.9907	52.996	2.0746	2.1006	51.925
#3	49.935	1.9777	53.167	2.0680	2.0947	51.823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.826	2.0516	1.9939	.53453	.51375	.49598
Stddev	.061	.0032	.0058	.00452	.00174	.00147
%RSD	.11911	.15771	.29085	.84511	.33890	.29556
#1	50.831	2.0551	1.9999	.53966	.51540	.49578
#2	50.884	2.0510	1.9935	.53277	.51193	.49754
#3	50.763	2.0487	1.9883	.53115	.51390	.49463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 13:02:47 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50928	1.8365	1.9918	2.0083	2.0817	1.0252
Stddev	.00265	.0110	.0019	.0039	.0013	.0036
%RSD	.52071	.59602	.09771	.19624	.06189	.35385
#1	.51231	1.8372	1.9941	2.0084	2.0814	1.0246
#2	.50739	1.8472	1.9906	2.0121	2.0805	1.0290
#3	.50812	1.8253	1.9907	2.0042	2.0830	1.0219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0650	2.0054
Stddev	.0068	.0031
%RSD	.32753	.15574
#1	2.0714	2.0079
#2	2.0657	2.0064
#3	2.0579	2.0019
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 13:02:47 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4097.2	76798.	13413.
Stddev	8.3	347.	100.
%RSD	.20232	.45204	.74290
#1	4088.9	76469.	13336.
#2	4097.4	76766.	13526.
#3	4105.4	77161.	13377.

Sample Name: CCB Acquired: 5/25/2023 13:07:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.01347	.00016	-.01074	.00001	-.00009
Stddev	.00018	.00769	.00078	.00044	.00009	.00004
%RSD	67.042	57.105	496.92	4.1006	1374.8	40.479
#1	.00006	.01560	-.00003	-.01025	.00011	-.00005
#2	.00034	.01987	-.00051	-.01090	-.00003	-.00009
#3	.00041	.00494	.00101	-.01109	-.00006	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00778	.00018	.00007	-.00091	.00032	.00202
Stddev	.00109	.00006	.00012	.00014	.00034	.00106
%RSD	14.058	32.719	179.13	14.986	105.49	52.636
#1	.00899	.00011	-.00007	-.00101	.00066	.00292
#2	.00686	.00021	.00010	-.00076	.00032	.00085
#3	.00750	.00022	.00016	-.00098	-.00002	.00229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 13:07:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00714	-.00001	.01759	.00008	-.00029	F .68108
Stddev	.00978	.00041	.00470	.00003	.00010	.67186
%RSD	137.00	3719.1	26.729	42.746	33.372	98.646
#1	-.00030	.00035	.02090	.00011	-.00032	-.01377
#2	.01822	-.00046	.01967	.00004	-.00037	1.3273
#3	.00351	.00008	.01221	.00009	-.00018	.72970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00709	.00069	-.00277	.00066	-.00047	-.00124
Stddev	.00546	.00011	.00125	.00077	.00011	.00051
%RSD	77.053	16.415	45.220	116.98	22.812	41.566
#1	.00703	.00072	-.00203	.00051	-.00034	-.00065
#2	.01258	.00056	-.00206	.00150	-.00052	-.00162
#3	.00165	.00078	-.00422	-.00002	-.00053	-.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 13:07:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	F -.21776	-.00066	.00002	.00035	.00328
Stddev	.00231	.01230	.00047	.00006	.00033	.00316
%RSD	530.91	5.6503	71.284	272.92	93.276	96.359
#1	-.00031	-.22749	-.00026	.00009	.00072	.00692
#2	-.00280	-.22186	-.00119	.00000	.00026	.00160
#3	.00181	-.20393	-.00054	-.00003	.00008	.00131
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00004	.00048
Stddev	.00033	.00011
%RSD	836.45	23.512
#1	-.00019	.00060
#2	.00034	.00045
#3	-.00026	.00038
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 13:07:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4219.2	78546.	13728.
Stddev	18.7	347.	99.
%RSD	.44369	.44187	.71762
#1	4200.5	78544.	13731.
#2	4219.0	78200.	13628.
#3	4238.0	78894.	13825.

Sample Name: 140-31632-a-20-a Acquired: 5/25/2023 13:12:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00021	.03548	-.00426	-.00344	.00051	-.00008
Stddev	.00007	.00587	.00097	.00045	.00003	.00002
%RSD	34.417	16.549	22.805	13.014	5.2437	27.700
#1	.00016	.04225	-.00388	-.00395	.00050	-.00008
#2	.00017	.03230	-.00536	-.00314	.00054	-.00005
#3	.00029	.03189	-.00353	-.00322	.00049	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21494	-.00015	-.00020	-.00061	.00079	.01903
Stddev	.00231	.00001	.00009	.00018	.00035	.00118
%RSD	1.0731	5.0096	44.067	29.072	44.689	6.2117
#1	.21755	-.00016	-.00012	-.00044	.00120	.02039
#2	.21320	-.00015	-.00030	-.00080	.00057	.01842
#3	.21406	-.00015	-.00020	-.00061	.00060	.01827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-20-a Acquired: 5/25/2023 13:12:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06415	-.00059	.02402	.00218	.00143	.67567
Stddev	.01406	.00036	.00331	.00014	.00007	.37525
%RSD	21.919	60.381	13.788	6.3351	5.1647	55.538
#1	.05123	-.00028	.02780	.00233	.00152	.33758
#2	.07913	-.00052	.02164	.00210	.00137	1.0794
#3	.06210	-.00098	.02262	.00209	.00141	.61002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04476	.00338	.00463	.00031	.00049	.00588
Stddev	.00344	.00016	.00119	.00237	.00105	.00242
%RSD	7.6778	4.6153	25.821	761.93	216.77	41.094
#1	.04749	.00340	.00361	.00131	.00023	.00835
#2	.04587	.00353	.00594	.00201	.00164	.00580
#3	.04090	.00322	.00433	-.00239	-.00042	.00351
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-20-a Acquired: 5/25/2023 13:12:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00595	1.4542	.00411	.00007	.00016	-.00217
Stddev	.00162	.0100	.00018	.00009	.00021	.00311
%RSD	27.262	.68588	4.3718	127.75	128.41	143.36
#1	.00726	1.4429	.00431	.00016	.00026	-.00521
#2	.00646	1.4618	.00395	-.00002	.00029	.00100
#3	.00413	1.4578	.00408	.00007	-.00008	-.00228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00043	.00558
Stddev	.00043	.00084
%RSD	101.03	15.109
#1	.00067	.00655
#2	-.00007	.00525
#3	.00069	.00496
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31632-a-20-a Acquired: 5/25/2023 13:12:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4183.6	78676.	13574.
Stddev	34.8	596.	71.
%RSD	.83237	.75753	.52467
#1	4144.1	78002.	13513.
#2	4197.1	78892.	13652.
#3	4209.7	79133.	13558.

Sample Name: 140-31632-a-21-a Acquired: 5/25/2023 13:17:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	.03803	-.00483	.01221	.01152	-.00009
Stddev	.00035	.00963	.00061	.00035	.00002	.00001
%RSD	163.30	25.321	12.656	2.8761	.19047	6.9666
#1	.00062	.03790	-.00419	.01251	.01155	-.00009
#2	-.00004	.02846	-.00541	.01229	.01151	-.00009
#3	.00007	.04772	-.00488	.01182	.01151	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14686	-.00012	-.00054	-.00204	.00081	.00542
Stddev	.00111	.00005	.00004	.00035	.00053	.00110
%RSD	.75529	41.396	7.3239	16.992	66.015	20.247
#1	.14606	-.00016	-.00056	-.00189	.00138	.00420
#2	.14640	-.00013	-.00049	-.00180	.00032	.00573
#3	.14813	-.00006	-.00056	-.00244	.00073	.00634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-21-a Acquired: 5/25/2023 13:17:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06196	-.00051	.02735	.00082	-.00014	1.8991
Stddev	.03810	.00032	.00445	.00002	.00006	.5343
%RSD	61.487	63.528	16.288	1.9284	46.149	28.136
#1	.01970	-.00046	.03196	.00083	-.00020	1.4601
#2	.07251	-.00022	.02704	.00082	-.00013	1.7431
#3	.09368	-.00086	.02306	.00080	-.00008	2.4941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3189	.00045	.00262	-.00203	.00089	.00523
Stddev	.0015	.00004	.00063	.00220	.00058	.00145
%RSD	.11412	9.2894	24.040	108.43	65.234	27.731
#1	1.3205	.00041	.00327	-.00210	.00078	.00691
#2	1.3175	.00049	.00259	-.00420	.00038	.00430
#3	1.3187	.00044	.00201	.00020	.00153	.00449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-21-a Acquired: 5/25/2023 13:17:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00423	.21336	.02137	.00022	-.00004	-.00148
Stddev	.00088	.00812	.00032	.00006	.00054	.00294
%RSD	20.672	3.8046	1.4901	28.130	1295.1	198.25
#1	.00326	.22125	.02128	.00026	.00044	-.00428
#2	.00450	.21381	.02173	.00015	.00007	.00158
#3	.00495	.20503	.02111	.00026	-.00063	-.00175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00026	.00582
Stddev	.00020	.00012
%RSD	79.277	2.1039
#1	.00009	.00595
#2	.00020	.00582
#3	.00049	.00570
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31632-a-21-a Acquired: 5/25/2023 13:17:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4174.7	78400.	13575.
Stddev	26.4	408.	108.
%RSD	.63186	.52091	.79641
#1	4145.2	78030.	13452.
#2	4183.1	78838.	13616.
#3	4195.9	78333.	13656.

Sample Name: 140-31632-a-22-a Acquired: 5/25/2023 13:22:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00029	.02803	-.00484	-.00017	.00052	-.00009
Stddev	.00037	.01548	.00053	.00039	.00009	.00001
%RSD	129.37	55.217	10.948	231.08	17.806	16.095
#1	.00018	.04455	-.00530	-.00051	.00061	-.00010
#2	-.00002	.01386	-.00497	.00026	.00053	-.00009
#3	.00070	.02568	-.00426	-.00026	.00042	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21157	-.00012	-.00039	.00007	.00001	.01558
Stddev	.00183	.00004	.00020	.00036	.00036	.00040
%RSD	.86511	35.944	51.135	533.88	2972.2	2.5381
#1	.21002	-.00014	-.00060	-.00018	-.00000	.01562
#2	.21359	-.00016	-.00021	-.00010	.00038	.01517
#3	.21110	-.00008	-.00036	.00048	-.00034	.01596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-22-a Acquired: 5/25/2023 13:22:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02664	-.00023	.01573	.00246	.00153	.56695
Stddev	.03074	.00025	.01601	.00006	.00023	.21506
%RSD	115.41	110.29	101.78	2.2995	14.758	37.934
#1	.01075	-.00028	.01752	.00247	.00128	.40319
#2	.06207	-.00045	-.00110	.00240	.00172	.48715
#3	.00709	.00005	.03078	.00251	.00158	.81051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04271	.00286	.00455	.00158	.00072	.00583
Stddev	.00387	.00012	.00168	.00110	.00029	.00119
%RSD	9.0669	4.0486	36.864	69.985	40.351	20.412
#1	.04246	.00299	.00444	.00235	.00098	.00658
#2	.03897	.00277	.00293	.00031	.00076	.00446
#3	.04670	.00283	.00627	.00207	.00041	.00645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-22-a Acquired: 5/25/2023 13:22:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00349	1.7495	.00352	.00005	.00019	-.00412
Stddev	.00173	.0128	.00034	.00004	.00055	.00160
%RSD	49.577	.73321	9.6015	86.807	290.19	38.863
#1	.00543	1.7525	.00316	.00004	.00065	-.00395
#2	.00213	1.7355	.00357	.00009	-.00042	-.00261
#3	.00289	1.7606	.00383	.00001	.00033	-.00580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00025	.00325
Stddev	.00018	.00011
%RSD	74.305	3.3147
#1	.00045	.00337
#2	.00020	.00318
#3	.00009	.00320
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31632-a-22-a Acquired: 5/25/2023 13:22:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4198.3	78853.	13672.
Stddev	31.5	822.	93.
%RSD	.75075	1.0427	.67749
#1	4162.2	77982.	13570.
#2	4212.5	78961.	13695.
#3	4220.3	79616.	13750.

Sample Name: 140-31709-a-1-e Acquired: 5/25/2023 13:27:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00068	1.3622	.00465	.06271	.03753	-.00006
Stddev	.00011	.0097	.00077	.00088	.00014	.00001
%RSD	16.712	.71025	16.586	1.4071	.37327	16.299
#1	.00065	1.3642	.00408	.06367	.03754	-.00005
#2	.00080	1.3517	.00434	.06193	.03739	-.00005
#3	.00058	1.3708	.00553	.06252	.03767	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7087	.00057	.00212	.01066	.18139	2.1414
Stddev	.0080	.00004	.00014	.00012	.00048	.0101
%RSD	.29480	6.3323	6.4754	1.1121	.26534	.47218
#1	2.7167	.00055	.00225	.01054	.18105	2.1508
#2	2.7086	.00054	.00198	.01067	.18194	2.1307
#3	2.7007	.00061	.00212	.01077	.18117	2.1426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-e Acquired: 5/25/2023 13:27:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.39165	.00322	.87955	.04018	.00466	8.1470
Stddev	.01957	.00017	.00734	.00010	.00006	.6774
%RSD	4.9981	5.1293	.83482	.25344	1.2803	8.3147
#1	.38269	.00306	.88586	.04012	.00464	7.3869
#2	.41410	.00339	.87149	.04030	.00461	8.3673
#3	.37815	.00322	.88129	.04013	.00473	8.6868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.7349	.00920	.55997	.02652	.02376	-.00188
Stddev	.0254	.00007	.00289	.00203	.00041	.00160
%RSD	.32864	.79477	.51692	7.6442	1.7066	85.017
#1	7.7518	.00912	.55786	.02475	.02333	-.00130
#2	7.7057	.00924	.55877	.02608	.02414	-.00065
#3	7.7473	.00925	.56327	.02873	.02379	-.00368
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-e Acquired: 5/25/2023 13:27:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00284	3.3032	.00314	.00865	.06586	.00516
Stddev	.00039	.0267	.00044	.00002	.00084	.00077
%RSD	13.856	.80794	13.896	.23750	1.2752	14.924
#1	-.00289	3.3251	.00306	.00866	.06664	.00605
#2	-.00321	3.2735	.00275	.00862	.06497	.00463
#3	-.00243	3.3112	.00361	.00865	.06596	.00482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00486	.14726
Stddev	.00020	.00056
%RSD	4.0752	.38002
#1	.00485	.14662
#2	.00467	.14749
#3	.00507	.14767
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-1-e Acquired: 5/25/2023 13:27:35 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4273.5	79037.	13701.
Stddev	21.7	418.	66.
%RSD	.50763	.52867	.47816
#1	4298.5	79518.	13666.
#2	4263.2	78768.	13777.
#3	4258.9	78825.	13661.

Sample Name: 140-31709-a-1-f du Acquired: 5/25/2023 13:32:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00162	1.4079	.00325	.06308	.03812	-.00009
Stddev	.00025	.0122	.00118	.00070	.00008	.00001
%RSD	15.273	.86598	36.232	1.1025	.19798	13.915
#1	.00142	1.4128	.00400	.06331	.03820	-.00011
#2	.00190	1.4169	.00189	.06362	.03811	-.00008
#3	.00153	1.3940	.00385	.06229	.03805	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.7203	.00056	.00169	.01069	.18029	2.1959
Stddev	.0035	.00006	.00013	.00008	.00060	.0057
%RSD	.12951	11.339	7.7084	.77483	.33478	.25959
#1	2.7234	.00052	.00180	.01070	.18098	2.2021
#2	2.7165	.00053	.00173	.01061	.18003	2.1947
#3	2.7211	.00064	.00154	.01077	.17986	2.1909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-f du Acquired: 5/25/2023 13:32:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38756	.00302	.90185	.04154	.00436	7.9033
Stddev	.01318	.00047	.01516	.00010	.00003	.7367
%RSD	3.4017	15.473	1.6807	.25189	.62559	9.3215
#1	.39159	.00297	.90640	.04161	.00438	8.2109
#2	.39826	.00350	.91421	.04159	.00437	7.0627
#3	.37283	.00257	.88494	.04142	.00433	8.4364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.4914	.00923	.52596	.02489	.02310	-.00117
Stddev	.0062	.00018	.00137	.00136	.00101	.00027
%RSD	.08238	1.9740	.26052	5.4826	4.3888	22.922
#1	7.4945	.00906	.52686	.02627	.02426	-.00114
#2	7.4953	.00942	.52663	.02354	.02267	-.00093
#3	7.4842	.00922	.52438	.02487	.02238	-.00146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-f du Acquired: 5/25/2023 13:32:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00006	3.2757	.00279	.00880	.07008	.00490
Stddev	.00115	.0099	.00029	.00007	.00048	.00096
%RSD	2055.4	.30170	10.326	.74561	.68399	19.531
#1	.00127	3.2766	.00271	.00873	.07045	.00410
#2	-.00080	3.2655	.00311	.00886	.06954	.00464
#3	-.00063	3.2852	.00255	.00879	.07026	.00596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00535	.14107
Stddev	.00024	.00012
%RSD	4.5629	.08314
#1	.00544	.14116
#2	.00508	.14094
#3	.00555	.14112
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-1-f du Acquired: 5/25/2023 13:32:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4236.4	78399.	13630.
Stddev	6.3	125.	51.
%RSD	.14876	.15941	.37269
#1	4229.2	78290.	13581.
#2	4239.0	78535.	13682.
#3	4240.9	78372.	13628.

Sample Name: 140-31709-a-1-g ms Acquired: 5/25/2023 13:37:22 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04732	4.2054	.09752	1.0143	.13766	.04889
Stddev	.00035	.0344	.00116	.0051	.00081	.00009
%RSD	.74995	.81840	1.1864	.49894	.58961	.19275
#1	.04743	4.1657	.09638	1.0087	.13681	.04878
#2	.04693	4.2241	.09748	1.0159	.13843	.04891
#3	.04761	4.2263	.09869	1.0184	.13774	.04896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.591	.04771	.09470	.19977	.41496	3.4171
Stddev	.131	.00006	.00032	.00031	.00137	.0091
%RSD	.25990	.12174	.33553	.15589	.33040	.26526
#1	50.474	.04774	.09435	.20000	.41375	3.4068
#2	50.733	.04764	.09495	.19941	.41469	3.4207
#3	50.566	.04774	.09481	.19990	.41645	3.4238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-g ms Acquired: 5/25/2023 13:37:22 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.610	.09645	10.313	.13783	.46802	53.957
Stddev	.085	.00047	.014	.00051	.00034	.730
%RSD	.18573	.48510	.13256	.37123	.07276	1.3535
#1	45.516	.09600	10.298	.13735	.46831	53.140
#2	45.681	.09693	10.314	.13776	.46765	54.549
#3	45.634	.09641	10.325	.13837	.46810	54.180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.988	.47525	5.2362	.12373	.11850	.44723
Stddev	.166	.00022	.0068	.00055	.00126	.00231
%RSD	.30790	.04553	.13031	.44624	1.0651	.51726
#1	53.831	.47527	5.2296	.12399	.11996	.44607
#2	54.162	.47503	5.2359	.12410	.11770	.44989
#3	53.972	.47546	5.2432	.12309	.11785	.44572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-g ms Acquired: 5/25/2023 13:37:22 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14174	14.947	.44918	.46258	.19511	.37589
Stddev	.00133	.060	.00065	.00212	.00120	.00345
%RSD	.93661	.40386	.14405	.45882	.61449	.91841
#1	.14286	14.880	.44907	.46023	.19480	.37399
#2	.14027	14.997	.44988	.46435	.19643	.37987
#3	.14208	14.963	.44860	.46315	.19409	.37379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19104	.62400
Stddev	.00098	.00034
%RSD	.51443	.05446
#1	.19008	.62361
#2	.19205	.62415
#3	.19099	.62424
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-1-g ms Acquired: 5/25/2023 13:37:22 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4176.1	77426.	13706.
Stddev	3.9	259.	64.
%RSD	.09387	.33484	.46474
#1	4178.1	77395.	13634.
#2	4178.7	77184.	13733.
#3	4171.6	77700.	13753.

Sample Name: 140-31709-a-2-c Acquired: 5/25/2023 13:42:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00089	3.2960	.00581	.10295	.08313	-.00004
Stddev	.00019	.0289	.00096	.00090	.00026	.00001
%RSD	21.574	.87572	16.460	.87289	.31333	27.067
#1	.00084	3.2642	.00570	.10233	.08293	-.00005
#2	.00073	3.3032	.00492	.10398	.08303	-.00003
#3	.00111	3.3205	.00682	.10253	.08342	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.3657	.00062	.00613	.01886	.15967	5.3940
Stddev	.0162	.00006	.00008	.00020	.00058	.0218
%RSD	.25489	9.1943	1.2409	1.0625	.36372	.40436
#1	6.3529	.00055	.00604	.01891	.16034	5.3688
#2	6.3602	.00065	.00618	.01864	.15942	5.4061
#3	6.3840	.00065	.00617	.01903	.15927	5.4070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-2-c Acquired: 5/25/2023 13:42:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.94236	.01628	2.8044	.11243	.00258	17.997
Stddev	.02655	.00094	.0077	.00053	.00023	.188
%RSD	2.8173	5.7943	.27547	.46942	8.9028	1.0454
#1	.97078	.01583	2.7956	.11183	.00253	18.002
#2	.93812	.01564	2.8074	.11270	.00284	18.182
#3	.91819	.01736	2.8102	.11277	.00239	17.806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.710	.01943	.58638	.03632	.03194	.00454
Stddev	.029	.00024	.00298	.00117	.00087	.00195
%RSD	.17258	1.2305	.50858	3.2181	2.7231	42.988
#1	16.692	.01956	.58982	.03666	.03294	.00432
#2	16.695	.01915	.58489	.03728	.03151	.00659
#3	16.744	.01958	.58444	.03502	.03137	.00271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-2-c Acquired: 5/25/2023 13:42:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00084	6.3314	.00349	.02574	.15447	.00488
Stddev	.00232	.0292	.00022	.00015	.00075	.00172
%RSD	275.76	.46116	6.3848	.58785	.48314	35.283
#1	.00110	6.3134	.00340	.02556	.15370	.00687
#2	-.00022	6.3157	.00332	.02584	.15452	.00394
#3	-.00340	6.3651	.00374	.02580	.15519	.00384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.01310	.16627
Stddev	.00011	.00083
%RSD	.87113	.49719
#1	.01315	.16703
#2	.01297	.16638
#3	.01317	.16539
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-2-c Acquired: 5/25/2023 13:42:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4230.8	78515.	13663.
Stddev	24.4	427.	46.
%RSD	.57603	.54375	.33378
#1	4208.8	78812.	13611.
#2	4226.7	78025.	13684.
#3	4257.0	78706.	13695.

Sample Name: 140-31709-a-3-c Acquired: 5/25/2023 13:46:53 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	1.0025	.00229	.06357	.02784	-.00010
Stddev	.00021	.0040	.00093	.00100	.00009	.00001
%RSD	22.333	.39661	40.432	1.5710	.33084	13.581
#1	.00111	1.0067	.00175	.06328	.02780	-.00009
#2	.00071	.99888	.00337	.06275	.02795	-.00009
#3	.00101	1.0018	.00177	.06468	.02778	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9431	.00028	.00157	.01068	.74414	1.5550
Stddev	.0071	.00004	.00016	.00085	.00216	.0010
%RSD	.36750	14.508	9.9447	7.9462	.29017	.06217
#1	1.9349	.00030	.00141	.01161	.74468	1.5539
#2	1.9464	.00030	.00172	.00995	.74597	1.5558
#3	1.9480	.00023	.00159	.01048	.74176	1.5554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-3-c Acquired: 5/25/2023 13:46:53 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31806	.00191	.84672	.02940	.01434	9.2190
Stddev	.00091	.00043	.01159	.00008	.00009	.2673
%RSD	.28692	22.443	1.3687	.26042	.65449	2.8996
#1	.31829	.00172	.83565	.02943	.01435	8.9999
#2	.31705	.00240	.84574	.02945	.01424	9.5168
#3	.31884	.00161	.85877	.02931	.01443	9.1402
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.6000	.00798	.51029	.00622	.00606	-.00308
Stddev	.0365	.00021	.00249	.00250	.00010	.00158
%RSD	.42382	2.6753	.48877	40.129	1.7142	51.250
#1	8.6268	.00776	.51132	.00881	.00603	-.00302
#2	8.6147	.00799	.51211	.00601	.00596	-.00469
#3	8.5585	.00819	.50745	.00383	.00617	-.00154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-3-c Acquired: 5/25/2023 13:46:53 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00115	2.7746	.00184	.00651	.04661	.00425
Stddev	.00063	.0170	.00046	.00007	.00053	.00102
%RSD	54.457	.61369	25.146	1.1311	1.1414	24.035
#1	-.00158	2.7654	.00196	.00658	.04652	.00308
#2	-.00145	2.7642	.00223	.00650	.04613	.00497
#3	-.00043	2.7943	.00133	.00644	.04718	.00470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00360	.07567
Stddev	.00022	.00017
%RSD	6.0632	.22512
#1	.00355	.07560
#2	.00341	.07587
#3	.00384	.07555
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-3-c Acquired: 5/25/2023 13:46:53 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4222.8	77632.	13580.
Stddev	11.8	682.	39.
%RSD	.27873	.87904	.28652
#1	4214.9	76930.	13572.
#2	4217.2	77675.	13623.
#3	4236.3	78293.	13546.

Sample Name: 140-31709-a-4-c Acquired: 5/25/2023 13:51:47 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	2.3668	.00473	.06257	.05154	-.00007
Stddev	.00111	.0070	.00062	.00103	.00022	.00000
%RSD	166.00	.29559	12.990	1.6483	.43025	7.0081
#1	.00195	2.3729	.00495	.06189	.05129	-.00007
#2	.00016	2.3592	.00404	.06376	.05169	-.00007
#3	-.00010	2.3683	.00521	.06207	.05166	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.0950	.00207	.00275	.01378	.20175	3.6953
Stddev	.0233	.00009	.00006	.00033	.00041	.0142
%RSD	.56922	4.3738	2.0833	2.4193	.20221	.38420
#1	4.1074	.00216	.00280	.01341	.20136	3.6829
#2	4.0681	.00206	.00269	.01405	.20171	3.6922
#3	4.1095	.00198	.00276	.01388	.20217	3.7107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-4-c Acquired: 5/25/2023 13:51:47 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50451	.00487	1.4397	.07219	.00698	8.7670
Stddev	.01298	.00060	.0052	.00039	.00030	.8869
%RSD	2.5737	12.318	.36049	.53584	4.2401	10.117
#1	.49999	.00483	1.4378	.07176	.00664	9.6292
#2	.51915	.00429	1.4358	.07251	.00720	7.8572
#3	.49439	.00548	1.4456	.07230	.00710	8.8147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.0409	.01388	.55543	.02300	.02052	-.00456
Stddev	.0290	.00030	.00232	.00172	.00085	.00048
%RSD	.36012	2.1564	.41789	7.4840	4.1196	10.552
#1	8.0234	.01382	.55300	.02103	.01955	-.00409
#2	8.0743	.01420	.55566	.02421	.02109	-.00506
#3	8.0249	.01361	.55763	.02375	.02093	-.00455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-4-c Acquired: 5/25/2023 13:51:47 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00143	4.8259	.00242	.01431	.11382	.00509
Stddev	.00120	.0065	.00022	.00007	.00113	.00233
%RSD	84.422	.13423	9.1069	.50888	.98858	45.851
#1	-.00216	4.8220	.00246	.01427	.11261	.00359
#2	-.00208	4.8333	.00218	.01439	.11399	.00778
#3	-.00004	4.8223	.00261	.01427	.11484	.00390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00879	.09553
Stddev	.00010	.00024
%RSD	1.1795	.24953
#1	.00867	.09535
#2	.00885	.09544
#3	.00885	.09580
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-4-c Acquired: 5/25/2023 13:51:47 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4228.4	77591.	13671.
Stddev	9.3	353.	136.
%RSD	.21892	.45517	.99500
#1	4221.3	77907.	13558.
#2	4225.1	77210.	13822.
#3	4238.9	77656.	13633.

Sample Name: 140-31709-a-1-e SD@5 Acquired: 5/25/2023 13:56:40 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00025	.27044	.00239	.00043	.00778	-.00012
Stddev	.00032	.01562	.00152	.00049	.00014	.00001
%RSD	128.41	5.7746	63.544	114.05	1.7998	5.8989
#1	.00047	.28847	.00156	.00070	.00782	-.00011
#2	-.00012	.26193	.00146	.00074	.00762	-.00013
#3	.00041	.26093	.00414	-.00014	.00790	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.57798	.00017	.00047	.00172	.03697	.42895
Stddev	.00377	.00004	.00002	.00034	.00020	.00663
%RSD	.65154	23.404	4.6948	20.029	.54488	1.5459
#1	.57621	.00015	.00046	.00209	.03697	.42980
#2	.57543	.00021	.00045	.00141	.03717	.42194
#3	.58231	.00014	.00050	.00166	.03677	.43512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-e SD@5 Acquired: 5/25/2023 13:56:40 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06774	.00069	.19006	.00820	.00043	2.3341
Stddev	.02002	.00085	.00873	.00004	.00008	.6276
%RSD	29.561	122.23	4.5957	.43103	17.835	26.886
#1	.07749	.00005	.19543	.00824	.00034	3.0388
#2	.04471	.00166	.17998	.00817	.00046	1.8357
#3	.08102	.00037	.19477	.00818	.00048	2.1278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5384	.00265	.11020	.00562	.00461	-.00224
Stddev	.0054	.00014	.00078	.00154	.00101	.00108
%RSD	.35001	5.1487	.70996	27.488	21.947	48.391
#1	1.5396	.00262	.11012	.00486	.00453	-.00198
#2	1.5325	.00280	.10946	.00460	.00364	-.00343
#3	1.5430	.00253	.11102	.00740	.00566	-.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-1-e SD@5 Acquired: 5/25/2023 13:56:40 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	.47963	-.00018	.00168	.01341	.00508
Stddev	.00161	.02123	.00050	.00004	.00038	.00061
%RSD	170.18	4.4272	283.83	2.3321	2.7979	11.925
#1	.00220	.47062	-.00070	.00164	.01343	.00483
#2	-.00087	.46438	-.00011	.00170	.01378	.00578
#3	.00150	.50388	.00028	.00171	.01303	.00465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00120	.03011
Stddev	.00029	.00008
%RSD	23.979	.27665
#1	.00148	.03007
#2	.00091	.03005
#3	.00119	.03020
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-1-e SD@5 Acquired: 5/25/2023 13:56:40 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4213.1	76484.	13031.
Stddev	9.7	664.	175.
%RSD	.22933	.86850	1.3403
#1	4202.3	76070.	12955.
#2	4216.2	76132.	13230.
#3	4220.9	77250.	12906.

Sample Name: CCV Acquired: 5/25/2023 14:01:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99515	25.201	.49744	1.9827	2.0283	2.1078
Stddev	.00683	.222	.00067	.0200	.0035	.0291
%RSD	.68583	.88107	.13479	1.0106	.17066	1.3826
#1	.98764	24.965	.49750	1.9643	2.0246	2.0887
#2	.99683	25.233	.49674	1.9798	2.0290	2.0934
#3	1.0010	25.406	.49807	2.0040	2.0314	2.1413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.760	.51816	2.0283	2.0951	1.9485	25.991
Stddev	.308	.00170	.0074	.0192	.0090	.217
%RSD	.57382	.32778	.36353	.91614	.46123	.83370
#1	53.550	.51650	2.0214	2.0788	1.9388	25.772
#2	53.616	.51808	2.0276	2.0902	1.9500	25.996
#3	54.114	.51989	2.0361	2.1162	1.9566	26.205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 14:01:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.508	1.9570	53.325	2.0823	2.0876	51.353
Stddev	.220	.0070	.559	.0149	.0073	1.016
%RSD	.44506	.35808	1.0474	.71572	.35073	1.9788
#1	49.292	1.9489	52.796	2.0678	2.0824	50.204
#2	49.501	1.9611	53.271	2.0816	2.0845	52.135
#3	49.732	1.9610	53.909	2.0975	2.0960	51.719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.637	2.0464	1.9821	.54238	.51432	.48558
Stddev	.202	.0073	.0059	.00649	.00230	.00054
%RSD	.39977	.35442	.29524	1.1964	.44786	.11081
#1	50.445	2.0396	1.9795	.54085	.51260	.48521
#2	50.618	2.0456	1.9780	.53679	.51694	.48533
#3	50.848	2.0541	1.9888	.54949	.51343	.48620
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 14:01:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50350	F 1.7858	1.9882	1.9784	2.0701	1.0159
Stddev	.00418	.0065	.0094	.0053	.0019	.0056
%RSD	.83056	.36339	.47289	.26625	.09270	.55401
#1	.50831	1.7826	1.9795	1.9725	2.0681	1.0098
#2	.50154	1.7815	1.9869	1.9801	2.0702	1.0209
#3	.50066	1.7933	1.9982	1.9827	2.0719	1.0170
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		-10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0711	2.0068
Stddev	.0157	.0055
%RSD	.75550	.27461
#1	2.0568	2.0029
#2	2.0685	2.0044
#3	2.0878	2.0131
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 14:01:36 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4074.9	75105.	12993.
Stddev	5.8	582.	28.
%RSD	.14138	.77493	.21892
#1	4069.5	75294.	12978.
#2	4080.9	75570.	13026.
#3	4074.2	74453.	12975.

Sample Name: CCB Acquired: 5/25/2023 14:06:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.01300	.00112	-.01139	.00035	-.00004
Stddev	.00021	.00612	.00130	.00177	.00003	.00008
%RSD	40.726	47.100	116.38	15.572	8.9623	196.99
#1	.00054	.01183	.00262	-.00949	.00032	.00005
#2	.00072	.01962	.00028	-.01166	.00036	-.00007
#3	.00030	.00754	.00046	-.01300	.00038	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00984	F .00021	.00024	-.00076	.00084	.00212
Stddev	.00468	.00014	.00010	.00004	.00034	.00209
%RSD	47.576	64.889	42.882	5.1476	41.032	98.174
#1	.01518	.00036	.00035	-.00071	.00081	.00371
#2	.00797	.00012	.00022	-.00078	.00120	.00290
#3	.00639	.00014	.00015	-.00077	.00051	-.00024
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.00020				
Low Limit		-.00020				

Sample Name: CCB Acquired: 5/25/2023 14:06:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01073	-.00064	.02382	.00009	-.00001	F 1.0660
Stddev	.02173	.00004	.00341	.00005	.00009	.2536
%RSD	202.53	6.9971	14.305	49.746	1561.1	23.791
#1	.01284	-.00061	.02775	.00014	-.00001	.99339
#2	-.01508	-.00069	.02208	.00005	-.00010	.85661
#3	-.02995	-.00062	.02164	.00009	.00009	1.3480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00751	.00088	.00253	.00178	-.00017	-.00253
Stddev	.00352	.00029	.00098	.00052	.00107	.00027
%RSD	46.790	32.656	38.669	29.410	634.22	10.803
#1	.00932	.00057	.00366	.00236	.00096	-.00284
#2	.00975	.00093	.00203	.00164	-.00028	-.00242
#3	.00346	.00114	.00190	.00134	-.00118	-.00232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 14:06:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	F -.21714	-.00019	-.00008	-.00042	F .00513
Stddev	.00070	.00162	.00028	.00008	.00074	.00055
%RSD	2329.5	.74561	144.53	99.904	177.27	10.768
#1	.00023	-.21705	-.00023	-.00001	-.00107	.00500
#2	-.00075	-.21556	.00010	-.00006	-.00057	.00574
#3	.00061	-.21879	-.00044	-.00016	.00039	.00465
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.06700				.00500
Low Limit		-.06700				-.00500

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00001	-.00021
Stddev	.00022	.00011
%RSD	2421.9	55.888
#1	-.00003	-.00023
#2	-.00021	-.00031
#3	.00022	-.00008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 14:06:25 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4179.2	75075.	12792.
Stddev	21.4	369.	63.
%RSD	.51302	.49159	.49257
#1	4171.7	75020.	12722.
#2	4162.5	74736.	12808.
#3	4203.4	75468.	12845.

Sample Name: CCB Acquired: 5/25/2023 14:13:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.02318	.00199	-.01582	.00011	-.00011
Stddev	.00019	.00594	.00166	.00046	.00017	.00002
%RSD	62.224	25.609	83.422	2.8822	149.33	17.893
#1	.00011	.01683	.00026	-.01531	.00019	-.00009
#2	.00034	.02859	.00357	-.01617	-.00008	-.00011
#3	.00049	.02412	.00215	-.01598	.00023	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00564	.00019	.00013	-.00047	.00029	.00170
Stddev	.00052	.00001	.00012	.00012	.00022	.00170
%RSD	9.3129	2.7314	94.338	25.382	76.033	100.06
#1	.00592	.00018	-.00001	-.00034	.00036	.00125
#2	.00503	.00019	.00020	-.00053	.00047	.00027
#3	.00596	.00019	.00019	-.00055	.00004	.00359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 14:13:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01135	.00003	.01408	.00003	-.00054	F 1.1226
Stddev	.00633	.00026	.00644	.00001	.00018	.0604
%RSD	55.729	902.13	45.721	24.962	34.053	5.3817
#1	-.00435	-.00024	.01548	.00003	-.00053	1.0661
#2	-.01666	.00027	.00706	.00003	-.00036	1.1153
#3	-.01303	.00006	.01971	.00004	-.00073	1.1863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00374	.00073	-.00002	.00188	.00100	-.00224
Stddev	.00274	.00025	.00084	.00288	.00060	.00059
%RSD	73.186	34.029	4131.4	153.29	59.742	26.551
#1	.00171	.00082	.00062	.00240	.00031	-.00155
#2	.00685	.00093	.00029	.00445	.00135	-.00259
#3	.00266	.00045	-.00097	-.00123	.00134	-.00258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 14:13:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00120	F -.22805	-.00035	-.00005	-.00068	.00304
Stddev	.00216	.01977	.00051	.00005	.00104	.00183
%RSD	179.73	8.6671	145.82	92.165	153.82	60.069
#1	-.00158	-.20532	-.00004	.00000	-.00018	.00398
#2	.00112	-.23763	-.00007	-.00007	.00002	.00422
#3	-.00314	-.24120	-.00094	-.00009	-.00187	.00094
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00022	-.00038
Stddev	.00002	.00004
%RSD	9.6023	10.604
#1	-.00020	-.00033
#2	-.00024	-.00039
#3	-.00022	-.00040
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 14:13:54 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4207.8	76721.	13096.
Stddev	23.8	424.	141.
%RSD	.56562	.55298	1.0762
#1	4187.6	76348.	12939.
#2	4201.9	76632.	13211.
#3	4234.0	77183.	13138.

Sample Name: 140-31709-a-5-c Acquired: 5/25/2023 14:18:52 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00060	3.2115	.00509	.05128	.05372	-.00007
Stddev	.00028	.0266	.00095	.00093	.00025	.00001
%RSD	47.480	.82931	18.674	1.8077	.47135	17.946
#1	.00092	3.2028	.00561	.05026	.05345	-.00007
#2	.00048	3.2414	.00399	.05149	.05395	-.00006
#3	.00039	3.1904	.00566	.05208	.05377	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.2908	.00084	.00932	.01655	.14078	5.0604
Stddev	.0294	.00007	.00004	.00052	.00067	.0327
%RSD	.89389	7.9892	.41125	3.1588	.47907	.64685
#1	3.2602	.00076	.00936	.01610	.14155	5.0481
#2	3.3189	.00089	.00929	.01643	.14051	5.0975
#3	3.2932	.00086	.00932	.01713	.14028	5.0356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-5-c Acquired: 5/25/2023 14:18:52 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.72021	.00518	2.5167	.09441	.00340	11.375
Stddev	.01679	.00103	.0266	.00034	.00018	.473
%RSD	2.3308	19.922	1.0561	.35541	5.3252	4.1613
#1	.73039	.00569	2.5120	.09408	.00325	11.180
#2	.72941	.00586	2.5453	.09475	.00360	11.031
#3	.70084	.00399	2.4928	.09441	.00336	11.915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.153	.01719	.55027	.01059	.01046	-.00454
Stddev	.026	.00026	.00166	.00179	.00086	.00102
%RSD	.23352	1.5150	.30215	16.881	8.1741	22.403
#1	11.164	.01697	.54843	.00895	.01132	-.00339
#2	11.172	.01748	.55167	.01032	.01045	-.00531
#3	11.123	.01714	.55069	.01249	.00961	-.00494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-5-c Acquired: 5/25/2023 14:18:52 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00181	6.1296	.00165	.01717	.15013	.00480
Stddev	.00049	.0198	.00010	.00002	.00069	.00140
%RSD	27.258	.32252	5.8533	.11882	.46131	29.242
#1	-.00185	6.1173	.00156	.01719	.14942	.00602
#2	-.00228	6.1524	.00164	.01716	.15080	.00511
#3	-.00129	6.1191	.00175	.01715	.15017	.00326
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.01336	.10153
Stddev	.00013	.00021
%RSD	.96432	.20774
#1	.01349	.10141
#2	.01323	.10140
#3	.01337	.10177
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-5-c Acquired: 5/25/2023 14:18:52 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4245.9	77272.	13406.
Stddev	9.8	176.	118.
%RSD	.23112	.22828	.88200
#1	4238.3	77114.	13517.
#2	4257.0	77462.	13282.
#3	4242.5	77241.	13419.

Sample Name: 140-31709-a-6-c Acquired: 5/25/2023 14:23:46 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	2.0450	.00473	.06475	.04232	-.00007
Stddev	.00016	.0221	.00089	.00131	.00048	.00001
%RSD	27.882	1.0816	18.748	2.0198	1.1371	18.564
#1	.00047	2.0217	.00556	.06336	.04177	-.00006
#2	.00051	2.0475	.00482	.06493	.04262	-.00006
#3	.00077	2.0658	.00380	.06595	.04258	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.3597	.00046	.00261	.01404	.12359	3.3157
Stddev	.0278	.00006	.00013	.00010	.00050	.0265
%RSD	1.1784	13.639	5.0275	.72607	.40832	.80022
#1	2.3300	.00039	.00271	.01398	.12340	3.2862
#2	2.3639	.00050	.00246	.01399	.12416	3.3233
#3	2.3852	.00048	.00267	.01416	.12320	3.3376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-6-c Acquired: 5/25/2023 14:23:46 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47148	.00208	1.4012	.05774	.00565	9.4198
Stddev	.02652	.00091	.0278	.00080	.00020	.2894
%RSD	5.6257	43.839	1.9833	1.3934	3.5512	3.0725
#1	.44320	.00264	1.3723	.05686	.00545	9.7102
#2	.49580	.00103	1.4036	.05791	.00565	9.1314
#3	.47544	.00257	1.4277	.05844	.00585	9.4177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.4278	.01311	.51193	.00829	.00611	-.00269
Stddev	.0608	.00017	.00415	.00244	.00039	.00142
%RSD	.72143	1.3097	.81015	29.447	6.4319	52.782
#1	8.3576	.01298	.50736	.00929	.00656	-.00410
#2	8.4622	.01305	.51545	.01006	.00595	-.00269
#3	8.4635	.01331	.51297	.00550	.00583	-.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31709-a-6-c Acquired: 5/25/2023 14:23:46 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00282	4.3009	.00166	.00893	.09417	.00463
Stddev	.00242	.0697	.00015	.00007	.00134	.00281
%RSD	85.788	1.6198	8.9307	.73895	1.4181	60.606
#1	-.00004	4.2247	.00154	.00886	.09270	.00647
#2	-.00445	4.3166	.00161	.00898	.09448	.00602
#3	-.00397	4.3614	.00182	.00897	.09531	.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00821	.05863
Stddev	.00031	.00011
%RSD	3.8211	.19603
#1	.00835	.05856
#2	.00785	.05876
#3	.00842	.05857
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31709-a-6-c Acquired: 5/25/2023 14:23:46 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4219.5	76409.	13231.
Stddev	7.4	922.	127.
%RSD	.17636	1.2072	.95614
#1	4226.8	77335.	13359.
#2	4212.0	76401.	13226.
#3	4219.6	75490.	13107.

Sample Name: 140-31759-a-1-a Acquired: 5/25/2023 14:28:42 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	.03791	-.00018	-.00958	.00207	-.00013
Stddev	.00024	.00783	.00106	.00030	.00002	.00001
%RSD	173.94	20.666	573.59	3.1333	1.0127	8.0361
#1	.00020	.02909	-.00137	-.00942	.00206	-.00014
#2	-.00013	.04408	.00065	-.00992	.00206	-.00012
#3	.00035	.04055	.00017	-.00939	.00210	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5339	.00013	.00059	.03740	.00265	.17196
Stddev	.0032	.00007	.00015	.00061	.00026	.00198
%RSD	.20901	53.972	25.464	1.6355	9.9743	1.1518
#1	1.5337	.00006	.00047	.03756	.00273	.17154
#2	1.5307	.00021	.00053	.03792	.00286	.17023
#3	1.5371	.00014	.00075	.03673	.00235	.17412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-1-a Acquired: 5/25/2023 14:28:42 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08218	.00007	.38536	.00381	.00452	1.6198
Stddev	.01395	.00044	.00729	.00004	.00016	.4309
%RSD	16.979	661.68	1.8925	.94891	3.5660	26.604
#1	.09637	-.00021	.37732	.00383	.00434	1.1526
#2	.06848	-.00016	.39155	.00377	.00463	1.7050
#3	.08169	.00058	.38720	.00383	.00460	2.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.66113	.02224	.53404	.00131	.00031	-.00328
Stddev	.00525	.00001	.00366	.00297	.00087	.00141
%RSD	.79395	.05950	.68548	226.77	277.89	42.959
#1	.66354	.02224	.53400	.00346	-.00054	-.00263
#2	.66474	.02223	.53772	-.00208	.00119	-.00489
#3	.65511	.02225	.53040	.00254	.00029	-.00231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-1-a Acquired: 5/25/2023 14:28:42 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	-.12046	.00951	.00506	-.00016	.00096
Stddev	.00239	.00572	.00060	.00003	.00034	.00154
%RSD	278.72	4.7483	6.3314	.60773	207.68	160.60
#1	-.00121	-.11392	.01013	.00505	-.00053	.00266
#2	.00347	-.12293	.00947	.00510	.00013	.00053
#3	.00031	-.12454	.00893	.00504	-.00008	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00020	.00228
Stddev	.00012	.00005
%RSD	60.363	2.1644
#1	.00032	.00232
#2	.00008	.00229
#3	.00019	.00222
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-1-a Acquired: 5/25/2023 14:28:42 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4171.0	75400.	12846.
Stddev	19.6	252.	121.
%RSD	.46901	.33465	.94562
#1	4154.1	75146.	12766.
#2	4166.3	75404.	12986.
#3	4192.4	75650.	12786.

Sample Name: 140-31759-a-2-a Acquired: 5/25/2023 14:33:41 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00046	.05255	-.00028	-.00989	.00257	-.00015
Stddev	.00006	.00574	.00170	.00049	.00007	.00001
%RSD	13.386	10.926	615.91	4.9578	2.5660	6.9581
#1	.00052	.05315	-.00198	-.01007	.00259	-.00015
#2	.00040	.04654	.00142	-.01026	.00262	-.00014
#3	.00048	.05798	-.00027	-.00933	.00249	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0081	.00012	.00097	.05555	.00335	.21606
Stddev	.0153	.00003	.00009	.00019	.00018	.00191
%RSD	.76178	27.888	8.8423	.34082	5.4760	.88276
#1	2.0002	.00015	.00107	.05547	.00352	.21396
#2	1.9983	.00011	.00093	.05541	.00316	.21768
#3	2.0257	.00009	.00092	.05576	.00338	.21655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-2-a Acquired: 5/25/2023 14:33:41 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08821	-.00045	.49040	.00570	.00740	1.8956
Stddev	.02548	.00070	.01807	.00001	.00019	.5895
%RSD	28.889	154.23	3.6845	.16154	2.5135	31.096
#1	.08053	.00009	.46981	.00571	.00728	1.2452
#2	.11665	-.00021	.50364	.00569	.00762	2.3945
#3	.06745	-.00124	.49775	.00571	.00732	2.0473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82154	.03206	.90026	-.00047	.00104	-.00304
Stddev	.01004	.00011	.00363	.00130	.00158	.00127
%RSD	1.2218	.33976	.40312	277.71	150.93	41.721
#1	.82702	.03212	.90244	-.00162	.00263	-.00410
#2	.82764	.03213	.89607	.00095	-.00052	-.00164
#3	.80995	.03194	.90227	-.00073	.00103	-.00338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-2-a Acquired: 5/25/2023 14:33:41 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00221	-.08318	.00956	.00675	-.00074	-.00067
Stddev	.00210	.00325	.00021	.00008	.00030	.00234
%RSD	94.805	3.9017	2.1646	1.2184	40.204	348.56
#1	.00401	-.07982	.00961	.00682	-.00075	.00193
#2	.00271	-.08630	.00934	.00677	-.00104	-.00262
#3	-.00009	-.08342	.00974	.00666	-.00044	-.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00037	.00235
Stddev	.00036	.00005
%RSD	95.137	2.0926
#1	.00028	.00231
#2	.00007	.00240
#3	.00077	.00232
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-2-a Acquired: 5/25/2023 14:33:41 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4194.5	76202.	13026.
Stddev	18.7	648.	96.
%RSD	.44599	.85006	.73682
#1	4174.0	75668.	12982.
#2	4198.7	76922.	13136.
#3	4210.7	76016.	12959.

Sample Name: 140-31759-a-3-a Acquired: 5/25/2023 14:38:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.03383	-.00058	-.00967	.00205	-.00015
Stddev	.00034	.00965	.00095	.00065	.00004	.00000
%RSD	127.04	28.538	165.02	6.7704	1.8756	2.3672
#1	.00017	.02758	-.00089	-.00944	.00207	-.00015
#2	.00064	.04495	-.00133	-.00916	.00201	-.00015
#3	-.00002	.02896	.00049	-.01041	.00208	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4721	.00016	.00052	.03418	.00334	.11170
Stddev	.0074	.00009	.00009	.00051	.00038	.00149
%RSD	.50291	54.503	16.654	1.5045	11.383	1.3327
#1	1.4758	.00007	.00042	.03422	.00346	.11024
#2	1.4635	.00015	.00059	.03467	.00291	.11321
#3	1.4769	.00024	.00054	.03365	.00364	.11165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-a Acquired: 5/25/2023 14:38:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05929	.00048	.39193	.00356	.00432	1.9703
Stddev	.01192	.00088	.00606	.00007	.00010	.5150
%RSD	20.105	183.70	1.5468	2.0078	2.2723	26.138
#1	.07303	-.00043	.39771	.00362	.00422	2.5214
#2	.05316	.00133	.38562	.00348	.00440	1.8882
#3	.05168	.00054	.39246	.00358	.00435	1.5013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.89917	.02081	.51262	-.00009	-.00005	-.00205
Stddev	.00661	.00006	.00236	.00113	.00049	.00115
%RSD	.73487	.26999	.45946	1273.5	969.46	56.358
#1	.90581	.02087	.51413	-.00117	.00040	-.00074
#2	.89913	.02080	.51382	.00108	-.00056	-.00294
#3	.89259	.02076	.50991	-.00017	.00001	-.00246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-a Acquired: 5/25/2023 14:38:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00221	-.13882	.00865	.00487	-.00068	.00036
Stddev	.00120	.00515	.00010	.00013	.00084	.00360
%RSD	54.091	3.7131	1.1686	2.6812	123.55	994.74
#1	.00315	-.14000	.00872	.00478	-.00069	-.00156
#2	.00086	-.13318	.00853	.00502	.00017	-.00187
#3	.00263	-.14329	.00870	.00481	-.00152	.00451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00030	.00156
Stddev	.00008	.00008
%RSD	28.413	4.8367
#1	.00027	.00160
#2	.00039	.00160
#3	.00023	.00147
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-3-a Acquired: 5/25/2023 14:38:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4192.2	76034.	12797.
Stddev	14.7	613.	186.
%RSD	.35029	.80571	1.4507
#1	4177.1	75425.	12591.
#2	4193.3	76027.	12950.
#3	4206.4	76650.	12849.

Sample Name: 140-31759-a-3-b ms Acquired: 5/25/2023 14:43:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05214	2.1511	.10546	1.0155	.11175	.05767
Stddev	.00054	.0088	.00134	.0046	.00016	.00032
%RSD	1.0368	.40939	1.2664	.44958	.14188	.55550
#1	.05204	2.1569	.10651	1.0105	.11178	.05733
#2	.05272	2.1554	.10396	1.0166	.11158	.05773
#3	.05165	2.1410	.10590	1.0194	.11189	.05796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.560	.05492	.10920	.26061	.26211	1.2204
Stddev	.125	.00026	.00031	.00100	.00101	.0047
%RSD	.22444	.46602	.28374	.38369	.38638	.38236
#1	55.423	.05464	.10885	.25960	.26304	1.2194
#2	55.590	.05495	.10933	.26159	.26227	1.2255
#3	55.667	.05515	.10942	.26065	.26103	1.2164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-b ms Acquired: 5/25/2023 14:43:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.155	.10528	10.996	.11321	.52351	53.222
Stddev	.086	.00071	.071	.00061	.00029	.541
%RSD	.17411	.67048	.64175	.53555	.05520	1.0172
#1	49.157	.10598	10.916	.11255	.52345	53.762
#2	49.239	.10530	11.022	.11333	.52326	53.225
#3	49.068	.10456	11.050	.11375	.52383	52.679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.245	.56579	5.3892	.11417	.10760	.48035
Stddev	.141	.00117	.0077	.00061	.00076	.00338
%RSD	.27593	.20733	.14243	.53356	.70609	.70279
#1	51.383	.56449	5.3978	.11440	.10801	.48407
#2	51.251	.56610	5.3866	.11348	.10672	.47748
#3	51.100	.56677	5.3831	.11464	.10806	.47950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-b ms Acquired: 5/25/2023 14:43:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15045	4.4749	.57743	.52609	.10870	.42157
Stddev	.00015	.0180	.00172	.00137	.00084	.00365
%RSD	.10226	.40283	.29727	.26098	.77333	.86568
#1	.15058	4.4543	.57552	.52737	.10961	.41833
#2	.15049	4.4826	.57884	.52626	.10852	.42086
#3	.15028	4.4878	.57793	.52464	.10796	.42552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.22140	.53162
Stddev	.00075	.00059
%RSD	.33961	.11044
#1	.22092	.53125
#2	.22226	.53230
#3	.22101	.53132
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-3-b ms Acquired: 5/25/2023 14:43:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4135.6	75053.	12881.
Stddev	20.2	392.	38.
%RSD	.48737	.52226	.29435
#1	4114.0	74708.	12839.
#2	4138.9	74973.	12891.
#3	4154.0	75479.	12913.

Sample Name: 140-31759-a-3-c msd Acquired: 5/25/2023 14:48:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04977	2.0593	.10154	.96616	.10576	.05465
Stddev	.00058	.0333	.00038	.00477	.00022	.00018
%RSD	1.1664	1.6174	.37767	.49354	.20976	.32845
#1	.05039	2.0246	.10113	.96129	.10551	.05445
#2	.04966	2.0910	.10159	.96638	.10581	.05474
#3	.04925	2.0621	.10190	.97082	.10595	.05478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.349	.05195	.10364	.24634	.24999	1.1639
Stddev	.378	.00021	.00020	.00064	.00050	.0080
%RSD	.68211	.40645	.18918	.26105	.19961	.68897
#1	54.931	.05202	.10357	.24585	.24941	1.1551
#2	55.450	.05212	.10350	.24707	.25029	1.1659
#3	55.666	.05171	.10387	.24610	.25026	1.1707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-c msd Acquired: 5/25/2023 14:48:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.556	.10030	10.906	.10713	.52853	53.347
Stddev	.130	.00075	.114	.00034	.00092	.350
%RSD	.26273	.74347	1.0471	.31271	.17430	.65695
#1	49.422	.09948	10.779	.10676	.52798	53.161
#2	49.682	.10093	10.936	.10723	.52960	53.751
#3	49.565	.10048	11.002	.10741	.52802	53.128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.728	.53775	5.4418	.10804	.10084	.48715
Stddev	.142	.00037	.0147	.00109	.00146	.00230
%RSD	.27409	.06797	.26938	1.0079	1.4492	.47222
#1	51.651	.53815	5.4573	.10834	.10040	.48966
#2	51.892	.53743	5.4401	.10895	.10247	.48663
#3	51.641	.53767	5.4282	.10683	.09964	.48514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-c msd Acquired: 5/25/2023 14:48:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14280	4.4089	.49647	.50160	.10811	.40139
Stddev	.00189	.0128	.00070	.00117	.00058	.00222
%RSD	1.3268	.29111	.14124	.23373	.53188	.55301
#1	.14397	4.3953	.49722	.50101	.10769	.39883
#2	.14381	4.4105	.49637	.50295	.10788	.40260
#3	.14061	4.4208	.49583	.50084	.10877	.40275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20902	.50553
Stddev	.00090	.00065
%RSD	.43183	.12937
#1	.20804	.50629
#2	.20921	.50521
#3	.20981	.50510
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-3-c msd Acquired: 5/25/2023 14:48:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4145.9	75988.	13181.
Stddev	21.0	226.	12.
%RSD	.50768	.29765	.09277
#1	4124.5	75770.	13189.
#2	4146.8	75971.	13167.
#3	4166.5	76222.	13187.

Sample Name: 140-31759-a-4-a Acquired: 5/25/2023 14:53:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00018	.07059	-.00031	-.00885	.00199	-.00014
Stddev	.00019	.00836	.00079	.00037	.00012	.00001
%RSD	106.61	11.845	256.98	4.1706	6.2714	6.1983
#1	-.00001	.06127	-.00064	-.00849	.00211	-.00014
#2	.00037	.07742	.00060	-.00883	.00199	-.00014
#3	.00018	.07309	-.00087	-.00923	.00186	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4879	.00012	.00059	.04127	.00305	.26334
Stddev	.0074	.00005	.00022	.00006	.00036	.00126
%RSD	.49508	36.961	37.006	.14189	11.678	.47658
#1	1.4849	.00009	.00034	.04125	.00283	.26479
#2	1.4963	.00017	.00066	.04133	.00346	.26255
#3	1.4826	.00011	.00076	.04122	.00286	.26269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-4-a Acquired: 5/25/2023 14:53:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09430	.00037	.40426	.00359	.00494	1.5495
Stddev	.00897	.00033	.01199	.00008	.00035	.7535
%RSD	9.5172	90.992	2.9654	2.1959	7.1434	48.626
#1	.08969	.00074	.41591	.00356	.00532	1.4852
#2	.08857	.00028	.40492	.00368	.00486	2.3331
#3	.10465	.00009	.39196	.00353	.00463	.83025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96365	.02164	.58883	.00117	-.00049	-.00120
Stddev	.00682	.00019	.00147	.00024	.00038	.00358
%RSD	.70817	.88062	.24967	20.799	76.702	297.66
#1	.97149	.02164	.59010	.00134	-.00058	-.00347
#2	.95907	.02182	.58917	.00127	-.00008	.00292
#3	.96039	.02144	.58722	.00089	-.00082	-.00306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-4-a Acquired: 5/25/2023 14:53:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00397	-.12176	.00994	.00519	-.00015	-.00110
Stddev	.00093	.01259	.00016	.00005	.00061	.00207
%RSD	23.315	10.339	1.6110	1.0116	412.41	187.50
#1	.00423	-.10907	.01011	.00525	.00055	-.00181
#2	.00294	-.13424	.00988	.00516	-.00041	.00123
#3	.00474	-.12195	.00981	.00515	-.00059	-.00272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00043	.00212
Stddev	.00026	.00008
%RSD	60.433	3.9841
#1	.00013	.00221
#2	.00055	.00205
#3	.00062	.00210
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-4-a Acquired: 5/25/2023 14:53:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4201.1	76777.	13288.
Stddev	11.8	409.	77.
%RSD	.27970	.53334	.57642
#1	4188.0	76504.	13295.
#2	4210.8	76580.	13208.
#3	4204.6	77248.	13361.

Sample Name: 140-31759-a-5-a Acquired: 5/25/2023 14:57:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.05677	-.00081	-.01131	.00275	-.00014
Stddev	.00041	.00603	.00035	.00035	.00004	.00001
%RSD	109.61	10.615	43.839	3.1160	1.3461	6.1041
#1	.00046	.05354	-.00108	-.01169	.00273	-.00013
#2	-.00007	.05304	-.00041	-.01125	.00279	-.00015
#3	.00074	.06372	-.00093	-.01100	.00273	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2205	.00012	.00084	.05518	.00382	.20415
Stddev	.0090	.00002	.00021	.00074	.00024	.00393
%RSD	.40580	20.038	25.057	1.3486	6.3359	1.9268
#1	2.2135	.00014	.00073	.05432	.00410	.19997
#2	2.2173	.00012	.00108	.05565	.00368	.20471
#3	2.2306	.00009	.00070	.05557	.00369	.20778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-5-a Acquired: 5/25/2023 14:57:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11174	.00022	.57694	.00557	.00757	2.2330
Stddev	.02254	.00119	.00504	.00003	.00011	.6180
%RSD	20.174	543.84	.87402	.48487	1.5052	27.674
#1	.11989	-.00009	.58276	.00555	.00757	1.5449
#2	.08626	-.00079	.57400	.00560	.00745	2.7407
#3	.12908	.00153	.57405	.00557	.00768	2.4135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1025	.03298	.86914	-.00021	-.00037	-.00182
Stddev	.0131	.00026	.00227	.00118	.00026	.00102
%RSD	1.1897	.78265	.26101	553.13	72.006	55.911
#1	1.0963	.03278	.87043	.00020	-.00042	-.00064
#2	1.0935	.03289	.86652	.00070	-.00060	-.00237
#3	1.1175	.03327	.87047	-.00154	-.00008	-.00243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-5-a Acquired: 5/25/2023 14:57:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00445	-.08237	.01070	.00764	.00012	.00042
Stddev	.00063	.01943	.00071	.00008	.00022	.00232
%RSD	14.129	23.587	6.6741	1.0819	187.94	548.81
#1	.00380	-.09613	.01134	.00758	.00005	.00007
#2	.00506	-.09084	.01084	.00773	-.00006	-.00170
#3	.00449	-.06015	.00993	.00760	.00037	.00290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00044	.00371
Stddev	.00048	.00001
%RSD	107.77	.27320
#1	.00094	.00370
#2	-.00000	.00372
#3	.00039	.00371
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-5-a Acquired: 5/25/2023 14:57:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4130.0	76772.	13121.
Stddev	16.9	258.	100.
%RSD	.40856	.33567	.76388
#1	4112.9	76487.	13111.
#2	4130.4	76988.	13226.
#3	4146.6	76841.	13026.

Sample Name: 140-31759-a-3-a SD@5 Acquired: 5/25/2023 15:02:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.01675	.00110	-.01539	.00053	-.00015
Stddev	.00039	.01156	.00068	.00061	.00007	.00003
%RSD	124.35	69.006	62.106	3.9774	13.969	19.678
#1	-.00011	.00468	.00034	-.01598	.00062	-.00017
#2	.00040	.02772	.00131	-.01544	.00049	-.00016
#3	.00066	.01785	.00166	-.01476	.00049	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.32492	.00017	.00024	.00592	.00123	.02590
Stddev	.00208	.00003	.00013	.00029	.00028	.00046
%RSD	.64009	19.330	54.399	4.9558	23.162	1.7922
#1	.32644	.00019	.00028	.00563	.00096	.02642
#2	.32255	.00013	.00010	.00590	.00153	.02574
#3	.32578	.00019	.00035	.00622	.00119	.02554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-a SD@5 Acquired: 5/25/2023 15:02:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02695	.00006	.08942	.00075	.00066	.58493
Stddev	.01802	.00047	.00540	.00006	.00019	.51792
%RSD	66.874	759.80	6.0373	8.0929	29.394	88.544
#1	.02468	-.00027	.09330	.00071	.00061	1.0615
#2	.04600	-.00014	.09170	.00073	.00049	.03378
#3	.01017	.00060	.08325	.00082	.00087	.65946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18709	.00503	.10547	.00034	-.00036	-.00297
Stddev	.00199	.00019	.00049	.00197	.00083	.00184
%RSD	1.0663	3.8555	.46209	577.80	232.62	61.999
#1	.18609	.00513	.10491	-.00059	.00001	-.00137
#2	.18579	.00514	.10576	.00260	.00023	-.00255
#3	.18939	.00480	.10575	-.00099	-.00131	-.00499
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31759-a-3-a SD@5 Acquired: 5/25/2023 15:02:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	-.21229	.00170	.00102	-.00056	.00245
Stddev	.00139	.00556	.00074	.00004	.00088	.00232
%RSD	1758.2	2.6189	43.279	3.7929	157.58	94.690
#1	-.00047	-.21844	.00223	.00106	-.00035	.00365
#2	-.00096	-.20762	.00201	.00098	-.00152	-.00022
#3	.00166	-.21082	.00086	.00101	.00020	.00392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00003	.00146
Stddev	.00021	.00003
%RSD	616.17	2.2163
#1	.00013	.00142
#2	-.00027	.00147
#3	.00003	.00148
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31759-a-3-a SD@5 Acquired: 5/25/2023 15:02:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4218.2	77143.	13151.
Stddev	10.9	261.	108.
%RSD	.25840	.33880	.82439
#1	4208.9	76914.	13167.
#2	4215.4	77087.	13251.
#3	4230.2	77428.	13036.

Sample Name: CRI Acquired: 5/25/2023 15:07:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01001	.22278	.01168	.18551	.01028	.00533
Stddev	.00037	.01081	.00144	.00033	.00005	.00004
%RSD	3.6701	4.8534	12.308	.18012	.45339	.70911
#1	.00985	.22857	.01118	.18527	.01033	.00531
#2	.00974	.22947	.01330	.18589	.01028	.00537
#3	.01043	.21031	.01056	.18537	.01023	.00530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.5613	.00542	.05133	.01037	.02616	.10631
Stddev	.0321	.00005	.00017	.00032	.00053	.00219
%RSD	.57752	.96604	.32284	3.0954	2.0359	2.0645
#1	5.5379	.00538	.05152	.01016	.02565	.10400
#2	5.5482	.00540	.05120	.01020	.02612	.10654
#3	5.5980	.00548	.05127	.01073	.02671	.10837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 15:07:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0438	.04846	5.3326	.01556	.04133	5.9188
Stddev	.0337	.00031	.0567	.00009	.00018	.5558
%RSD	.66880	.63959	1.0631	.60686	.44005	9.3900
#1	5.0049	.04857	5.2716	.01550	.04112	6.5470
#2	5.0612	.04870	5.3426	.01567	.04144	5.7180
#3	5.0653	.04811	5.3837	.01551	.04142	5.4913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1850	.04231	.29963	F .01339	.01051	.05616
Stddev	.0167	.00012	.00157	.00305	.00044	.00081
%RSD	.32197	.28691	.52246	22.791	4.2184	1.4435
#1	5.1657	.04242	.29834	.01368	.01083	.05590
#2	5.1940	.04218	.30137	.01020	.01071	.05707
#3	5.1952	.04233	.29919	.01628	.01001	.05551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				.01000		
Range				30.000%		

Sample Name: CRI Acquired: 5/25/2023 15:07:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00876	F .25337	.09844	.04938	.05269	F .01436
Stddev	.00158	.01439	.00019	.00008	.00037	.00240
%RSD	17.992	5.6790	.19711	.15621	.70324	16.689
#1	.00694	.25527	.09822	.04935	.05265	.01571
#2	.00970	.23812	.09859	.04932	.05309	.01159
#3	.00964	.26671	.09852	.04947	.05235	.01578
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value		.50000				.01000
Range		-30.000%				30.000%

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02619	.02170
Stddev	.00037	.00012
%RSD	1.4070	.55642
#1	.02627	.02175
#2	.02652	.02178
#3	.02580	.02156
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/25/2023 15:07:54 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4182.9	76052.	12977.
Stddev	21.6	93.	100.
%RSD	.51531	.12190	.77433
#1	4160.9	75979.	13006.
#2	4183.8	76020.	13061.
#3	4204.0	76156.	12866.

Sample Name: CCV Acquired: 5/25/2023 15:12:49 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99672	25.346	.50240	1.9733	2.0489	2.1118
Stddev	.00263	.129	.00117	.0103	.0029	.0174
%RSD	.26384	.51011	.23292	.52309	.14035	.82436
#1	.99460	25.209	.50370	1.9614	2.0468	2.0946
#2	.99966	25.466	.50209	1.9791	2.0522	2.1294
#3	.99589	25.363	.50142	1.9794	2.0478	2.1114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.781	.52213	2.0398	2.1025	1.9543	26.183
Stddev	.309	.00060	.0016	.0086	.0015	.148
%RSD	.56365	.11546	.07912	.40976	.07555	.56694
#1	54.434	.52219	2.0392	2.0929	1.9560	26.022
#2	55.023	.52270	2.0385	2.1097	1.9533	26.314
#3	54.887	.52150	2.0416	2.1047	1.9537	26.214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 15:12:49 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.987	1.9592	54.306	2.0844	2.1150	51.972
Stddev	.120	.0013	.378	.0091	.0006	.363
%RSD	.24069	.06611	.69642	.43680	.02783	.69787
#1	49.865	1.9605	53.880	2.0741	2.1146	51.851
#2	50.106	1.9592	54.603	2.0914	2.1148	52.379
#3	49.991	1.9579	54.436	2.0876	2.1157	51.685
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.157	2.0587	1.9877	.54818	.51910	.48710
Stddev	.119	.0010	.0024	.00510	.00088	.00159
%RSD	.23198	.04595	.12070	.93119	.16910	.32598
#1	51.092	2.0577	1.9853	.54474	.52011	.48630
#2	51.294	2.0588	1.9877	.55404	.51850	.48608
#3	51.085	2.0596	1.9901	.54575	.51870	.48893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 15:12:49 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50751	F 1.7843	1.9818	1.9942	2.0958	1.0268
Stddev	.00279	.0078	.0036	.0027	.0050	.0029
%RSD	.54966	.43598	.17895	.13620	.23933	.27849
#1	.50432	1.7779	1.9781	1.9922	2.0918	1.0238
#2	.50947	1.7930	1.9851	1.9973	2.1014	1.0295
#3	.50874	1.7820	1.9822	1.9931	2.0942	1.0270
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		-10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0834	2.0145
Stddev	.0063	.0025
%RSD	.30414	.12396
#1	2.0761	2.0119
#2	2.0875	2.0147
#3	2.0866	2.0168
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 15:12:49 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4080.0	75453.	12824.
Stddev	2.2	366.	84.
%RSD	.05472	.48553	.65705
#1	4081.8	75534.	12888.
#2	4077.5	75053.	12728.
#3	4080.7	75772.	12856.

Sample Name: CCB Acquired: 5/25/2023 15:17:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.01110	.00188	-.01361	.00035	-.00006
Stddev	.00024	.01601	.00084	.00162	.00006	.00006
%RSD	91.301	144.26	44.482	11.903	17.305	102.07
#1	.00048	.01744	.00110	-.01188	.00035	.00001
#2	.00029	-.00711	.00177	-.01386	.00029	-.00010
#3	.00001	.02297	.00276	-.01509	.00041	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01067	.00018	.00012	-.00062	.00063	.00365
Stddev	.00356	.00008	.00012	.00042	.00009	.00051
%RSD	33.410	42.983	98.338	67.077	14.220	14.048
#1	.01386	.00009	.00020	-.00042	.00069	.00377
#2	.01133	.00024	-.00002	-.00035	.00068	.00308
#3	.00682	.00020	.00018	-.00110	.00053	.00408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 15:17:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02183	-.00015	.01072	.00008	-.00026	-.06891
Stddev	.02698	.00088	.00192	.00007	.00015	.78865
%RSD	123.59	603.67	17.900	95.750	58.769	1144.5
#1	.05299	.00087	.00856	.00016	-.00031	-.49182
#2	.00638	-.00061	.01140	.00005	-.00009	.84099
#3	.00613	-.00070	.01222	.00002	-.00038	-.55590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00324	.00109	-.00125	F .00209	-.00007	-.00207
Stddev	.00119	.00016	.00089	.00156	.00090	.00069
%RSD	36.780	14.602	71.383	74.703	1321.5	33.537
#1	.00301	.00123	-.00222	.00386	.00096	-.00129
#2	.00218	.00111	-.00046	.00152	-.00047	-.00262
#3	.00453	.00092	-.00107	.00090	-.00070	-.00229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/25/2023 15:17:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00042	F -.23375	-.00061	-.00008	-.00041	.00144
Stddev	.00168	.00715	.00026	.00005	.00084	.00076
%RSD	397.29	3.0590	42.580	63.452	208.32	52.392
#1	.00020	-.22848	-.00072	-.00004	-.00007	.00209
#2	.00086	-.23088	-.00031	-.00007	.00022	.00061
#3	-.00232	-.24189	-.00080	-.00014	-.00137	.00163
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00016	-.00027
Stddev	.00026	.00001
%RSD	163.59	4.9504
#1	-.00007	-.00026
#2	-.00046	-.00026
#3	.00005	-.00028
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 15:17:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4194.9	76392.	12810.
Stddev	9.4	86.	71.
%RSD	.22438	.11209	.55076
#1	4185.7	76339.	12837.
#2	4204.5	76491.	12731.
#3	4194.6	76347.	12864.

Sample Name: CRI Acquired: 5/25/2023 15:23:18 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01044	.21234	.00956	.19526	.01042	.00548
Stddev	.00043	.01163	.00092	.00062	.00011	.00001
%RSD	4.1532	5.4754	9.6390	.31736	1.0543	.24438
#1	.00996	.20859	.00983	.19596	.01040	.00546
#2	.01080	.20306	.01031	.19500	.01032	.00549
#3	.01056	.22538	.00853	.19480	.01054	.00549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.5831	.00547	.05194	.01064	.02778	.10573
Stddev	.0021	.00007	.00026	.00021	.00044	.00127
%RSD	.03742	1.3203	.50788	1.9657	1.5826	1.1981
#1	5.5807	.00545	.05163	.01086	.02734	.10457
#2	5.5844	.00555	.05204	.01062	.02778	.10554
#3	5.5842	.00541	.05213	.01044	.02822	.10708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 15:23:18 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0649	.04887	5.3149	.01572	.04174	5.9116
Stddev	.0226	.00117	.0197	.00007	.00021	.3042
%RSD	.44694	2.3853	.37126	.43741	.50454	5.1465
#1	5.0387	.04769	5.3343	.01576	.04153	6.0864
#2	5.0774	.04889	5.3155	.01576	.04195	6.0882
#3	5.0784	.05002	5.2948	.01564	.04174	5.5603
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1963	.04302	.31389	.01101	.01124	.06131
Stddev	.0228	.00007	.00073	.00124	.00134	.00209
%RSD	.43853	.15898	.23271	11.292	11.920	3.4067
#1	5.1742	.04305	.31307	.01051	.01108	.05982
#2	5.1950	.04306	.31448	.01242	.00998	.06040
#3	5.2197	.04294	.31410	.01009	.01265	.06370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 15:23:18 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01109	F .27176	.10011	.04960	.05218	.00882
Stddev	.00232	.00794	.00075	.00047	.00163	.00086
%RSD	20.883	2.9228	.75009	.95306	3.1290	9.7280
#1	.01373	.27113	.10004	.04909	.05196	.00980
#2	.00940	.26415	.09939	.04970	.05392	.00840
#3	.01013	.28000	.10089	.05002	.05068	.00825
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		-30.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02647	.02312
Stddev	.00022	.00012
%RSD	.84970	.53203
#1	.02655	.02301
#2	.02665	.02325
#3	.02622	.02309
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/25/2023 15:23:18 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4039.6	73636.	12837.
Stddev	19.4	214.	97.
%RSD	.47939	.29087	.75773
#1	4058.9	73441.	12726.
#2	4039.8	73601.	12909.
#3	4020.1	73865.	12875.

Sample Name: 140-31774-a-2-a Acquired: 5/25/2023 15:28:43 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00578	2.0429	-.00212	.17019	.51217	-.00010
Stddev	.00006	.0186	.00090	.00070	.00078	.00001
%RSD	1.0564	.90926	42.446	.41239	.15228	7.1284
#1	.00579	2.0384	-.00203	.16939	.51225	-.00010
#2	.00572	2.0269	-.00127	.17044	.51290	-.00011
#3	.00584	2.0633	-.00306	.17073	.51134	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.9155	.01513	.00922	.09262	.21103	1.9868
Stddev	.0626	.00017	.00021	.00095	.00057	.0094
%RSD	1.0587	1.0982	2.3164	1.0305	.26961	.47048
#1	5.8698	.01510	.00898	.09238	.21048	1.9771
#2	5.8898	.01498	.00940	.09181	.21099	1.9873
#3	5.9869	.01531	.00927	.09367	.21161	1.9958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-2-a Acquired: 5/25/2023 15:28:43 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.56607	.00167	1.2641	.03059	.00372	5.1492
Stddev	.02445	.00126	.0294	.00040	.00017	.2272
%RSD	4.3198	75.465	2.3233	1.2941	4.6296	4.4116
#1	.56049	.00169	1.2342	.03017	.00355	5.0206
#2	.54489	.00291	1.2652	.03062	.00371	5.4115
#3	.59283	.00039	1.2929	.03096	.00390	5.0155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5254	.04812	1.2099	.04031	.03656	.00683
Stddev	.0091	.00041	.0025	.00109	.00013	.00203
%RSD	.19998	.86067	.20661	2.7030	.36075	29.713
#1	4.5355	.04844	1.2118	.03906	.03649	.00906
#2	4.5226	.04766	1.2071	.04087	.03649	.00634
#3	4.5180	.04827	1.2108	.04101	.03672	.00509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-2-a Acquired: 5/25/2023 15:28:43 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01110	1.4784	.17921	.02923	.29846	-.00289
Stddev	.00357	.0137	.00049	.00011	.00076	.00155
%RSD	32.169	.92347	.27529	.39220	.25569	53.766
#1	.01481	1.4628	.17924	.02934	.29844	-.00451
#2	.00768	1.4841	.17870	.02924	.29770	-.00141
#3	.01081	1.4882	.17968	.02911	.29923	-.00275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00827	.21376
Stddev	.00009	.00013
%RSD	1.1244	.06315
#1	.00831	.21383
#2	.00834	.21384
#3	.00817	.21360
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-2-a Acquired: 5/25/2023 15:28:43 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3965.6	73993.	13270.
Stddev	48.4	824.	96.
%RSD	1.2195	1.1141	.72209
#1	3913.7	73065.	13193.
#2	3973.7	74276.	13377.
#3	4009.4	74639.	13241.

Sample Name: 140-31774-a-7-a Acquired: 5/25/2023 15:33:37 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00162	.17503	-.00393	.26898	.04723	-.00013
Stddev	.00017	.00682	.00101	.00128	.00020	.00001
%RSD	10.559	3.8948	25.766	.47581	.43206	11.524
#1	.00148	.16720	-.00491	.26751	.04715	-.00013
#2	.00157	.17960	-.00289	.26988	.04708	-.00011
#3	.00181	.17831	-.00400	.26955	.04746	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3356	.00137	-.00003	.01973	.07544	.63461
Stddev	.0122	.00005	.00008	.00068	.00019	.00456
%RSD	.91041	3.7197	286.50	3.4249	.24913	.71909
#1	1.3217	.00131	.00006	.02048	.07555	.62934
#2	1.3442	.00140	-.00008	.01916	.07554	.63706
#3	1.3410	.00139	-.00006	.01957	.07522	.63742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-7-a Acquired: 5/25/2023 15:33:37 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44916	-.00001	.25541	.04891	.00097	3.8457
Stddev	.04727	.00081	.00522	.00036	.00003	.5074
%RSD	10.525	5738.3	2.0434	.73026	2.5848	13.195
#1	.39581	.00088	.25111	.04850	.00100	3.6267
#2	.46580	-.00024	.26122	.04910	.00095	3.4844
#3	.48585	-.00069	.25390	.04913	.00098	4.4258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8442	.01371	.28883	.00664	.00803	.00783
Stddev	.0108	.00023	.00155	.00120	.00026	.00075
%RSD	.38033	1.6893	.53701	18.093	3.1999	9.6402
#1	2.8321	.01375	.29023	.00652	.00804	.00780
#2	2.8473	.01391	.28716	.00550	.00828	.00860
#3	2.8531	.01346	.28908	.00789	.00777	.00709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-7-a Acquired: 5/25/2023 15:33:37 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00827	1.3471	.20130	.00325	.00939	-.00553
Stddev	.00054	.0219	.00063	.00004	.00080	.00167
%RSD	6.4740	1.6260	.31081	1.2562	8.5144	30.195
#1	.00849	1.3218	.20090	.00326	.01030	-.00663
#2	.00866	1.3603	.20202	.00328	.00911	-.00636
#3	.00766	1.3592	.20098	.00320	.00877	-.00361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00071	.06147
Stddev	.00028	.00006
%RSD	39.606	.09480
#1	.00089	.06141
#2	.00039	.06149
#3	.00085	.06152
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-7-a Acquired: 5/25/2023 15:33:37 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3955.0	74033.	13221.
Stddev	42.6	883.	53.
%RSD	1.0767	1.1934	.40037
#1	3908.7	73140.	13160.
#2	3964.0	74052.	13250.
#3	3992.4	74907.	13253.

Sample Name: 140-31774-a-12-a Acquired: 5/25/2023 15:38:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00183	.17943	-.00461	.30866	.01525	-.00014
Stddev	.00016	.00727	.00115	.00167	.00019	.00001
%RSD	8.5277	4.0533	24.895	.54169	1.2155	8.7032
#1	.00165	.17169	-.00562	.30673	.01505	-.00015
#2	.00189	.18612	-.00336	.30956	.01541	-.00013
#3	.00194	.18048	-.00485	.30968	.01528	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4437	.00040	-.00027	.01661	.05279	.25015
Stddev	.0163	.00006	.00014	.00028	.00058	.00273
%RSD	1.1298	13.923	52.297	1.7098	1.1027	1.0899
#1	1.4258	.00034	-.00036	.01637	.05341	.24761
#2	1.4474	.00040	-.00011	.01654	.05271	.24981
#3	1.4578	.00045	-.00035	.01692	.05225	.25303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-12-a Acquired: 5/25/2023 15:38:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.39638	.00035	.21256	.01915	.00098	3.5832
Stddev	.02744	.00051	.00083	.00009	.00024	.3137
%RSD	6.9229	144.82	.38939	.47562	24.667	8.7544
#1	.37568	-.00024	.21196	.01908	.00119	3.6321
#2	.42751	.00066	.21221	.01912	.00104	3.8695
#3	.38595	.00063	.21350	.01925	.00071	3.2479
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.6858	.00839	.22811	.00632	.00687	.00466
Stddev	.0161	.00043	.00238	.00250	.00143	.00106
%RSD	.59930	5.1749	1.0443	39.509	20.819	22.761
#1	2.6685	.00789	.23060	.00349	.00526	.00458
#2	2.7003	.00857	.22787	.00820	.00738	.00575
#3	2.6887	.00870	.22585	.00727	.00798	.00364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-12-a Acquired: 5/25/2023 15:38:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00816	1.7591	.16795	.00383	.01184	-.00239
Stddev	.00126	.0391	.00071	.00006	.00016	.00238
%RSD	15.392	2.2246	.42299	1.6869	1.3337	99.593
#1	.00705	1.7173	.16796	.00383	.01166	-.00506
#2	.00952	1.7652	.16866	.00377	.01195	-.00165
#3	.00792	1.7948	.16724	.00390	.01192	-.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00103	.05013
Stddev	.00046	.00017
%RSD	44.531	.34268
#1	.00155	.05033
#2	.00089	.05006
#3	.00066	.05000
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-12-a Acquired: 5/25/2023 15:38:34 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4025.0	75341.	13563.
Stddev	39.5	978.	53.
%RSD	.98101	1.2980	.38983
#1	3980.7	74224.	13559.
#2	4037.8	76041.	13618.
#3	4056.4	75759.	13512.

Sample Name: 140-31774-a-18-a Acquired: 5/25/2023 15:43:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00065	.03306	-.00341	.02998	.00196	-.00015
Stddev	.00030	.01345	.00119	.00037	.00007	.00001
%RSD	45.954	40.669	34.954	1.2463	3.5199	7.0353
#1	.00080	.04200	-.00295	.03041	.00204	-.00016
#2	.00030	.01760	-.00252	.02974	.00193	-.00014
#3	.00083	.03958	-.00476	.02978	.00191	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41432	.00008	-.00029	.00580	.00399	.04175
Stddev	.00375	.00004	.00010	.00032	.00035	.00056
%RSD	.90398	58.303	34.977	5.4717	8.7342	1.3484
#1	.41034	.00011	-.00038	.00548	.00418	.04146
#2	.41778	.00010	-.00018	.00611	.00359	.04240
#3	.41484	.00002	-.00032	.00581	.00420	.04139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-18-a Acquired: 5/25/2023 15:43:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19198	-.00029	.06877	.00137	.00019	1.6472
Stddev	.01517	.00002	.00697	.00002	.00008	.7530
%RSD	7.9035	7.4907	10.140	1.3605	40.425	45.715
#1	.18530	-.00031	.07295	.00137	.00020	1.6343
#2	.20934	-.00026	.06072	.00135	.00011	.90071
#3	.18129	-.00029	.07264	.00138	.00027	2.4066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.69727	.00392	.11172	.00109	.00188	.00315
Stddev	.00150	.00011	.00121	.00037	.00065	.00061
%RSD	.21547	2.6894	1.0844	33.774	34.460	19.231
#1	.69562	.00380	.11132	.00092	.00257	.00357
#2	.69855	.00399	.11307	.00151	.00180	.00245
#3	.69765	.00397	.11075	.00083	.00128	.00343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-18-a Acquired: 5/25/2023 15:43:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00341	.07966	.12583	.00068	.00021	.00029
Stddev	.00077	.00827	.00073	.00004	.00072	.00129
%RSD	22.531	10.383	.57841	5.4666	336.58	439.54
#1	.00402	.07013	.12504	.00071	.00078	.00073
#2	.00255	.08497	.12647	.00064	-.00060	.00131
#3	.00367	.08389	.12599	.00069	.00046	-.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00020	.01713
Stddev	.00030	.00011
%RSD	148.81	.62170
#1	-.00000	.01706
#2	.00006	.01725
#3	.00055	.01708
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-18-a Acquired: 5/25/2023 15:43:29 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4147.6	76771.	13637.
Stddev	20.0	713.	60.
%RSD	.48164	.92834	.43897
#1	4125.3	75951.	13672.
#2	4153.5	77117.	13568.
#3	4163.9	77244.	13672.

Sample Name: 140-31774-a-23-a Acquired: 5/25/2023 15:48:27 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00257	.19724	-.00395	.16442	.01670	-.00014
Stddev	.00015	.00216	.00079	.00116	.00010	.00002
%RSD	5.9996	1.0973	20.093	.70540	.60918	12.727
#1	.00270	.19969	-.00485	.16343	.01666	-.00014
#2	.00260	.19559	-.00336	.16569	.01662	-.00016
#3	.00240	.19643	-.00363	.16412	.01681	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1798	.00342	-.00022	.01383	.08772	.27176
Stddev	.0304	.00003	.00009	.00035	.00035	.00511
%RSD	1.3942	.92998	40.041	2.5047	.39915	1.8818
#1	2.1452	.00340	-.00029	.01399	.08798	.26606
#2	2.1923	.00346	-.00025	.01406	.08785	.27325
#3	2.2020	.00341	-.00012	.01343	.08732	.27596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-23-a Acquired: 5/25/2023 15:48:27 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.61508	.00073	.50088	.02166	.00082	4.8136
Stddev	.02853	.00086	.01314	.00019	.00008	.8880
%RSD	4.6379	118.05	2.6230	.86015	10.164	18.447
#1	.58286	.00122	.48573	.02149	.00085	4.7279
#2	.62530	.00124	.50776	.02162	.00073	5.7412
#3	.63710	-.00027	.50914	.02186	.00089	3.9715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.6165	.01239	.27601	.01174	.01719	.00439
Stddev	.0305	.00019	.00358	.00152	.00022	.00036
%RSD	.84272	1.4967	1.2985	12.982	1.2535	8.1098
#1	3.5820	.01260	.27965	.01038	.01744	.00468
#2	3.6279	.01224	.27588	.01339	.01704	.00449
#3	3.6396	.01234	.27248	.01146	.01710	.00399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-23-a Acquired: 5/25/2023 15:48:27 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00469	.54839	.17726	.00521	.02126	-.00459
Stddev	.00143	.02019	.00086	.00009	.00065	.00244
%RSD	30.467	3.6809	.48438	1.6546	3.0787	53.109
#1	.00632	.53031	.17711	.00528	.02060	-.00556
#2	.00407	.57017	.17649	.00523	.02191	-.00181
#3	.00367	.54468	.17818	.00511	.02128	-.00638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00089	.10975
Stddev	.00037	.00032
%RSD	42.056	.29023
#1	.00131	.10977
#2	.00074	.11006
#3	.00061	.10942
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-23-a Acquired: 5/25/2023 15:48:27 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4017.9	75720.	13580.
Stddev	37.9	619.	98.
%RSD	.94420	.81744	.72406
#1	3979.6	75032.	13693.
#2	4018.7	76232.	13511.
#3	4055.4	75897.	13537.

Sample Name: 140-31774-a-28-a Acquired: 5/25/2023 15:53:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00232	.20371	-.00407	.33750	.04471	-.00014
Stddev	.00049	.02092	.00049	.00324	.00015	.00001
%RSD	21.192	10.270	12.025	.95878	.33568	3.8533
#1	.00249	.20539	-.00449	.33499	.04456	-.00014
#2	.00271	.22375	-.00353	.33637	.04470	-.00015
#3	.00177	.18201	-.00419	.34115	.04486	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3501	.00094	-.00004	.02655	.07179	.30011
Stddev	.0163	.00003	.00012	.00057	.00055	.00340
%RSD	1.2079	2.8882	346.97	2.1330	.76989	1.1339
#1	1.3312	.00095	-.00012	.02699	.07230	.30029
#2	1.3598	.00091	-.00009	.02675	.07185	.30342
#3	1.3592	.00095	.00010	.02591	.07120	.29663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-28-a Acquired: 5/25/2023 15:53:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.60731	.00016	.27862	.01824	.00116	3.5741
Stddev	.01607	.00114	.01011	.00012	.00013	.8403
%RSD	2.6461	713.04	3.6282	.67579	11.292	23.510
#1	.61052	.00138	.26752	.01810	.00131	4.0813
#2	.58987	-.00001	.28107	.01826	.00108	4.0368
#3	.62153	-.00088	.28729	.01835	.00109	2.6042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.9803	.01042	.24426	.01096	.01212	.00477
Stddev	.0104	.00013	.00110	.00243	.00081	.00026
%RSD	.34768	1.2376	.45038	22.166	6.7040	5.5133
#1	2.9742	.01056	.24549	.01091	.01304	.00447
#2	2.9744	.01031	.24337	.01342	.01151	.00497
#3	2.9923	.01038	.24391	.00856	.01182	.00488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-28-a Acquired: 5/25/2023 15:53:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00879	1.3482	.20513	.00372	.01626	-.00403
Stddev	.00112	.0053	.00099	.00012	.00043	.00079
%RSD	12.752	.39168	.48185	3.1854	2.6338	19.691
#1	.00964	1.3421	.20572	.00385	.01611	-.00336
#2	.00752	1.3511	.20569	.00361	.01675	-.00491
#3	.00921	1.3515	.20399	.00371	.01593	-.00384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00095	.05157
Stddev	.00012	.00008
%RSD	12.566	.14890
#1	.00084	.05165
#2	.00094	.05149
#3	.00108	.05156
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-28-a Acquired: 5/25/2023 15:53:23 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4049.6	76512.	13599.
Stddev	37.3	216.	94.
%RSD	.92154	.28239	.69481
#1	4007.2	76373.	13675.
#2	4064.2	76761.	13493.
#3	4077.4	76403.	13630.

Sample Name: 140-31774-a-28-a PDS Acquired: 5/25/2023 15:58:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04926	2.0982	.09630	1.2467	.14376	.05274
Stddev	.00045	.0188	.00105	.0048	.00098	.00027
%RSD	.91603	.89834	1.0874	.38813	.67859	.52039
#1	.04970	2.0997	.09748	1.2505	.14466	.05300
#2	.04880	2.1163	.09550	1.2483	.14389	.05278
#3	.04928	2.0787	.09591	1.2412	.14273	.05245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.080	.04984	.09880	.22731	.31415	1.2882
Stddev	.183	.00040	.00084	.00030	.00261	.0103
%RSD	.35132	.79595	.84704	.13138	.82971	.80102
#1	52.161	.05029	.09977	.22750	.31708	1.2848
#2	52.209	.04969	.09833	.22746	.31330	1.2997
#3	51.871	.04955	.09831	.22696	.31208	1.2799
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-28-a PDS Acquired: 5/25/2023 15:58:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.201	.09745	9.9581	.11695	.50629	52.642
Stddev	.298	.00130	.0779	.00074	.00606	.246
%RSD	.63135	1.3318	.78235	.63415	1.1976	.46792
#1	47.163	.09670	9.9069	.11778	.51326	52.640
#2	47.517	.09895	10.048	.11673	.50339	52.397
#3	46.924	.09670	9.9196	.11635	.50223	52.890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.017	.50347	4.9494	.10734	.10638	.46887
Stddev	.422	.00486	.0598	.00429	.00253	.00679
%RSD	.82774	.96442	1.2076	3.9959	2.3828	1.4485
#1	51.265	.50902	5.0172	.10527	.10884	.47671
#2	51.256	.50138	4.9269	.11228	.10654	.46462
#3	50.529	.50001	4.9042	.10448	.10377	.46529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-28-a PDS Acquired: 5/25/2023 15:58:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16771	6.1235	.65538	.48249	.12083	.37305
Stddev	.00441	.0649	.00529	.00455	.00065	.00579
%RSD	2.6293	1.0607	.80677	.94338	.54208	1.5513
#1	.17280	6.0503	.66079	.48570	.12140	.37940
#2	.16502	6.1742	.65512	.48449	.12098	.37165
#3	.16531	6.1461	.65023	.47728	.12011	.36809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20176	.53186
Stddev	.00121	.00584
%RSD	.59970	1.0972
#1	.20307	.53836
#2	.20152	.53014
#3	.20068	.52708
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-28-a PDS Acquired: 5/25/2023 15:58:19 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3969.2	74127.	13533.
Stddev	66.5	1091.	154.
%RSD	1.6761	1.4722	1.1370
#1	3895.5	72961.	13401.
#2	3987.3	74297.	13495.
#3	4024.8	75124.	13702.

Sample Name: 31774-a-28-a PDSD Acquired: 5/25/2023 16:03:02 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04807	2.0553	.09548	1.2374	.14242	.05216
Stddev	.00066	.0262	.00075	.0098	.00117	.00061
%RSD	1.3754	1.2765	.78178	.78772	.82428	1.1620
#1	.04760	2.0291	.09548	1.2262	.14109	.05146
#2	.04883	2.0816	.09473	1.2427	.14328	.05248
#3	.04780	2.0551	.09622	1.2434	.14291	.05254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.537	.04966	.09817	.22462	.31120	1.2700
Stddev	.555	.00009	.00051	.00423	.00138	.0151
%RSD	1.0774	.19084	.51577	1.8812	.44307	1.1898
#1	50.896	.04957	.09797	.21981	.30969	1.2528
#2	51.862	.04965	.09780	.22628	.31238	1.2761
#3	51.854	.04976	.09875	.22776	.31153	1.2811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31774-a-28-a PDSD Acquired: 5/25/2023 16:03:02 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.512	.09617	9.7814	.11578	.50816	52.463
Stddev	.561	.00183	.1681	.00137	.00074	.362
%RSD	1.2055	1.9073	1.7190	1.1803	.14541	.69089
#1	45.886	.09447	9.5880	.11420	.50857	52.061
#2	46.969	.09812	9.8935	.11656	.50731	52.764
#3	46.680	.09591	9.8625	.11659	.50860	52.565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.328	.50219	4.9570	.10706	.10484	.47123
Stddev	.420	.00053	.0095	.00320	.00052	.00095
%RSD	.83401	.10600	.19169	2.9866	.49299	.20096
#1	49.880	.50204	4.9678	.10392	.10455	.47199
#2	50.712	.50175	4.9498	.10695	.10453	.47017
#3	50.392	.50278	4.9534	.11031	.10544	.47152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31774-a-28-a PDSD Acquired: 5/25/2023 16:03:02 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16878	6.1428	.65875	.47679	.12054	.37165
Stddev	.00237	.1310	.00195	.00404	.00202	.00240
%RSD	1.4035	2.1329	.29670	.84829	1.6756	.64595
#1	.17147	5.9925	.65789	.47284	.11863	.37016
#2	.16789	6.2331	.65737	.48092	.12033	.37442
#3	.16699	6.2028	.66098	.47660	.12266	.37038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19954	.53012
Stddev	.00203	.00055
%RSD	1.0151	.10403
#1	.19725	.53063
#2	.20030	.52953
#3	.20108	.53021
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31774-a-28-a PDSD Acquired: 5/25/2023 16:03:02 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3961.3	74315.	13595.
Stddev	37.6	186.	95.
%RSD	.94804	.24992	.69752
#1	3918.9	74209.	13625.
#2	3974.6	74207.	13489.
#3	3990.4	74530.	13672.

Sample Name: 140-31774-a-33-a Acquired: 5/25/2023 16:07:44 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00086	.13823	-.00426	.57119	.01480	-.00011
Stddev	.00079	.01544	.00091	.02167	.00066	.00002
%RSD	91.601	11.167	21.347	3.7931	4.4406	15.611
#1	.00145	.15255	-.00385	.59618	.01556	-.00013
#2	.00116	.14025	-.00362	.55966	.01436	-.00010
#3	-.00003	.12188	-.00530	.55772	.01449	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3163	.00042	-.00019	.01421	.06641	.17940
Stddev	.0421	.00002	.00011	.00075	.00354	.00656
%RSD	3.1968	4.8132	56.135	5.2592	5.3294	3.6568
#1	1.3645	.00042	-.00025	.01481	.07050	.18598
#2	1.2868	.00040	-.00007	.01444	.06433	.17286
#3	1.2976	.00044	-.00026	.01337	.06441	.17935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-33-a Acquired: 5/25/2023 16:07:44 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.45494	.00027	.22296	.04008	.00086	3.8018
Stddev	.01021	.00015	.00230	.00146	.00013	.3675
%RSD	2.2448	56.745	1.0298	3.6487	15.526	9.6663
#1	.45413	.00025	.22531	.04175	.00094	3.5045
#2	.44515	.00012	.22072	.03904	.00070	4.2127
#3	.46553	.00042	.22284	.03944	.00092	3.6883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.8125	.01124	.20887	.00434	.00596	.00603
Stddev	.0866	.00019	.00216	.00015	.00097	.00144
%RSD	3.0773	1.7176	1.0347	3.4227	16.359	23.849
#1	2.9113	.01141	.20653	.00438	.00708	.00563
#2	2.7504	.01103	.20930	.00418	.00534	.00762
#3	2.7756	.01128	.21078	.00447	.00546	.00483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-33-a Acquired: 5/25/2023 16:07:44 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00512	.96585	.16398	.00343	.00937	-.00265
Stddev	.00093	.03920	.00062	.00024	.00025	.00132
%RSD	18.215	4.0586	.38091	7.0291	2.6190	49.916
#1	.00556	1.0109	.16328	.00370	.00955	-.00303
#2	.00575	.93991	.16446	.00333	.00909	-.00118
#3	.00405	.94670	.16420	.00325	.00947	-.00375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00099	.04542
Stddev	.00030	.00030
%RSD	29.683	.66648
#1	.00131	.04508
#2	.00073	.04550
#3	.00093	.04567
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-33-a Acquired: 5/25/2023 16:07:44 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3999.8	74060.	13218.
Stddev	18.9	3289.	442.
%RSD	.47307	4.4409	3.3431
#1	3978.2	70281.	12708.
#2	4008.3	75616.	13479.
#3	4013.0	76281.	13467.

Sample Name: 140-31777-a-2-a Acquired: 5/25/2023 16:12:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.08762	.01985	.13410	.02746	-.00012
Stddev	.00015	.00360	.00105	.00154	.00018	.00001
%RSD	35.566	4.1122	5.2783	1.1520	.63882	5.3544
#1	.00031	.08876	.01876	.13252	.02730	-.00012
#2	.00039	.08358	.02085	.13415	.02743	-.00013
#3	.00061	.09051	.01995	.13561	.02765	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1745	-.00002	-.00017	.00528	.06302	.14162
Stddev	.0122	.00005	.00016	.00038	.00055	.00220
%RSD	1.0398	253.17	90.210	7.2547	.86993	1.5542
#1	1.1617	-.00000	-.00033	.00512	.06344	.13916
#2	1.1757	.00002	-.00002	.00500	.06322	.14340
#3	1.1861	-.00007	-.00016	.00571	.06240	.14230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-2-a Acquired: 5/25/2023 16:12:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48525	-.00012	.28032	.00817	.00136	1.4883
Stddev	.04719	.00068	.00935	.00001	.00006	.4446
%RSD	9.7248	592.29	3.3346	.09701	4.7641	29.871
#1	.43253	.00005	.27249	.00817	.00141	1.3072
#2	.52354	.00047	.27780	.00818	.00129	1.1629
#3	.49968	-.00087	.29066	.00817	.00139	1.9948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1538	.00469	.48080	.00836	.00585	.00373
Stddev	.0052	.00019	.00271	.00103	.00141	.00009
%RSD	.45280	4.1219	.56446	12.331	24.151	2.5411
#1	1.1517	.00449	.48346	.00865	.00611	.00375
#2	1.1500	.00471	.48089	.00922	.00433	.00381
#3	1.1598	.00487	.47804	.00722	.00712	.00363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-2-a Acquired: 5/25/2023 16:12:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02343	.41782	.19188	.00632	.00342	-.00094
Stddev	.00109	.00415	.00056	.00008	.00071	.00174
%RSD	4.6614	.99253	.29429	1.1994	20.815	185.94
#1	.02439	.41318	.19127	.00641	.00353	-.00026
#2	.02365	.42116	.19239	.00628	.00267	-.00291
#3	.02224	.41912	.19197	.00627	.00408	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00021	.04462
Stddev	.00007	.00016
%RSD	34.915	.35769
#1	.00027	.04479
#2	.00024	.04458
#3	.00013	.04448
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-2-a Acquired: 5/25/2023 16:12:39 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4136.4	77286.	13733.
Stddev	42.0	760.	50.
%RSD	1.0165	.98379	.36462
#1	4090.1	76475.	13741.
#2	4146.9	77401.	13779.
#3	4172.2	77982.	13680.

Sample Name: CCV Acquired: 5/25/2023 16:17:35 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0185	25.253	.51544	2.0227	2.0680	2.1278
Stddev	.0005	.144	.00280	.0096	.0044	.0164
%RSD	.04921	.57085	.54417	.47415	.21466	.76934
#1	1.0185	25.171	.51464	2.0118	2.0640	2.1127
#2	1.0180	25.169	.51313	2.0301	2.0728	2.1256
#3	1.0190	25.420	.51856	2.0261	2.0671	2.1452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.206	.52631	2.0647	2.1056	2.0161	26.071
Stddev	.219	.00006	.0015	.0077	.0073	.131
%RSD	.40328	.01136	.07116	.36412	.35958	.50156
#1	53.958	.52636	2.0655	2.1012	2.0194	25.950
#2	54.369	.52624	2.0656	2.1012	2.0211	26.052
#3	54.292	.52632	2.0630	2.1145	2.0078	26.209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 16:17:35 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.755	1.9873	53.327	2.0925	2.1328	52.091
Stddev	.108	.0037	.327	.0047	.0042	.158
%RSD	.21628	.18362	.61368	.22582	.19684	.30400
#1	49.673	1.9886	52.973	2.0877	2.1367	51.999
#2	49.715	1.9832	53.391	2.0927	2.1334	52.001
#3	49.877	1.9902	53.618	2.0971	2.1283	52.274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.109	2.0861	2.0586	.54314	.52283	.50903
Stddev	.063	.0012	.0021	.00297	.00071	.00177
%RSD	.12410	.05876	.10370	.54667	.13579	.34798
#1	51.049	2.0874	2.0610	.54270	.52255	.50732
#2	51.103	2.0860	2.0580	.54041	.52230	.50892
#3	51.176	2.0849	2.0569	.54630	.52364	.51086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 16:17:35 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53565	F 1.7741	2.0094	2.0107	2.0990	1.0375
Stddev	.00100	.0097	.0023	.0016	.0029	.0028
%RSD	.18624	.54876	.11263	.08048	.13906	.26997
#1	.53470	1.7747	2.0068	2.0089	2.0962	1.0405
#2	.53669	1.7641	2.0103	2.0113	2.1020	1.0370
#3	.53555	1.7835	2.0110	2.0120	2.0989	1.0349
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		-10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0910	2.0711
Stddev	.0037	.0018
%RSD	.17478	.08725
#1	2.0878	2.0718
#2	2.0903	2.0725
#3	2.0950	2.0691
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 16:17:35 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3973.1	74457.	13110.
Stddev	3.6	129.	46.
%RSD	.09089	.17391	.34791
#1	3971.2	74459.	13145.
#2	3970.8	74586.	13127.
#3	3977.2	74327.	13059.

Sample Name: CCB Acquired: 5/25/2023 16:22:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.01516	-.00065	-.01475	.00024	-.00011
Stddev	.00013	.01458	.00021	.00137	.00017	.00004
%RSD	483.32	96.128	31.980	9.2950	69.413	33.816
#1	.00004	.03151	-.00048	-.01337	.00005	-.00007
#2	.00015	.00350	-.00088	-.01478	.00033	-.00010
#3	-.00011	.01049	-.00058	-.01611	.00035	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00848	.00014	-.00000	-.00049	.00208	.00274
Stddev	.00107	.00009	.00013	.00028	.00007	.00047
%RSD	12.664	62.650	4546.5	57.971	3.1618	17.276
#1	.00907	.00005	-.00001	-.00034	.00213	.00230
#2	.00914	.00023	.00012	-.00031	.00211	.00268
#3	.00724	.00014	-.00013	-.00082	.00201	.00324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 16:22:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04925	-.00022	.01184	.00005	-.00008	F .57540
Stddev	.01430	.00049	.00790	.00003	.00014	.30967
%RSD	29.033	221.46	66.744	63.289	170.45	53.818
#1	-.05951	-.00031	.02081	.00001	-.00019	.91529
#2	-.03292	-.00066	.00593	.00006	.00008	.50164
#3	-.05531	.00031	.00878	.00007	-.00014	.30927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00889	.00095	-.00059	.00126	.00022	.00104
Stddev	.00930	.00008	.00065	.00224	.00050	.00011
%RSD	104.52	8.3201	109.38	177.36	228.50	10.196
#1	.01753	.00086	-.00127	.00327	.00059	.00113
#2	.01010	.00101	.00002	-.00115	.00041	.00107
#3	-.00095	.00098	-.00052	.00167	-.00035	.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 16:22:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	F -.21984	-.00021	-.00009	.00035	.00228
Stddev	.00143	.01916	.00022	.00014	.00064	.00164
%RSD	278.73	8.7150	106.88	154.99	182.12	71.926
#1	.00212	-.20332	-.00005	-.00006	.00023	.00225
#2	-.00063	-.21536	-.00046	.00003	-.00022	.00393
#3	.00005	-.24084	-.00011	-.00024	.00105	.00065
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00026	.00016
Stddev	.00016	.00006
%RSD	61.322	39.510
#1	-.00022	.00022
#2	-.00013	.00011
#3	-.00044	.00013
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 16:22:26 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4051.1	74911.	13055.
Stddev	7.3	372.	49.
%RSD	.18139	.49615	.37221
#1	4043.6	74572.	13055.
#2	4051.6	75308.	13104.
#3	4058.2	74851.	13007.

Sample Name: 140-31777-a-7-a Acquired: 5/25/2023 16:29:33 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00063	.14559	-.00246	.14308	.01060	-.00013
Stddev	.00041	.01466	.00025	.00152	.00008	.00001
%RSD	65.405	10.066	9.9798	1.0626	.78933	8.5877
#1	.00029	.14371	-.00218	.14185	.01070	-.00012
#2	.00109	.13197	-.00264	.14262	.01058	-.00014
#3	.00052	.16110	-.00256	.14478	.01054	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4831	.00008	-.00023	.00485	.05103	.16207
Stddev	.0335	.00005	.00001	.00077	.00053	.00235
%RSD	1.3480	65.161	4.0052	15.840	1.0473	1.4479
#1	2.4493	.00002	-.00023	.00512	.05127	.16142
#2	2.4836	.00008	-.00024	.00398	.05139	.16011
#3	2.5163	.00012	-.00024	.00544	.05041	.16467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a Acquired: 5/25/2023 16:29:33 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38561	.00030	.50572	1.0475	.00125	2.3329
Stddev	.00851	.00080	.01272	.0092	.00016	.7899
%RSD	2.2078	269.51	2.5154	.87337	13.039	33.859
#1	.37973	.00116	.49691	1.0383	.00133	1.9799
#2	.38173	-.00042	.49995	1.0475	.00136	1.7810
#3	.39537	.00015	.52030	1.0566	.00106	3.2377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1213	.00627	.46676	.00776	.00821	.00441
Stddev	.0074	.00006	.00117	.00239	.00095	.00124
%RSD	.65794	.98959	.24967	30.749	11.572	28.076
#1	1.1138	.00620	.46544	.00988	.00763	.00499
#2	1.1216	.00629	.46765	.00822	.00930	.00524
#3	1.1285	.00632	.46719	.00517	.00769	.00299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a Acquired: 5/25/2023 16:29:33 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01018	.68456	.16473	.00198	.00646	-.00171
Stddev	.00109	.00776	.00131	.00010	.00072	.00284
%RSD	10.717	1.1332	.79673	4.7955	11.113	165.88
#1	.00897	.67562	.16506	.00208	.00690	-.00344
#2	.01047	.68854	.16584	.00197	.00563	-.00326
#3	.01109	.68951	.16328	.00189	.00684	.00157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00024	.04389
Stddev	.00012	.00020
%RSD	50.730	.44804
#1	.00038	.04392
#2	.00022	.04408
#3	.00013	.04368
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-7-a Acquired: 5/25/2023 16:29:33 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4061.7	75392.	13205.
Stddev	44.0	484.	151.
%RSD	1.0841	.64147	1.1413
#1	4014.2	74846.	13337.
#2	4069.8	75566.	13238.
#3	4101.2	75765.	13041.

Sample Name: 140-31777-a-7-a PDS Acquired: 5/25/2023 16:34:31 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04575	2.0095	.09150	1.0252	.10774	.04972
Stddev	.00008	.0247	.00040	.0034	.00008	.00018
%RSD	.16572	1.2290	.43532	.33328	.07508	.37095
#1	.04578	1.9810	.09195	1.0242	.10769	.04954
#2	.04580	2.0247	.09122	1.0290	.10783	.04991
#3	.04566	2.0228	.09132	1.0223	.10769	.04971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.864	.04861	.09662	.20313	.28672	1.1267
Stddev	.449	.00011	.00022	.00177	.00055	.0013
%RSD	.84875	.22553	.22877	.87212	.19134	.11604
#1	52.367	.04867	.09687	.20141	.28659	1.1260
#2	53.239	.04868	.09647	.20495	.28733	1.1282
#3	52.987	.04848	.09651	.20304	.28626	1.1259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a PDS Acquired: 5/25/2023 16:34:31 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.480	.09439	10.236	1.0967	.50315	50.777
Stddev	.176	.00012	.111	.0033	.00086	.521
%RSD	.37860	.12573	1.0885	.30189	.17084	1.0262
#1	46.282	.09447	10.108	1.0935	.50308	50.476
#2	46.537	.09426	10.295	1.1001	.50404	51.378
#3	46.620	.09445	10.306	1.0964	.50233	50.475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.613	.49079	5.0495	.10398	.10089	.46724
Stddev	.115	.00036	.0166	.00103	.00119	.00386
%RSD	.23595	.07339	.32807	.99250	1.1806	.82549
#1	48.691	.49108	5.0625	.10309	.10226	.46867
#2	48.665	.49090	5.0550	.10375	.10009	.47018
#3	48.481	.49039	5.0308	.10511	.10032	.46287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a PDS Acquired: 5/25/2023 16:34:31 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13855	5.3050	.62202	.46570	.10923	.37097
Stddev	.00126	.0484	.00020	.00113	.00047	.00365
%RSD	.91240	.91301	.03194	.24323	.42794	.98281
#1	.13945	5.2492	.62221	.46463	.10888	.37210
#2	.13909	5.3295	.62202	.46688	.10976	.36689
#3	.13710	5.3363	.62182	.46557	.10904	.37392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19544	.51437
Stddev	.00120	.00148
%RSD	.61543	.28727
#1	.19415	.51474
#2	.19653	.51563
#3	.19563	.51274
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-7-a PDS Acquired: 5/25/2023 16:34:31 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4054.6	76062.	13419.
Stddev	39.2	980.	123.
%RSD	.96680	1.2882	.91461
#1	4013.2	75368.	13390.
#2	4059.4	75635.	13312.
#3	4091.1	77183.	13553.

Sample Name: 140-31777-a-7-a PDSD Acquired: 5/25/2023 16:39:16 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04800	2.0884	.09859	1.0716	.11280	.05237
Stddev	.00046	.0127	.00128	.0069	.00068	.00042
%RSD	.95592	.61062	1.3031	.64206	.60305	.79821
#1	.04757	2.0862	.09809	1.0637	.11202	.05189
#2	.04848	2.0769	.09763	1.0746	.11315	.05255
#3	.04793	2.1021	.10005	1.0765	.11323	.05267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.739	.05120	.10150	.21206	.29761	1.1824
Stddev	.397	.00026	.00030	.00148	.00055	.0125
%RSD	.73812	.51676	.29685	.69651	.18452	1.0590
#1	53.474	.05111	.10129	.21036	.29698	1.1748
#2	53.548	.05100	.10137	.21304	.29784	1.1754
#3	54.195	.05150	.10185	.21277	.29801	1.1968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a PDSD Acquired: 5/25/2023 16:39:16 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.181	.09934	10.402	1.1179	.51113	51.741
Stddev	.396	.00086	.163	.0077	.00233	.641
%RSD	.83857	.86259	1.5640	.68570	.45636	1.2384
#1	46.817	.09846	10.339	1.1093	.50852	51.269
#2	47.124	.10017	10.281	1.1204	.51301	52.470
#3	47.602	.09938	10.587	1.1240	.51186	51.484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.316	.51680	5.1241	.11100	.10668	.47789
Stddev	.255	.00150	.0140	.00160	.00053	.00236
%RSD	.51725	.29091	.27409	1.4455	.49517	.49399
#1	49.061	.51515	5.1079	.11193	.10665	.47516
#2	49.315	.51716	5.1310	.11192	.10722	.47928
#3	49.571	.51810	5.1333	.10914	.10617	.47922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a PDSD Acquired: 5/25/2023 16:39:16 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14525	5.4359	.63327	.49007	.11096	.38754
Stddev	.00023	.0582	.00225	.00334	.00133	.00297
%RSD	.15986	1.0700	.35596	.68243	1.1980	.76708
#1	.14514	5.3747	.63092	.48624	.10943	.38804
#2	.14509	5.4427	.63347	.49154	.11189	.38435
#3	.14552	5.4904	.63541	.49242	.11154	.39023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20498	.53886
Stddev	.00114	.00150
%RSD	.55771	.27851
#1	.20369	.53729
#2	.20542	.53899
#3	.20584	.54029
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-7-a PDSD Acquired: 5/25/2023 16:39:16 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3998.4	74906.	13136.
Stddev	22.9	601.	201.
%RSD	.57335	.80206	1.5328
#1	3973.4	74392.	12977.
#2	4003.7	74759.	13362.
#3	4018.3	75566.	13068.

Sample Name: 140-31777-a-12-a Acquired: 5/25/2023 16:44:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.07402	-.00065	.08294	.02211	-.00011
Stddev	.00009	.00359	.00098	.00183	.00025	.00000
%RSD	28.723	4.8550	151.11	2.2103	1.1085	3.5399
#1	.00022	.07577	-.00044	.08439	.02232	-.00011
#2	.00039	.07640	.00021	.08356	.02217	-.00011
#3	.00032	.06989	-.00172	.08088	.02184	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.90415	.00013	-.00032	.00473	.06579	.13080
Stddev	.00138	.00005	.00013	.00037	.00138	.00093
%RSD	.15230	41.199	39.530	7.8916	2.0901	.71357
#1	.90385	.00008	-.00034	.00513	.06701	.13054
#2	.90566	.00013	-.00044	.00439	.06608	.13183
#3	.90296	.00018	-.00019	.00467	.06430	.13002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-12-a Acquired: 5/25/2023 16:44:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37624	-.00009	.08709	.01084	.00112	2.1343
Stddev	.01485	.00032	.00860	.00008	.00013	.4285
%RSD	3.9481	367.53	9.8778	.72415	11.308	20.076
#1	.37321	.00023	.09109	.01093	.00101	2.6186
#2	.36314	-.00040	.09296	.01081	.00126	1.8042
#3	.39238	-.00008	.07721	.01078	.00110	1.9802
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.85896	.00527	.45549	.00369	.00477	.00627
Stddev	.00871	.00026	.00261	.00101	.00030	.00142
%RSD	1.0142	4.9679	.57337	27.275	6.2219	22.654
#1	.86889	.00558	.45849	.00256	.00458	.00680
#2	.85539	.00512	.45380	.00449	.00461	.00734
#3	.85261	.00512	.45416	.00401	.00511	.00466
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-12-a Acquired: 5/25/2023 16:44:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03011	.19433	.16331	.00150	.00213	-.00244
Stddev	.00146	.01232	.00066	.00005	.00066	.00103
%RSD	4.8440	6.3382	.40495	3.2422	30.796	42.062
#1	.03174	.20855	.16377	.00150	.00140	-.00283
#2	.02967	.18743	.16360	.00155	.00267	-.00128
#3	.02892	.18700	.16255	.00145	.00233	-.00321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00026	.02789
Stddev	.00028	.00019
%RSD	105.70	.69433
#1	.00003	.02811
#2	.00057	.02777
#3	.00019	.02778
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-12-a Acquired: 5/25/2023 16:44:01 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4106.9	76451.	13330.
Stddev	39.7	1275.	142.
%RSD	.96755	1.6679	1.0651
#1	4061.9	75014.	13181.
#2	4121.6	76893.	13345.
#3	4137.3	77446.	13464.

Sample Name: 140-31777-a-18-a Acquired: 5/25/2023 16:48:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00555	-.00175	.03390	.00276	-.00014
Stddev	.00042	.00802	.00075	.00032	.00011	.00002
%RSD	156.77	144.42	42.979	.93481	4.1213	12.744
#1	.00030	.01379	-.00122	.03355	.00273	-.00016
#2	-.00016	.00509	-.00261	.03417	.00267	-.00013
#3	.00067	-.00223	-.00142	.03397	.00289	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30766	.00003	.00007	.00140	.00466	.02458
Stddev	.00294	.00009	.00008	.00051	.00032	.00123
%RSD	.95449	263.77	120.19	36.244	6.8042	4.9950
#1	.30496	-.00007	.00000	.00128	.00494	.02371
#2	.31079	.00009	.00004	.00096	.00472	.02404
#3	.30722	.00008	.00016	.00196	.00432	.02598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-18-a Acquired: 5/25/2023 16:48:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00748	.00209	.04762	.00159	-.00015	2.3087
Stddev	.03455	.00021	.00257	.00004	.00020	.2528
%RSD	461.92	10.057	5.3931	2.6570	133.17	10.948
#1	-.03216	.00234	.05036	.00154	.00005	2.0875
#2	.03116	.00197	.04527	.00161	-.00035	2.2544
#3	.02344	.00197	.04722	.00161	-.00015	2.5842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.6037	.00308	.00403	-.00194	.00076	.00094
Stddev	.0086	.00012	.00216	.00184	.00107	.00055
%RSD	.53527	3.9318	53.546	95.198	140.27	58.622
#1	1.5961	.00303	.00414	-.00077	.00114	.00158
#2	1.6130	.00298	.00182	-.00098	.00158	.00060
#3	1.6020	.00321	.00613	-.00406	-.00044	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-18-a Acquired: 5/25/2023 16:48:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00559	-.03951	.00363	.00028	-.00043	-.00201
Stddev	.00207	.01805	.00037	.00004	.00024	.00058
%RSD	37.090	45.686	10.117	13.346	55.207	28.683
#1	.00692	-.02065	.00331	.00032	-.00016	-.00135
#2	.00320	-.04125	.00403	.00024	-.00058	-.00234
#3	.00664	-.05662	.00355	.00027	-.00056	-.00235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00010	.00598
Stddev	.00011	.00006
%RSD	110.75	.99416
#1	.00013	.00605
#2	.00020	.00597
#3	-.00002	.00593
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-18-a Acquired: 5/25/2023 16:48:58 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4016.6	74369.	12854.
Stddev	14.0	99.	18.
%RSD	.34826	.13252	.13645
#1	4001.2	74444.	12840.
#2	4020.0	74257.	12873.
#3	4028.5	74406.	12848.

Sample Name: 140-31777-a-19-a Acquired: 5/25/2023 16:53:57 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00032	.03061	-.00241	.03705	.00157	-.00012
Stddev	.00034	.00867	.00132	.00006	.00008	.00001
%RSD	106.01	28.331	54.612	.15560	5.2180	11.970
#1	.00049	.02198	-.00355	.03706	.00166	-.00011
#2	-.00007	.03932	-.00097	.03699	.00156	-.00014
#3	.00055	.03052	-.00270	.03710	.00150	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33091	.00003	-.00024	.00287	.00250	.04028
Stddev	.00214	.00007	.00001	.00025	.00028	.00061
%RSD	.64549	220.53	5.7892	8.6971	11.054	1.5244
#1	.32886	.00010	-.00023	.00289	.00281	.04017
#2	.33076	-.00004	-.00025	.00261	.00237	.03973
#3	.33312	.00003	-.00023	.00310	.00231	.04094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-19-a Acquired: 5/25/2023 16:53:57 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09911	.00029	.04383	.00235	.00017	1.4337
Stddev	.01345	.00045	.00681	.00007	.00015	.7892
%RSD	13.568	156.07	15.529	2.9011	87.158	55.046
#1	.11214	.00080	.04631	.00227	.00001	1.0529
#2	.08528	-.00002	.03613	.00236	.00020	.90713
#3	.09992	.00008	.04904	.00241	.00029	2.3411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91380	.00332	.25590	.00081	.00066	.00264
Stddev	.00349	.00011	.00233	.00146	.00055	.00133
%RSD	.38179	3.1853	.90980	178.73	83.301	50.416
#1	.91205	.00341	.25858	.00127	.00027	.00393
#2	.91782	.00320	.25474	.00198	.00128	.00127
#3	.91153	.00334	.25437	-.00082	.00042	.00272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-19-a Acquired: 5/25/2023 16:53:57 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00477	-.00653	.12581	.00017	.00120	-.00139
Stddev	.00174	.00647	.00071	.00009	.00019	.00227
%RSD	36.444	99.063	.56258	53.921	15.828	163.30
#1	.00677	-.00150	.12544	.00013	.00142	.00070
#2	.00384	-.00426	.12536	.00028	.00109	-.00381
#3	.00369	-.01382	.12662	.00011	.00110	-.00106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00022	.00751
Stddev	.00055	.00011
%RSD	252.57	1.5268
#1	.00045	.00763
#2	-.00041	.00740
#3	.00062	.00750
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-19-a Acquired: 5/25/2023 16:53:57 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4067.0	75520.	12959.
Stddev	23.5	297.	184.
%RSD	.57815	.39293	1.4206
#1	4041.9	75660.	12835.
#2	4070.5	75721.	13170.
#3	4088.6	75179.	12871.

Sample Name: 140-31777-a-7-a SD@5 Acquired: 5/25/2023 16:58:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.03661	-.00069	.01735	.00245	-.00013
Stddev	.00044	.00728	.00145	.00020	.00010	.00001
%RSD	81.836	19.887	210.29	1.1602	4.0632	9.4483
#1	.00102	.03193	-.00215	.01728	.00248	-.00012
#2	.00015	.04500	.00075	.01720	.00252	-.00014
#3	.00045	.03290	-.00066	.01758	.00233	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54672	.00008	-.00004	.00063	.01185	.03615
Stddev	.00201	.00004	.00009	.00021	.00021	.00127
%RSD	.36736	56.744	255.47	33.858	1.7938	3.5054
#1	.54745	.00007	.00002	.00046	.01208	.03725
#2	.54827	.00004	-.00014	.00056	.01166	.03476
#3	.54445	.00013	.00002	.00087	.01182	.03642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a SD@5 Acquired: 5/25/2023 16:58:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07874	.00054	.11558	.22378	.00029	.63469
Stddev	.03190	.00116	.00865	.00115	.00008	.99836
%RSD	40.517	213.48	7.4815	.51546	26.485	157.30
#1	.06074	.00104	.12528	.22502	.00034	1.3404
#2	.11558	.00138	.10866	.22357	.00033	1.0712
#3	.05990	-.00078	.11281	.22274	.00020	-.50759
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23715	.00196	.10330	.00029	.00293	.00119
Stddev	.00570	.00024	.00161	.00195	.00089	.00070
%RSD	2.4028	12.450	1.5607	670.71	30.465	58.967
#1	.23096	.00171	.10515	-.00074	.00363	.00039
#2	.23832	.00195	.10229	-.00092	.00192	.00169
#3	.24217	.00220	.10244	.00254	.00324	.00150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-7-a SD@5 Acquired: 5/25/2023 16:58:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00288	-.04585	.03486	.00033	.00076	.00158
Stddev	.00196	.00449	.00088	.00003	.00059	.00293
%RSD	68.025	9.7952	2.5280	10.097	77.703	185.07
#1	.00113	-.04685	.03549	.00030	.00094	.00491
#2	.00499	-.04094	.03385	.00034	.00125	-.00062
#3	.00251	-.04975	.03524	.00036	.00010	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00051	.01084
Stddev	.00016	.00002
%RSD	31.093	.17120
#1	.00054	.01085
#2	.00066	.01082
#3	.00034	.01086
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-7-a SD@5 Acquired: 5/25/2023 16:58:55 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4069.6	74864.	12904.
Stddev	9.8	609.	132.
%RSD	.24068	.81319	1.0253
#1	4058.8	74299.	12838.
#2	4072.1	74784.	12818.
#3	4077.9	75508.	13057.

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 17:03:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09428	4.3256	.00894	.58721	.21891	.00000
Stddev	.00023	.0123	.00009	.00277	.00181	.00001
%RSD	.23997	.28360	.95158	.47211	.82842	301.81
#1	.09441	4.3169	.00903	.58508	.22087	-.00001
#2	.09441	4.3201	.00894	.59034	.21856	.00002
#3	.09402	4.3396	.00886	.58620	.21730	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	44.235	.07085	.03862	1.4586	1.1322	44.132
Stddev	.054	.00032	.00030	.0049	.0083	.052
%RSD	.12133	.44845	.77345	.33674	.72954	.11894
#1	44.268	.07122	.03882	1.4558	1.1412	44.166
#2	44.173	.07067	.03828	1.4643	1.1250	44.159
#3	44.264	.07067	.03877	1.4557	1.1302	44.072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 17:03:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.6257	.00799	11.405	5.9803	.17668	10.539
Stddev	.0377	.00034	.094	.0305	.00033	.650
%RSD	.66945	4.1969	.82439	.51042	.18850	6.1645
#1	5.5945	.00779	11.301	5.9454	.17704	10.976
#2	5.6151	.00838	11.431	6.0020	.17638	10.848
#3	5.6675	.00781	11.484	5.9934	.17662	9.7924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.8488	1.3748	.53712	6.5091	6.3864	.03130
Stddev	.0710	.0037	.00636	.0397	.0163	.00140
%RSD	.72055	.26899	1.1844	.60999	.25454	4.4783
#1	9.9292	1.3789	.54401	6.4727	6.4032	.02969
#2	9.8226	1.3738	.53586	6.5515	6.3851	.03197
#3	9.7947	1.3717	.53148	6.5032	6.3708	.03225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 17:03:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01361	8.2188	.42288	.07331	.16572	.00123
Stddev	.00090	.0340	.00131	.00041	.00219	.00154
%RSD	6.5796	.41332	.31025	.55558	1.3197	125.77
#1	.01289	8.1804	.42436	.07378	.16799	-.00022
#2	.01461	8.2449	.42238	.07310	.16363	.00105
#3	.01334	8.2312	.42189	.07306	.16554	.00285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.04202	F 25.518
Stddev	.00017	.060
%RSD	.39949	.23691
#1	.04212	25.567
#2	.04211	25.451
#3	.04182	25.537
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-6-a PDS Acquired: 5/25/2023 17:03:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3980.2	75445.	13012.
Stddev	53.5	1063.	193.
%RSD	1.3445	1.4093	1.4869
#1	3922.2	74456.	12789.
#2	3990.7	75310.	13127.
#3	4027.6	76570.	13121.

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 17:08:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09681	4.4816	.00807	.60753	.22617	-.00000
Stddev	.00054	.0396	.00057	.00286	.00116	.00001
%RSD	.55423	.88277	7.0563	.47121	.51378	210.98
#1	.09732	4.4475	.00742	.61058	.22667	.00001
#2	.09687	4.5250	.00834	.60712	.22700	-.00001
#3	.09625	4.4724	.00846	.60490	.22484	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.729	.07422	.04042	1.5173	1.1733	45.587
Stddev	.216	.00135	.00058	.0056	.0110	.100
%RSD	.47243	1.8196	1.4352	.36966	.93706	.22041
#1	45.480	.07338	.03998	1.5175	1.1805	45.471
#2	45.860	.07351	.04020	1.5227	1.1787	45.640
#3	45.848	.07578	.04108	1.5115	1.1606	45.650
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 17:08:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.7959	.00850	11.783	6.2019	.18569	10.604
Stddev	.0417	.00098	.101	.0508	.00244	.435
%RSD	.71926	11.582	.86039	.81969	1.3125	4.1014
#1	5.7544	.00757	11.669	6.2542	.18476	10.367
#2	5.7956	.00840	11.816	6.1986	.18386	11.105
#3	5.8378	.00953	11.864	6.1527	.18846	10.338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.141	1.4447	.56173	6.7654	6.7052	.03394
Stddev	.010	.0220	.00775	.0113	.1177	.00234
%RSD	.09496	1.5249	1.3795	.16707	1.7554	6.8936
#1	10.146	1.4275	.55764	6.7600	6.6138	.03326
#2	10.147	1.4372	.55688	6.7784	6.6637	.03201
#3	10.130	1.4695	.57066	6.7578	6.8380	.03654
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 17:08:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01567	8.4655	.44512	.07583	.17044	-.00127
Stddev	.00163	.0189	.00665	.00053	.00099	.00420
%RSD	10.405	.22297	1.4931	.70242	.57820	331.91
#1	.01554	8.4515	.43972	.07602	.17086	-.00108
#2	.01737	8.4581	.44310	.07624	.17114	.00284
#3	.01411	8.4870	.45254	.07523	.16931	-.00555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.04388	F 26.652
Stddev	.00023	.424
%RSD	.52800	1.5903
#1	.04407	26.436
#2	.04395	26.380
#3	.04362	27.141
Check ?	Chk Pass	Chk Fail
High Limit		10.000
Low Limit		-10.000

Sample Name: 140-31632-a-6-a PDSD Acquired: 5/25/2023 17:08:51 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: Pb 5PPM

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3853.9	73774.	12769.
Stddev	24.1	1506.	67.
%RSD	.62488	2.0407	.52137
#1	3850.5	72122.	12693.
#2	3879.6	74130.	12806.
#3	3831.8	75069.	12810.

Sample Name: CRI Acquired: 5/25/2023 17:13:51 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01007	.22524	.01009	.18104	.01016	.00522
Stddev	.00043	.00887	.00197	.00094	.00012	.00004
%RSD	4.2801	3.9384	19.559	.52015	1.1858	.67947
#1	.01057	.21995	.01032	.18044	.01006	.00518
#2	.00979	.23548	.01194	.18056	.01013	.00525
#3	.00986	.22028	.00801	.18213	.01029	.00523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3881	.00523	.04960	.00995	.02664	.10809
Stddev	.0171	.00011	.00008	.00078	.00004	.00152
%RSD	.31758	2.1946	.16338	7.7919	.15008	1.4065
#1	5.3737	.00535	.04969	.01021	.02662	.10636
#2	5.4070	.00522	.04954	.01056	.02669	.10924
#3	5.3836	.00512	.04956	.00908	.02661	.10867
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 17:13:51 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8798	.04706	5.1972	.01539	.03949	6.0732
Stddev	.0089	.00065	.0548	.00010	.00014	.6203
%RSD	.18153	1.3801	1.0538	.61970	.35017	10.214
#1	4.8710	.04636	5.1357	.01544	.03960	5.8171
#2	4.8798	.04719	5.2152	.01528	.03934	6.7806
#3	4.8887	.04764	5.2408	.01545	.03954	5.6220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.9953	.04148	.29559	.01049	.00961	.05650
Stddev	.0156	.00007	.00172	.00076	.00013	.00088
%RSD	.31257	.17610	.58347	7.2607	1.3178	1.5496
#1	4.9783	.04157	.29369	.00964	.00948	.05576
#2	5.0090	.04143	.29604	.01109	.00973	.05627
#3	4.9984	.04146	.29705	.01075	.00962	.05747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/25/2023 17:13:51 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01285	.26183	.09670	.04757	.04985	.01214
Stddev	.00111	.01148	.00059	.00013	.00085	.00113
%RSD	8.6583	4.3843	.60851	.27492	1.7112	9.2760
#1	.01354	.26160	.09730	.04744	.05080	.01101
#2	.01345	.25046	.09669	.04758	.04963	.01215
#3	.01157	.27342	.09612	.04770	.04913	.01327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02514	.02378
Stddev	.00037	.00034
%RSD	1.4887	1.4316
#1	.02538	.02416
#2	.02533	.02368
#3	.02471	.02350
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/25/2023 17:13:51 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4122.2	74761.	12736.
Stddev	9.0	107.	55.
%RSD	.21816	.14332	.42858
#1	4132.6	74806.	12798.
#2	4117.4	74838.	12714.
#3	4116.7	74639.	12695.

Sample Name: CCV Acquired: 5/25/2023 17:18:46 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0182	25.645	.51377	2.0274	2.0731	2.1534
Stddev	.0004	.124	.00092	.0035	.0030	.0232
%RSD	.04037	.48458	.17950	.17435	.14450	1.0753
#1	1.0181	25.601	.51385	2.0249	2.0754	2.1375
#2	1.0187	25.550	.51464	2.0258	2.0741	2.1428
#3	1.0179	25.786	.51281	2.0314	2.0697	2.1800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.804	.52926	2.0700	2.1404	1.9934	26.515
Stddev	.092	.00037	.0010	.0086	.0065	.060
%RSD	.16759	.07004	.05060	.40096	.32529	.22656
#1	54.863	.52896	2.0708	2.1311	1.9979	26.534
#2	54.851	.52967	2.0688	2.1420	1.9964	26.448
#3	54.699	.52915	2.0703	2.1480	1.9860	26.564
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/25/2023 17:18:46 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.354	1.9978	54.545	2.1222	2.1226	52.259
Stddev	.232	.0046	.132	.0041	.0043	.310
%RSD	.46080	.22817	.24130	.19384	.20126	.59372
#1	50.489	2.0030	54.514	2.1176	2.1275	52.506
#2	50.086	1.9954	54.431	2.1233	2.1207	52.360
#3	50.488	1.9949	54.689	2.1256	2.1197	51.911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.581	2.0909	2.0571	F .55620	.52636	.50813
Stddev	.086	.0029	.0043	.00240	.00387	.00283
%RSD	.16722	.13963	.20673	.43224	.73609	.55626
#1	51.679	2.0942	2.0582	.55747	.52730	.50637
#2	51.517	2.0886	2.0608	.55770	.52968	.51139
#3	51.548	2.0898	2.0525	.55342	.52210	.50663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				.50000		
Range				10.500%		

Sample Name: CCV Acquired: 5/25/2023 17:18:46 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53096	1.8166	2.0307	2.0215	2.1046	1.0461
Stddev	.00216	.0236	.0045	.0025	.0075	.0017
%RSD	.40611	1.3008	.22127	.12171	.35794	.16024
#1	.53135	1.8439	2.0267	2.0240	2.1089	1.0451
#2	.53289	1.8044	2.0299	2.0215	2.1090	1.0451
#3	.52863	1.8016	2.0356	2.0191	2.0959	1.0480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.1084	2.0658
Stddev	.0042	.0009
%RSD	.19764	.04406
#1	2.1036	2.0655
#2	2.1107	2.0650
#3	2.1110	2.0668
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/25/2023 17:18:46 Type: QC
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3952.2	73043.	12696.
Stddev	8.2	21.	62.
%RSD	.20738	.02887	.48996
#1	3943.2	73045.	12625.
#2	3954.1	73020.	12741.
#3	3959.2	73062.	12722.

Sample Name: CCB Acquired: 5/25/2023 17:23:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.02406	-.00005	-.01469	.00028	-.00008
Stddev	.00035	.01598	.00073	.00189	.00015	.00003
%RSD	97.473	66.431	1536.6	12.864	54.627	46.190
#1	.00050	.00710	-.00087	-.01317	.00044	-.00004
#2	-.00004	.03884	.00019	-.01410	.00027	-.00009
#3	.00060	.02624	.00053	-.01681	.00013	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01020	.00016	.00003	-.00036	.00166	.00196
Stddev	.00350	.00006	.00028	.00032	.00021	.00029
%RSD	34.300	37.223	816.25	89.041	12.760	14.767
#1	.01396	.00023	.00022	.00001	.00182	.00175
#2	.00704	.00012	.00017	-.00054	.00173	.00229
#3	.00960	.00014	-.00028	-.00056	.00142	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 17:23:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01775	.00012	.01614	.00015	-.00002	F 1.3664
Stddev	.03191	.00005	.01331	.00004	.00021	.6926
%RSD	179.75	41.909	82.479	27.956	1161.1	50.692
#1	-.02842	.00011	.03009	.00019	-.00004	.74399
#2	.01812	.00017	.00357	.00015	-.00022	1.2426
#3	-.04296	.00007	.01476	.00011	.00021	2.1126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	bP	Pb2203A	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00384	.00104	-.00081	.00021	.00017	-.00021
Stddev	.00142	.00008	.00073	.00181	.00047	.00070
%RSD	36.901	7.6718	89.920	858.12	270.91	330.68
#1	.00526	.00095	-.00117	-.00168	.00070	-.00079
#2	.00243	.00110	-.00127	.00192	.00004	-.00041
#3	.00383	.00106	.00003	.00039	-.00021	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/25/2023 17:23:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00132	F -.22340	-.00041	-.00012	-.00021	.00096
Stddev	.00048	.00431	.00047	.00006	.00043	.00071
%RSD	36.323	1.9293	114.87	48.075	207.22	74.093
#1	.00082	-.22351	-.00083	-.00008	-.00063	.00104
#2	.00134	-.22765	-.00048	-.00019	.00023	.00163
#3	.00178	-.21904	.00009	-.00010	-.00022	.00021
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00008	.00013
Stddev	.00028	.00012
%RSD	355.68	94.216
#1	.00019	.00027
#2	-.00024	.00006
#3	.00028	.00006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/25/2023 17:23:36 Type: Unk
Method: MT0007(v23) HF 042423(v6) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4079.0	74614.	12744.
Stddev	13.1	177.	71.
%RSD	.32194	.23712	.56048
#1	4066.4	74606.	12665.
#2	4078.1	74795.	12766.
#3	4092.6	74442.	12802.

Eurofins Knoxville ICP Batch Review Checklist – SOPs: KNOX-MT-0007r28, KNOX-MT-0008r10

Chart Name:	FOS2523	Analysis Batch #:	73629	Analyst:	KNC	Instrument:	DUO

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated per SOP?	Y	Y	
2. Was CCVL within limits? (90-110%R)	Y	Y	
3. ICV analyzed within limits? (90-110%R and <5.0% RSD)	Y	Y	
4. CCV analyzed at required frequency & within limits? (90 - 110%R and <5.0% RSD)	Y	Y	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM#_____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste ≤RL)	Y	Y	☒ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM#_____)
6. ICSA/ICSAB run before samples?	Y	Y	
7. ICSAB interferents and analytes within limits? (80 - 120%R)	Y	Y	
8. ICSA criteria for non-interfering elements met? (Water/Soil/Waste ±1x RL) (Air/SEP/PM10/JN ±2x RL if RL ≤10 µg/L; ±1x RL if RL >10 µg/L)	Y	Y	☐ **ICSA->2X MDL; Stock Impurities** (NCM#_____)
9. Reporting Limit Check Standard (CRI) within limits? (Water/Soil/Waste=70-130%R; Air/SEP/PM10/JN Waste=50-150%)	Y	Y	CRI 150% - TL ReAnalyzed 1523
10. 6010C samples bracketed by RL Check Standards?	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with target element concentrations > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments:
2. Were all hits reported from a run with interfering elements < LR?	Y	Y	
3. Elements with F, k or ^ flags reported from a dilution if necessary?	NA	NA	
4. Were sample results reported as ND with elevated RLs?	NA	NA	☐ **RL-Dilution, Matrix** (NCM# _____) ☐ **RL-Dilution, Interferents** (NCM# _____) ☐ **RL-Dilution, Matrix, Neg. Analyte** (NCM# _____)
5. Internal standard (IS) response ±30% of ICB IS? *If no, list details:*	Y	Y	☐ **ISTD – Matrix, DL Required** (NCM#_____) ☐ Low IS response. Reanalyzed.
6. Report flag turned to No for Mg-SEP Step1 and Na-Steps 2 & 5?	NA	NA	
7. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Zn <RL; Air/SEP/PM10/JN Waste <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM#_____) ☐ **Method Blank – Report, 10X** (NCM#_____) ☐ **Method Blank–Insufficient Sample** (NCM#_____) ☐ See narrative-common analyte in SEP leachate.
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCSD –Insufficient Sample** (NCM#_____) ☐ **LCS/LCSD - %R High** (NCM#_____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	Y	Y	☐ **MS/MSD/DUP-Insufficient Volume** (NCM#_____)
4. MS/MSD %R and RPD within QC limits?	Y	Y	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM#_____)
5. DUP RPD within limits?	N	N	☒ **DUP - %RPD** (NCM# 45923
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R) 74x Spike Added	N	N	☒ **Post Digestion Spike - %R** (NCM# 45924 ☐ **MS/MSD; High Bias; PDS Acceptable** (NCM#_____)
7. Serial dilution per prep batch & ≤ 10% D for analytes >50X MDL?	Y	Y	☐ **Serial Dilution - %D** (NCM#_____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: KNC 5-25-23	2nd Level Review by: CLG 5-26-23

Calculation: Mn at 1327

$$0.04018\ mg/L \times 0.050\ L \times \frac{9}{2} \times \frac{1}{772}\ m^3 \times 1000\ \mu g/mg = 0.0117\ \mu g/m^3$$

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-73514/5-a			
10	10	1	10	1	QC	lcs 140-73514/6-a			
11	11	1	11	1	QC	lcsd 140-73514/7-a			
12	12	1	12	1	Unk	mb 140-73444/14-a			
13	13	1	1	2	QC	lcs 140-73444/15-a			
14	14	1	2	2	QC	lcsd 140-73444/16-a			
15	15	1	3	2	Unk	140-31669-a-3-a			
16	16	1	4	2	Unk	140-31669-a-10-a			
17	17	1	5	2	Unk	140-31669-a-10-a PDS			
18	18	1	6	2	Unk	31669-a-10-a SD@5	2ML TO 10ML		
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	Unk	31669-a-10-a PDSD			
22	22	1	10	2	Unk	140-31669-a-17-a			
23	23	1	11	2	Unk	140-31669-a-23-a			
24	24	1	12	2	Unk	140-31774-a-1-a			
25	25	1	1	3	Unk	140-31774-a-6-a			
26	26	1	2	3	Unk	140-31774-a-11-a			
27	27	1	3	3	Unk	140-31774-a-16-a			
28	28	1	4	3	Unk	140-31774-a-17-a			
29	29	1	5	3	Unk	140-31774-a-22-a			
30	30	1	6	3	Unk	140-31774-a-27-a			
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-31774-a-27-a PDS			
34	34	1	10	3	Unk	31774-a-27-a PDSD			
35	35	1	11	3	Unk	140-31774-a-32-a			
36	36	1	12	3	Unk	140-31777-a-1-a			
37	37	1	1	4	Unk	140-31777-a-6-a			
38	38	1	2	4	Unk	140-31777-a-6-a PDS			
39	39	1	3	4	Unk	140-31777-a-6-a PDSD			
40	40	1	4	4	Unk	140-31777-a-11-a			
41	41	1	5	4	Unk	140-31777-a-16-a			
42	42	1	6	4	Unk	140-31777-a-6-a SD@5	2ML TO 10ML		
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB			
45	45	1	9	4	Unk	140-31777-a-17-a			
46	46	1	10	4	QC	CRI			
47	47	1	11	4	QC	CCV			
48	48	1	12	4	Unk	CCB			
49	49	1	1	5	Unk	140-31669-a-3-a @3	4ml to 12ml		
50	50	1	2	5	Unk	140-31669-a-10-a @3	(A)		
51	51	1	3	5	Unk	31669-a-10-a PDS@3			
52	52	1	4	5	Unk	31669-a-10-a PDSD@3			
53	53	1	5	5	Unk	140-31669-a-17-a @3			
54	54	1	6	5	Unk	140-31774-a-1-a @2	5ml to 10ml		
55	55	1	7	5	Unk	140-31774-a-6-a @2			
56	56	1	8	5	Unk	140-31774-a-11-a @2			
57	57	1	9	5	Unk	140-31774-a-17-a @2			

MC 5-26-23

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	31669-a-10-a SD@15	2mL (A) to 10mL		
59	59	1	11	5	QC	CCV			
60	60	1	12	5	Unk	CCB			
61	61	2	1	1	Unk	140-31774-a-32-a @2	5mL to 10mL		
62	62	2	2	1	Unk	140-31777-a-1-a @2			
63	63	2	3	1	Unk	140-31777-a-6-a @2	(B)	WC 5-26-23	
64	64	2	4	1	Unk	31777-a-6-a PDS@2			
65	65	2	5	1	Unk	31777-a-6-a PDSD@2			
66	66	2	6	1	Unk	140-31777-a-11-a @2			
67	67	2	7	1	Unk	140-31777-a-16-a @2			
68	68	2	8	1	Unk	31777-a-6-a SD@10	2mL (B) to 10mL		
69	69	2	9	1	QC	CRI			
70	70	2	10	1	QC	CCV			
71	71	2	11	1	Unk	CCB			
72	72	2	12	1	Unk	Sample-68			
73	73	2	1	2	Unk	Sample-69			
74	74	2	2	2	Unk	Sample-70			
75	75	2	3	2	Unk	Sample-48			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA	Adj. Pb – Rev		
5	5	1	5	1	Unk	ICSAB	Pb – Rev		
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-73514/5-a			
10	10	1	10	1	QC	lcs 140-73514/6-a			
11	11	1	11	1	QC	lcsd 140-73514/7-a			
12	12	1	12	1	Unk	mb 140-73444/14-a			
13	13	1	1	2	QC	lcs 140-73444/15-a			
14	14	1	2	2	QC	lcsd 140-73444/16-a			
15	15	1	3	2	Unk 1	140-31669-a-3-a	S:↑e3 –	As,Co,Ni,Pb,Se –	45991
16	16	1	4	2	Unk 2	140-31669-a-10-a	S:↑e3		
17	17	1	5	2	Unk 3	140-31669-a-10-a PDS	e3		
18	18	1	6	2	Unk 10	31669-a-10-a SD@5	2ML TO 10ML e15		
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	Unk 4	31669-a-10-a PDSD	e3		
22	22	1	10	2	Unk 5	140-31669-a-17-a	S:↑e3		
23	23	1	11	2	Unk	140-31669-a-23-a ✓			
24	24	1	12	2	Unk 6	140-31774-a-1-a	S:↑e2 –	As,Pb – 45992	
25	25	1	1	3	Unk 7	140-31774-a-6-a	S:↑e2		
26	26	1	2	3	Unk 8	140-31774-a-11-a	S:↑e2		
27	27	1	3	3	Unk	140-31774-a-16-a ✓			
28	28	1	4	3	Unk 9	140-31774-a-17-a	S:↑e2		
29	29	1	5	3	Unk	140-31774-a-22-a ✓			
30	30	1	6	3	Unk	140-31774-a-27-a ✓			
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-31774-a-27-a PDS ✓			
34	34	1	10	3	Unk	31774-a-27-a PDSD ✓			
35	35	1	11	3	Unk 11	140-31774-a-32-a	S:↑e2		
36	36	1	12	3	Unk 12	140-31777-a-1-a	S:↑e2 –	As,Co,Ni,Pb,Se,Tl –	45992
37	37	1	1	4	Unk 13	140-31777-a-6-a	S:↑e2		
38	38	1	2	4	Unk 14	140-31777-a-6-a PDS	e2		
39	39	1	3	4	Unk 15	140-31777-a-6-a PDSD	e2		
40	40	1	4	4	Unk 16	140-31777-a-11-a	S:↑e2		
41	41	1	5	4	Unk 17	140-31777-a-16-a	S:↑e2	Computer Error	
42	42	1	6	4	Unk 18	140-31777-a-6-a SD@5	2ML TO 10ML e10	1228–1245	
43	43	1	7	4	QC	CCV			
44	44	1	8	4	Unk	CCB			
45	45	1	9	4	Unk	140-31777-a-17-a ✓			
46	46	1	10	4	QC	CRI			
47	47	1	11	4	QC	CCV			
48	48	1	12	4	Unk	CCB			
49	49	1	1	5	Unk	Sample-45	41186	2930–5442	
50	50	1	2	5	Unk	Sample-46	76487	53541–99433	
51	51	1	3	5	Unk	Sample-47	13330	9331–17329	
52	52	1	4	5	Unk	Sample-48			

F052623

SL-293 CRI-1166

CCVL-1136 CCV-1163

ICV-238 Y-163

±CSA(Si)-75 H2O-55

ICSAB-119

669 = As, Be, Cd, Co, Cr, Mn, Ni, Pb, Sb, Se [Ag, Ba, Cu, Ⓟ, Tl, Zn]

774 = As, Be, Cd, Cr, Pb

777 = Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V, Zn [Ⓟ]

5/31/2023
10:32 AM

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73514 Analyst: Collins, Kerry N Batch Open: 5/23/2023 11:30:00AM

Batch End: 5/24/2023 5:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31669-A-3 (29_6010C)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-3-A
1	140-31669-A-3 (29_7470A)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-3-A
2	140-31669-A-10 (29_6010C)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-10-A
2	140-31669-A-10 (29_7470A)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-10-A
3	140-31669-A-17 (29_6010C)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-17-A
3	140-31669-A-17 (29_7470A)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-17-A
4	140-31669-A-23 (29_6010C)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-23-A
4	140-31669-A-23 (29_7470A)	N/A (140-31669-1)	Air Train Frc	1 Sample	100 mL	5/26/23	15_Days	4		140-31669-A-23-A
5	MB~140-73514/5 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-73514/5-A
6	LCS~140-73514/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-73514/6-A
7	LCSD~140-73514/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-73514/7-A

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73444 Analyst: Collins, Kerry N Batch Open: 5/22/2023 8:00:00AM

Batch End: 5/24/2023 4:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31774-A-1 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-1-A
1	140-31774-A-1 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-1-A
2	140-31774-A-6 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-6-A
2	140-31774-A-6 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-6-A
3	140-31774-A-11 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-11-A
3	140-31774-A-11 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-11-A
4	140-31774-A-16 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-16-A
4	140-31774-A-16 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-16-A
5	140-31774-A-17 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-17-A
5	140-31774-A-17 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-17-A
6	140-31774-A-22 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-22-A
6	140-31774-A-22 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-22-A
	140-31774-A-27 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4		140-31774-A-27-A

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73444 Analyst: Collins, Kerry N Batch Open: 5/22/2023 8:00:00AM

Batch End: 5/24/2023 4:00:00PM

7	140-31774-A-27 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4	
8	140-31774-A-32 (29_6010C)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4	
8	140-31774-A-32 (29_7470A)	N/A (140-31774-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Day_Rush	4	
9	140-31777-A-1 (29_6010C)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
9	140-31777-A-1 (29_7470A)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
10	140-31777-A-6 (29_6010C)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
10	140-31777-A-6 (29_7470A)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
11	140-31777-A-11 (29_6010C)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
11	140-31777-A-11 (29_7470A)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
12	140-31777-A-16 (29_6010C)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
12	140-31777-A-16 (29_7470A)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
13	140-31777-A-17 (29_6010C)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
13	140-31777-A-17 (29_7470A)	N/A (140-31777-1)	Air Train Fro	1 Sample	100 mL	5/26/23	8_Days	4	
14	MB~140-73444/14 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	
	LCS~140-73444/15 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	

Page 549 of 877

5/31/2023 10:32 AM

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73444 Analyst: Collins, Kerry N Batch Open: 5/22/2023 8:00:00AM

Batch End: 5/24/2023 4:00:00PM

16	LCSD~140-73444/16 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	

Sample Name: ICIS Acquired: 5/26/2023 8:44:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00059	.00059	-.00422	.00103	.00966	.00120
Stddev	.00000	.00006	.00018	.00004	.00028	.00005
%RSD	.17768	10.668	4.3504	3.8600	2.9081	4.2847
#1	-.00059	.00066	-.00401	.00108	.00964	.00122
#2	-.00058	.00055	-.00428	.00100	.00995	.00124
#3	-.00059	.00056	-.00436	.00103	.00939	.00114

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00915	-.00348	-.00512	.00019	.00493	.00136
Stddev	.00014	.00022	.00003	.00004	.00005	.00002
%RSD	1.5523	6.3346	.57767	18.722	.96374	1.6357
#1	.00910	-.00338	-.00514	.00023	.00495	.00134
#2	.00904	-.00374	-.00508	.00016	.00488	.00138
#3	.00931	-.00334	-.00512	.00019	.00496	.00135

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00080	-.00218	-.00011	.00039	.00230	.00110
Stddev	.00056	.00061	.00013	.00002	.00012	.00010
%RSD	69.625	28.148	115.80	4.1102	5.0261	8.7102
#1	.00119	-.00164	-.00023	.00040	.00242	.00112
#2	.00104	-.00285	.00003	.00037	.00229	.00119
#3	.00016	-.00205	-.00014	.00040	.00219	.00100

Sample Name: ICIS Acquired: 5/26/2023 8:44:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00396	-.00149	.00045	-.00003	.00244	.00524
Stddev	.00083	.00055	.00011	.00003	.00006	.00012
%RSD	21.022	36.986	24.231	107.59	2.2834	2.3781
#1	.00306	-.00174	.00053	-.00006	.00239	.00511
#2	.00413	-.00188	.00033	-.00002	.00244	.00525
#3	.00470	-.00086	.00050	-.00000	.00250	.00536

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00245	.00037	.00203	-.00346	.00043	-.00217
Stddev	.00007	.00002	.00003	.00047	.00018	.00013
%RSD	2.8040	6.3497	1.4468	13.437	42.423	5.9759
#1	.00241	.00036	.00200	-.00298	.00022	-.00222
#2	.00241	.00035	.00202	-.00391	.00051	-.00203
#3	.00253	.00039	.00206	-.00349	.00055	-.00228

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.00005	.02157
Stddev	.00005	.00048
%RSD	97.415	2.2145
#1	.00010	.02212
#2	.00000	.02136
#3	.00005	.02124

Sample Name: ICIS Acquired: 5/26/2023 8:44:39 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4220.7	76935.	13374.
Stddev	12.5	332.	68.
%RSD	.29699	.43208	.50801
#1	4226.7	77286.	13318.
#2	4206.3	76625.	13354.
#3	4229.1	76893.	13449.

Sample Name: S1 Acquired: 5/26/2023 8:49:37 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.24609	1.0416	.14495	.33165	19.737	20.979
Stddev	.00029	.0070	.00071	.00116	.164	.044
%RSD	.11694	.67174	.48887	.34883	.83292	.20791
#1	.24588	1.0339	.14576	.33075	19.916	20.958
#2	.24642	1.0475	.14444	.33296	19.705	21.029
#3	.24598	1.0436	.14466	.33126	19.592	20.951

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	21.321	3.3148	7.0048	.45700	1.0882	4.4812
Stddev	.419	.0089	.0213	.00072	.0002	.0206
%RSD	1.9652	.26977	.30374	.15768	.02002	.45944
#1	21.803	3.3248	7.0251	.45699	1.0880	4.4587
#2	21.115	3.3118	7.0066	.45772	1.0882	4.4991
#3	21.045	3.3077	6.9826	.45628	1.0884	4.4858

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.8195	5.3165	1.7792	2.9666	3.1935	.05375
Stddev	.0161	.0296	.0069	.0092	.0034	.00033
%RSD	.42224	.55583	.38808	.31159	.10758	.61421
#1	3.8010	5.2825	1.7756	2.9638	3.1974	.05382
#2	3.8303	5.3308	1.7872	2.9770	3.1916	.05404
#3	3.8273	5.3361	1.7749	2.9591	3.1913	.05339

Sample Name: S1 Acquired: 5/26/2023 8:49:37 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	19.989	5.7545	.33049	.01237	.30662	.15471
Stddev	.285	.0175	.00089	.00012	.00109	.00040
%RSD	1.4279	.30356	.26995	.96630	.35503	.25727
#1	20.274	5.7720	.33127	.01233	.30764	.15482
#2	19.703	5.7545	.33069	.01250	.30547	.15505
#3	19.988	5.7370	.32952	.01227	.30676	.15427

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.10315	.07498	1.3754	22.514	1.3778	.14872
Stddev	.00024	.00020	.0072	.064	.0078	.00018
%RSD	.23279	.27089	.52146	.28381	.56685	.12206
#1	.10314	.07521	1.3813	22.574	1.3693	.14890
#2	.10291	.07494	1.3775	22.521	1.3846	.14873
#3	.10339	.07481	1.3674	22.447	1.3795	.14854

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.82721	12.197
Stddev	.00097	.034
%RSD	.11775	.27963
#1	.82647	12.230
#2	.82832	12.198
#3	.82686	12.162

Sample Name: S1 Acquired: 5/26/2023 8:49:37 Type: Cal
Method: MT0007(v23) HF AIR 042423(v3) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3927.6	73445.	12911.
Stddev	7.6	134.	64.
%RSD	.19371	.18203	.49249
#1	3920.8	73573.	12845.
#2	3926.3	73307.	12916.
#3	3935.8	73455.	12972.

Sample Name: CCVL Acquired: 5/26/2023 8:54:50 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48700	12.320	.24547	.98915	.98221	1.0442
Stddev	.00140	.041	.00112	.00522	.00264	.0052
%RSD	.28656	.33031	.45505	.52804	.26828	.49339
#1	.48712	12.340	.24675	.98316	.97946	1.0406
#2	.48833	12.273	.24499	.99276	.98472	1.0501
#3	.48555	12.347	.24467	.99153	.98245	1.0419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.850	.25251	.99624	1.0170	.97014	12.618
Stddev	.166	.00037	.00215	.0027	.00222	.042
%RSD	.66738	.14788	.21560	.26189	.22916	.33451
#1	24.911	.25289	.99861	1.0142	.96846	12.661
#2	24.662	.25215	.99443	1.0194	.97266	12.577
#3	24.976	.25249	.99568	1.0175	.96929	12.617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/26/2023 8:54:50 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.507	.98839	24.473	1.0129	.99944	24.246
Stddev	.087	.00219	.274	.0011	.00213	.188
%RSD	.35549	.22183	1.1209	.11017	.21355	.77469
#1	24.582	.98860	24.700	1.0129	1.0017	24.067
#2	24.528	.99046	24.168	1.0141	.99748	24.229
#3	24.412	.98609	24.551	1.0118	.99912	24.441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.200	1.0055	.97773	.25780	.24860	.24236
Stddev	.045	.0019	.00220	.00346	.00115	.00227
%RSD	.18427	.19134	.22487	1.3419	.46063	.93617
#1	24.205	1.0077	.97595	.25399	.24820	.24170
#2	24.242	1.0044	.98018	.25869	.24771	.24489
#3	24.154	1.0043	.97705	.26073	.24989	.24050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 5/26/2023 8:54:50 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24463	.98705	.99691	1.0016	.99786	.50229
Stddev	.00075	.01087	.00290	.0033	.00140	.00384
%RSD	.30748	1.1009	.29084	.33104	.14069	.76489
#1	.24380	.99412	1.0002	.99906	.99836	.50643
#2	.24484	.97454	.99557	1.0053	.99895	.50160
#3	.24526	.99249	.99492	1.0003	.99628	.49884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.0006	1.0031
Stddev	.0034	.0024
%RSD	.33529	.24000
#1	.99710	1.0058
#2	1.0010	1.0024
#3	1.0038	1.0012
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCVL Acquired: 5/26/2023 8:54:50 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4117.8	75289.	13294.
Stddev	16.3	265.	175.
%RSD	.39545	.35138	1.3152
#1	4099.1	75448.	13100.
#2	4128.6	74983.	13440.
#3	4125.8	75435.	13342.

Sample Name: ICV Acquired: 5/26/2023 8:59:40 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48745	11.979	.25098	.99814	.97788	1.0223
Stddev	.00119	.090	.00176	.00470	.00149	.0053
%RSD	.24436	.74729	.70178	.47111	.15195	.52085
#1	.48815	11.877	.24915	.99364	.97727	1.0266
#2	.48607	12.015	.25266	1.0030	.97958	1.0238
#3	.48811	12.044	.25112	.99774	.97680	1.0163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.342	.24961	.97732	1.0061	.95738	12.217
Stddev	.162	.00074	.00101	.0015	.00345	.095
%RSD	.66685	.29679	.10380	.15085	.36070	.77394
#1	24.200	.24919	.97650	1.0054	.95549	12.109
#2	24.307	.24918	.97700	1.0051	.95528	12.258
#3	24.519	.25047	.97846	1.0078	.96136	12.285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/26/2023 8:59:40 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.737	.97316	23.728	.99697	.96456	23.282
Stddev	.093	.00167	.266	.00316	.00089	.841
%RSD	.39019	.17199	1.1190	.31692	.09224	3.6117
#1	23.631	.97194	23.463	.99558	.96470	24.232
#2	23.776	.97507	23.727	1.0006	.96361	22.634
#3	23.803	.97248	23.994	.99474	.96537	22.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.597	.99577	.97091	.24871	.24620	.23728
Stddev	.077	.00141	.00537	.00232	.00107	.00078
%RSD	.32617	.14154	.55356	.93482	.43279	.33056
#1	23.521	.99554	.96518	.24658	.24606	.23640
#2	23.675	.99449	.97170	.24836	.24522	.23751
#3	23.596	.99728	.97584	.25119	.24733	.23791
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 5/26/2023 8:59:40 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24632	.95861	.96734	.98698	.97997	.51944
Stddev	.00294	.02200	.00184	.00250	.00453	.00272
%RSD	1.1932	2.2952	.19056	.25289	.46208	.52402
#1	.24382	.93351	.96529	.98605	.97475	.52137
#2	.24559	.96775	.96789	.98980	.98285	.52062
#3	.24956	.97456	.96885	.98508	.98230	.51632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.98334	.99241
Stddev	.00285	.00028
%RSD	.28962	.02823
#1	.98006	.99216
#2	.98485	.99235
#3	.98512	.99271
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: ICV Acquired: 5/26/2023 8:59:40 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4147.9	76103.	13502.
Stddev	6.5	213.	126.
%RSD	.15687	.27980	.93551
#1	4144.2	76066.	13613.
#2	4155.4	75911.	13528.
#3	4144.0	76332.	13365.

Sample Name: ICB Acquired: 5/26/2023 9:04:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	-.00863	-.00070	.00186	.00003	-.00003
Stddev	.00012	.01782	.00077	.00041	.00009	.00002
%RSD	48.612	206.48	109.86	21.954	311.85	80.409
#1	.00035	.00611	-.00097	.00233	.00012	-.00000
#2	.00026	-.00357	.00017	.00168	-.00001	-.00004
#3	.00012	-.02843	-.00129	.00157	-.00003	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00414	.00003	-.00000	-.00029	.00027	.00234
Stddev	.00066	.00004	.00027	.00025	.00014	.00024
%RSD	15.913	118.07	27236.	86.196	50.459	10.393
#1	.00460	-.00001	-.00005	-.00006	.00036	.00243
#2	.00338	.00006	.00029	-.00056	.00011	.00207
#3	.00443	.00005	-.00024	-.00026	.00033	.00253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/26/2023 9:04:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02229	.00007	.00739	.00011	-.00005	F -1.0411
Stddev	.00789	.00015	.00450	.00003	.00004	.6610
%RSD	35.415	207.85	60.827	31.444	70.599	63.492
#1	-.03109	-.00006	.00248	.00014	-.00003	-.27979
#2	-.01584	.00004	.00841	.00007	-.00003	-1.3743
#3	-.01993	.00023	.01130	.00012	-.00010	-1.4691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00179	.00022	.00092	-.00121	-.00057	-.00172
Stddev	.00229	.00008	.00150	.00055	.00071	.00229
%RSD	127.93	35.137	162.45	45.853	125.64	132.62
#1	.00372	.00023	-.00053	-.00057	.00011	-.00155
#2	-.00074	.00014	.00083	-.00148	-.00049	-.00409
#3	.00238	.00030	.00246	-.00157	-.00132	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 5/26/2023 9:04:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00135	.00137	-.00007	.00011	-.00011	.00273
Stddev	.00103	.01215	.00029	.00007	.00132	.00318
%RSD	76.328	889.58	422.92	59.456	1175.5	116.52
#1	-.00020	-.00305	-.00040	.00019	-.00091	.00640
#2	-.00219	-.00795	.00013	.00009	.00141	.00082
#3	-.00167	.01510	.00006	.00006	-.00083	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00015	-.00011
Stddev	.00012	.00003
%RSD	79.553	22.854
#1	-.00022	-.00008
#2	-.00023	-.00013
#3	-.00001	-.00013
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICB Acquired: 5/26/2023 9:04:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4185.8	76487.	13330.
Stddev	4.4	262.	64.
%RSD	.10456	.34276	.48357
#1	4187.1	76233.	13286.
#2	4181.0	76756.	13301.
#3	4189.4	76471.	13404.

Sample Name: ICSA Acquired: 5/26/2023 9:09:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00144	483.07	.01027	-.00403	.00237	-.00045
Stddev	.00028	1.17	.00071	.00086	.00004	.00001
%RSD	19.189	.24263	6.9123	21.246	1.7336	2.9486
#1	-.00175	481.96	.01109	-.00334	.00233	-.00045
#2	-.00122	484.30	.00978	-.00377	.00237	-.00047
#3	-.00135	482.95	.00996	-.00499	.00242	-.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	450.19	.00300	-.00997	.00698	.00073	180.07
Stddev	1.07	.00012	.00012	.00051	.00023	.36
%RSD	.23807	4.1000	1.2245	7.3076	30.850	.19842
#1	448.95	.00294	-.00984	.00754	.00097	180.02
#2	450.71	.00291	-.01008	.00654	.00052	179.75
#3	450.89	.00314	-.01001	.00686	.00070	180.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 5/26/2023 9:09:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07103	.00980	487.12	.00051	-.00118	-.78546
Stddev	.02712	.00051	1.37	.00005	.00038	.33278
%RSD	38.178	5.2555	.28177	9.8894	31.843	42.368
#1	-.05386	.01004	485.54	.00050	-.00075	-.88046
#2	-.05693	.01014	487.83	.00046	-.00146	-.41551
#3	-.10229	.00921	488.00	.00056	-.00133	-1.0604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05468	-.01563	-.02110	F -.01634	F .03574	.01629
Stddev	.00108	.00019	.00130	.00368	.00227	.00094
%RSD	1.9831	1.1912	6.1554	22.533	6.3466	5.7834
#1	.05496	-.01576	-.02259	-.01692	.03771	.01521
#2	.05348	-.01542	-.02017	-.01240	.03624	.01697
#3	.05560	-.01572	-.02055	-.01969	.03326	.01669
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit				.01500	.01500	
Low Limit				-.01500	-.01500	

Sample Name: ICSA Acquired: 5/26/2023 9:09:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00341	F 786.72	.00055	.00458	.01107	-.00425
Stddev	.00267	3.17	.00022	.00007	.00058	.00155
%RSD	78.403	.40326	39.225	1.6010	5.2305	36.405
#1	.00630	783.08	.00034	.00461	.01165	-.00393
#2	.00101	788.22	.00053	.00463	.01050	-.00289
#3	.00292	788.87	.00077	.00449	.01107	-.00594
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1204.9				
Low Limit		795.10				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00579	.00825
Stddev	.00019	.00007
%RSD	3.2609	.90346
#1	.00601	.00826
#2	.00566	.00818
#3	.00571	.00832
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSA Acquired: 5/26/2023 9:09:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3914.9	72021.	13235.
Stddev	4.6	42.	38.
%RSD	.11677	.05768	.28385
#1	3910.5	71995.	13251.
#2	3919.6	72069.	13262.
#3	3914.6	72000.	13192.

Sample Name: ICSAB Acquired: 5/26/2023 9:14:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20083	242.68	.09706	.95111	.48769	.50317
Stddev	.00047	.53	.00043	.00591	.00069	.00258
%RSD	.23187	.21972	.44542	.62128	.14241	.51192
#1	.20038	242.08	.09675	.94439	.48769	.50122
#2	.20131	243.09	.09688	.95551	.48699	.50609
#3	.20081	242.87	.09755	.95343	.48838	.50219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	238.99	.94693	.47545	.47760	.50677	93.583
Stddev	.49	.00077	.00024	.00159	.00127	.181
%RSD	.20710	.08134	.05023	.33313	.25107	.19383
#1	238.63	.94622	.47540	.47768	.50745	93.394
#2	238.79	.94775	.47571	.47915	.50530	93.756
#3	239.55	.94681	.47524	.47598	.50755	93.598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/26/2023 9:14:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.6705	.99267	243.68	.48709	.96419	9.0776
Stddev	.0692	.00328	.48	.00241	.00194	.4036
%RSD	.71554	.33066	.19867	.49437	.20108	4.4461
#1	9.5957	.98896	243.12	.48496	.96231	9.5110
#2	9.6836	.99385	243.97	.48970	.96619	8.7125
#3	9.7323	.99520	243.94	.48660	.96408	9.0092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.7047	.94562	.94971	F .03873	.05032	.58769
Stddev	.0352	.00100	.00278	.00137	.00212	.00101
%RSD	.36219	.10603	.29280	3.5271	4.2155	.17108
#1	9.6761	.94549	.94720	.03988	.05046	.58699
#2	9.6940	.94668	.95270	.03722	.04814	.58884
#3	9.7439	.94469	.94923	.03909	.05237	.58725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.06025		
Low Limit				.03976		

Sample Name: ICSAB Acquired: 5/26/2023 9:14:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04514	F 1.6517	.93615	.97716	.96393	.09340
Stddev	.00295	.1514	.00173	.00232	.00349	.00071
%RSD	6.5309	9.1673	.18524	.23776	.36206	.76272
#1	.04678	1.8142	.93812	.97546	.95997	.09326
#2	.04174	1.6264	.93545	.97622	.96530	.09418
#3	.04691	1.5146	.93487	.97981	.96653	.09277
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1.2049				
Low Limit		.79510				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.49037	.98875
Stddev	.00111	.00063
%RSD	.22554	.06399
#1	.48910	.98900
#2	.49116	.98923
#3	.49084	.98804
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSAB Acquired: 5/26/2023 9:14:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3990.0	73919.	13125.
Stddev	6.7	481.	34.
%RSD	.16714	.65016	.25973
#1	3982.3	74160.	13156.
#2	3994.5	73365.	13088.
#3	3993.1	74231.	13130.

Sample Name: ICSA Acquired: 5/26/2023 9:22:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00112	476.06	.00932	-.00562	.00234	-.00048
Stddev	.00034	2.45	.00111	.00157	.00003	.00001
%RSD	30.440	.51430	11.887	27.865	1.3913	2.5419
#1	-.00081	478.83	.00812	-.00382	.00236	-.00047
#2	-.00149	475.13	.01030	-.00640	.00231	-.00049
#3	-.00106	474.21	.00956	-.00665	.00236	-.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	447.17	.00317	-.00977	.00625	.00105	177.34
Stddev	.24	.00016	.00004	.00080	.00022	.86
%RSD	.05410	4.9192	.42946	12.744	20.716	.48648
#1	447.44	.00301	-.00975	.00575	.00120	178.33
#2	446.98	.00332	-.00981	.00583	.00080	176.97
#3	447.08	.00319	-.00973	.00717	.00114	176.73
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 5/26/2023 9:22:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.07111	.00926	480.97	.00054	-.00086	-.60895
Stddev	.00790	.00064	2.74	.00011	.00037	.61601
%RSD	11.110	6.9079	.57057	20.141	43.019	101.16
#1	-.08023	.00862	483.90	.00050	-.00065	-.37762
#2	-.06628	.00926	480.55	.00067	-.00128	-1.3071
#3	-.06683	.00990	478.46	.00046	-.00063	-.14210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05892	-.01569	-.02145	-.00984	F .03661	.01267
Stddev	.00028	.00038	.00199	.00344	.00234	.00306
%RSD	.47058	2.4446	9.2972	34.989	6.3975	24.158
#1	.05868	-.01526	-.02165	-.00923	.03559	.01045
#2	.05886	-.01600	-.02334	-.00674	.03495	.01617
#3	.05922	-.01581	-.01937	-.01354	.03929	.01141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					.01500	
Low Limit					-.01500	

Sample Name: ICSA Acquired: 5/26/2023 9:22:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00373	F 776.91	-.00156	.00453	.01119	-.00815
Stddev	.00064	3.51	.00146	.00008	.00041	.00207
%RSD	17.223	.45229	93.905	1.7347	3.6788	25.436
#1	.00370	780.74	-.00014	.00447	.01160	-.00948
#2	.00439	776.18	-.00306	.00450	.01078	-.00922
#3	.00310	773.83	-.00147	.00462	.01119	-.00576
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1204.9				
Low Limit		795.10				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00561	.00838
Stddev	.00033	.00018
%RSD	5.8853	2.1280
#1	.00524	.00820
#2	.00573	.00855
#3	.00587	.00841
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSA Acquired: 5/26/2023 9:22:17 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3929.1	72323.	13326.
Stddev	6.5	217.	90.
%RSD	.16440	.29955	.67742
#1	3921.6	72258.	13239.
#2	3933.4	72565.	13320.
#3	3932.2	72146.	13419.

Sample Name: ICSAB Acquired: 5/26/2023 9:27:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20061	240.36	.09922	.94886	.48931	.50092
Stddev	.00064	1.11	.00012	.00274	.00081	.00035
%RSD	.32129	.46285	.12173	.28919	.16469	.07071
#1	.20013	239.23	.09920	.94570	.48886	.50051
#2	.20134	241.45	.09934	.95026	.49024	.50115
#3	.20036	240.38	.09910	.95062	.48883	.50110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	234.99	.94765	.47449	.47715	.50752	92.605
Stddev	2.96	.00065	.00063	.00129	.00178	.311
%RSD	1.2580	.06865	.13239	.27036	.35128	.33578
#1	232.06	.94715	.47425	.47642	.50549	92.257
#2	234.94	.94741	.47402	.47639	.50828	92.855
#3	237.97	.94839	.47521	.47864	.50880	92.704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/26/2023 9:27:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.6690	.99238	242.12	.48533	.96671	8.5897
Stddev	.0265	.00388	1.31	.00068	.00113	.3711
%RSD	.27451	.39122	.54258	.13984	.11686	4.3205
#1	9.6936	.98960	240.61	.48468	.96666	8.2652
#2	9.6724	.99681	242.76	.48527	.96786	8.9944
#3	9.6409	.99072	243.00	.48603	.96560	8.5097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.7208	.94492	.94570	.04629	.04834	.58531
Stddev	.0306	.00098	.00398	.00462	.00185	.00025
%RSD	.31497	.10341	.42033	9.9837	3.8271	.04332
#1	9.7225	.94469	.94464	.04672	.05027	.58511
#2	9.7506	.94407	.94236	.05068	.04659	.58523
#3	9.6894	.94599	.95010	.04147	.04815	.58560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 5/26/2023 9:27:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04635	F 1.9066	.93075	.97642	.95477	.09166
Stddev	.00208	.2047	.00106	.00157	.00298	.00505
%RSD	4.4897	10.739	.11390	.16069	.31219	5.5067
#1	.04875	2.1268	.92956	.97616	.95241	.09639
#2	.04528	1.8710	.93109	.97810	.95812	.08635
#3	.04504	1.7220	.93159	.97500	.95379	.09224
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1.2049				
Low Limit		.79510				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.49117	.98460
Stddev	.00022	.00112
%RSD	.04477	.11410
#1	.49134	.98349
#2	.49092	.98456
#3	.49124	.98574
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSAB Acquired: 5/26/2023 9:27:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3995.9	74180.	13235.
Stddev	5.0	252.	50.
%RSD	.12481	.33923	.38027
#1	4000.4	74470.	13271.
#2	3996.9	74026.	13256.
#3	3990.6	74043.	13178.

Sample Name: CRI Acquired: 5/26/2023 9:32:14 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00997	.19691	.00984	.19410	.00958	.00507
Stddev	.00044	.01125	.00126	.00203	.00001	.00002
%RSD	4.4302	5.7131	12.761	1.0459	.05921	.40405
#1	.01024	.18580	.00935	.19494	.00958	.00506
#2	.01022	.19665	.00890	.19179	.00958	.00506
#3	.00946	.20830	.01127	.19558	.00959	.00510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0695	.00503	.04910	.00946	.02588	.10035
Stddev	.0137	.00003	.00015	.00023	.00016	.00136
%RSD	.26997	.67451	.30318	2.4393	.60989	1.3525
#1	5.0538	.00500	.04907	.00971	.02582	.10060
#2	5.0790	.00507	.04896	.00940	.02577	.10157
#3	5.0758	.00503	.04926	.00926	.02606	.09889
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 9:32:14 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.7964	.04860	4.7799	.01464	.03896	4.9775
Stddev	.0333	.00006	.0328	.00016	.00028	.1831
%RSD	.69374	.11982	.68680	1.1024	.70587	3.6786
#1	4.7642	.04854	4.7567	.01446	.03896	4.8690
#2	4.7944	.04866	4.7656	.01470	.03869	5.1889
#3	4.8306	.04859	4.8175	.01477	.03924	4.8746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.8592	.04033	.29153	.00927	.00876	.05648
Stddev	.0227	.00016	.00084	.00091	.00167	.00205
%RSD	.46688	.40316	.28803	9.7845	19.029	3.6333
#1	4.8391	.04051	.29180	.00969	.00737	.05684
#2	4.8547	.04021	.29219	.00823	.00829	.05832
#3	4.8838	.04026	.29058	.00989	.01061	.05427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 9:32:14 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00849	F .85937	.09632	.04911	.04777	.00975
Stddev	.00042	.04053	.00088	.00009	.00018	.00246
%RSD	5.0027	4.7158	.91222	.18811	.36819	25.286
#1	.00824	.90228	.09708	.04900	.04772	.00696
#2	.00898	.85408	.09652	.04913	.04797	.01164
#3	.00825	.82174	.09536	.04918	.04763	.01064
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02456	.02119
Stddev	.00038	.00005
%RSD	1.5393	.23654
#1	.02420	.02113
#2	.02453	.02123
#3	.02496	.02121
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/26/2023 9:32:14 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4150.8	75682.	13108.
Stddev	3.8	307.	50.
%RSD	.09076	.40542	.38521
#1	4154.4	75845.	13166.
#2	4146.9	75328.	13080.
#3	4151.1	75872.	13078.

Sample Name: CCV Acquired: 5/26/2023 9:37:08 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98589	24.591	.49360	1.9688	1.9950	2.0432
Stddev	.00280	.046	.00275	.0100	.0014	.0056
%RSD	.28357	.18613	.55719	.50634	.06872	.27167
#1	.98305	24.644	.49672	1.9577	1.9944	2.0378
#2	.98600	24.564	.49253	1.9769	1.9965	2.0489
#3	.98863	24.567	.49154	1.9717	1.9940	2.0430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.326	.50418	1.9931	2.0217	1.9644	24.876
Stddev	.185	.00066	.0008	.0105	.0022	.025
%RSD	.36798	.13179	.04165	.51907	.11359	.10176
#1	50.173	.50469	1.9927	2.0098	1.9670	24.905
#2	50.532	.50343	1.9926	2.0296	1.9631	24.860
#3	50.274	.50442	1.9941	2.0258	1.9632	24.863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 9:37:08 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.127	2.0062	49.451	2.0132	2.0311	49.483
Stddev	.137	.0054	.072	.0093	.0021	.818
%RSD	.27851	.27076	.14645	.46000	.10375	1.6529
#1	49.284	2.0104	49.367	2.0035	2.0330	49.256
#2	49.030	2.0001	49.491	2.0220	2.0288	50.391
#3	49.068	2.0082	49.494	2.0141	2.0316	48.803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.322	2.0076	1.9599	.50697	.49948	.48934
Stddev	.158	.0018	.0052	.00613	.00072	.00102
%RSD	.31987	.08990	.26340	1.2085	.14509	.20832
#1	49.503	2.0071	1.9655	.50070	.49923	.48817
#2	49.214	2.0060	1.9553	.50726	.49892	.48990
#3	49.249	2.0095	1.9588	.51295	.50030	.48996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 9:37:08 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49754	2.1721	1.9616	2.0151	1.9806	.99741
Stddev	.00289	.0083	.0053	.0019	.0074	.00513
%RSD	.58087	.38360	.27112	.09510	.37320	.51443
#1	.50054	2.1811	1.9649	2.0172	1.9887	1.0026
#2	.49478	2.1647	1.9554	2.0142	1.9742	.99230
#3	.49730	2.1705	1.9644	2.0137	1.9789	.99737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0126	1.9938
Stddev	.0060	.0024
%RSD	.30080	.11906
#1	2.0062	1.9958
#2	2.0183	1.9912
#3	2.0133	1.9945
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 9:37:08 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4043.6	74554.	13087.
Stddev	2.6	355.	48.
%RSD	.06550	.47568	.36470
#1	4045.6	74921.	13108.
#2	4040.6	74213.	13032.
#3	4044.6	74528.	13120.

Sample Name: CCB Acquired: 5/26/2023 9:41:57 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	-.00874	.00074	-.00014	-.00003	-.00008
Stddev	.00022	.00390	.00006	.00087	.00020	.00002
%RSD	34.334	44.616	8.3019	631.06	677.45	25.922
#1	.00078	-.01163	.00068	.00086	.00020	-.00007
#2	.00039	-.00431	.00073	-.00064	-.00018	-.00011
#3	.00075	-.01029	.00080	-.00063	-.00011	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00626	-.00001	-.00010	-.00011	.00099	.00176
Stddev	.00200	.00005	.00010	.00040	.00020	.00122
%RSD	31.997	393.70	102.59	364.69	20.570	69.223
#1	.00736	-.00004	-.00015	.00012	.00094	.00214
#2	.00395	-.00003	-.00015	.00013	.00081	.00274
#3	.00748	.00004	.00002	-.00057	.00121	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/26/2023 9:41:57 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05867	-.00013	.01422	.00009	.00001	-.15115
Stddev	.01771	.00040	.00067	.00003	.00015	.43999
%RSD	30.178	302.82	4.7073	33.110	2003.8	291.10
#1	-.04329	-.00044	.01499	.00007	.00018	.21394
#2	-.05469	.00032	.01389	.00012	-.00006	-.02771
#3	-.07803	-.00028	.01378	.00007	-.00010	-.63968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.00045	.00149	-.00071	.00011	-.00011
Stddev	.00211	.00012	.00129	.00410	.00126	.00074
%RSD	1363.1	25.873	86.263	579.86	1185.8	673.54
#1	-.00187	.00058	.00133	-.00132	-.00075	-.00061
#2	.00220	.00038	.00030	-.00447	.00156	-.00046
#3	-.00078	.00038	.00286	.00366	-.00049	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 5/26/2023 9:41:57 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00051	F .16238	-.00018	.00009	-.00089	.00203
Stddev	.00118	.01259	.00009	.00011	.00067	.00169
%RSD	229.04	7.7510	51.772	127.94	75.130	83.248
#1	-.00061	.16814	-.00007	.00000	-.00013	.00322
#2	.00071	.17106	-.00021	.00022	-.00138	.00010
#3	-.00164	.14795	-.00025	.00005	-.00117	.00278
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00017	-.00018
Stddev	.00008	.00003
%RSD	48.412	15.018
#1	-.00009	-.00017
#2	-.00016	-.00021
#3	-.00025	-.00016
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 9:41:57 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4165.1	76016.	13248.
Stddev	4.7	471.	55.
%RSD	.11175	.61970	.41307
#1	4167.8	75794.	13311.
#2	4167.8	76557.	13222.
#3	4159.7	75697.	13210.

Sample Name: mb 140-73514/5-a Acquired: 5/26/2023 9:46:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00020	-.00329	.00478	F 129.01	.00094	-.00013
Stddev	.00037	.00353	.00130	.63	.00009	.00001
%RSD	180.61	107.44	27.183	.48962	9.2747	6.5985
#1	-.00056	.00013	.00332	128.52	.00103	-.00012
#2	-.00022	-.00692	.00582	128.80	.00086	-.00013
#3	.00017	-.00307	.00518	129.73	.00093	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.20000		
Low Limit				-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04562	-.00009	-.00031	-.00054	.00337	.00095
Stddev	.00138	.00003	.00003	.00018	.00028	.00144
%RSD	3.0202	33.828	9.3024	32.801	8.2805	150.76
#1	.04403	-.00006	-.00029	-.00046	.00349	.00201
#2	.04628	-.00009	-.00031	-.00074	.00357	-.00068
#3	.04653	-.00012	-.00034	-.00041	.00305	.00153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73514/5-a Acquired: 5/26/2023 9:46:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03066	-.00038	.02710	.00023	.00037	-.79170
Stddev	.04764	.00088	.00635	.00005	.00011	.03446
%RSD	155.40	228.47	23.428	21.229	29.598	4.3530
#1	.07631	-.00104	.01997	.00017	.00050	-.77534
#2	.03441	-.00073	.02919	.00026	.00029	-.76846
#3	-.01875	.00062	.03214	.00025	.00034	-.83129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02853	.00030	-.00124	-.00681	-.00118	-.00116
Stddev	.00205	.00009	.00086	.00128	.00097	.00109
%RSD	7.1856	31.263	69.089	18.738	82.133	94.473
#1	.02640	.00027	-.00098	-.00682	-.00074	.00005
#2	.02870	.00022	-.00055	-.00553	-.00230	-.00207
#3	.03049	.00040	-.00220	-.00809	-.00051	-.00145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73514/5-a Acquired: 5/26/2023 9:46:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00300	F 10.483	.00033	.00026	-.00006	.00324
Stddev	.00049	2.833	.00016	.00009	.00096	.00157
%RSD	16.425	27.020	48.783	32.659	1650.0	48.384
#1	-.00245	7.5434	.00021	.00029	-.00088	.00184
#2	-.00313	13.195	.00027	.00017	.00100	.00294
#3	-.00341	10.711	.00052	.00033	-.00029	.00493
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00021	.00211
Stddev	.00027	.00007
%RSD	128.89	3.5269
#1	-.00008	.00205
#2	.00025	.00219
#3	.00045	.00208
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73514/5-a Acquired: 5/26/2023 9:46:56 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4144.9	76171.	13482.
Stddev	7.0	154.	28.
%RSD	.16873	.20211	.21066
#1	4141.4	76260.	13457.
#2	4140.3	76259.	13513.
#3	4152.9	75993.	13476.

Sample Name: lcs 140-73514/6-a Acquired: 5/26/2023 9:52:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04866	1.9151	.10626	F 132.23	.10422	.04979
Stddev	.00064	.0110	.00032	.95	.00019	.00008
%RSD	1.3200	.57194	.29797	.72192	.18485	.16772
#1	.04876	1.9025	.10656	131.35	.10433	.04982
#2	.04797	1.9205	.10593	133.25	.10434	.04986
#3	.04924	1.9223	.10630	132.09	.10400	.04970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.407	.05004	.10067	.20241	.24792	1.0462
Stddev	.154	.00003	.00010	.00066	.00010	.0083
%RSD	.30487	.05493	.10267	.32799	.04053	.79308
#1	50.320	.05003	.10055	.20305	.24804	1.0384
#2	50.584	.05002	.10074	.20246	.24787	1.0549
#3	50.316	.05007	.10071	.20173	.24785	1.0452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73514/6-a Acquired: 5/26/2023 9:52:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.733	.10108	9.5756	.09938	.49905	49.894
Stddev	.093	.00091	.0881	.00035	.00104	.664
%RSD	.19106	.90214	.91953	.35144	.20929	1.3302
#1	48.639	.10088	9.4774	.09946	.49964	49.153
#2	48.825	.10207	9.6475	.09968	.49784	50.434
#3	48.734	.10028	9.6018	.09899	.49967	50.096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.041	.50639	4.9932	.09751	.09564	.50046
Stddev	.109	.00059	.0083	.00265	.00149	.00240
%RSD	.22316	.11557	.16660	2.7148	1.5559	.47887
#1	49.098	.50704	4.9911	.09456	.09703	.49772
#2	49.110	.50589	5.0023	.09967	.09581	.50152
#3	48.915	.50625	4.9861	.09831	.09407	.50214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73514/6-a Acquired: 5/26/2023 9:52:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14552	F 10.965	.48525	.49918	.10011	.39825
Stddev	.00182	.067	.00023	.00037	.00048	.00116
%RSD	1.2498	.61253	.04674	.07318	.48385	.29010
#1	.14363	10.974	.48523	.49899	.09980	.39920
#2	.14568	11.028	.48548	.49960	.10067	.39858
#3	.14726	10.894	.48503	.49895	.09987	.39696
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19989	.51435
Stddev	.00025	.00058
%RSD	.12590	.11260
#1	.20013	.51500
#2	.19992	.51390
#3	.19963	.51414
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73514/6-a Acquired: 5/26/2023 9:52:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4084.1	75521.	13324.
Stddev	10.2	475.	45.
%RSD	.24980	.62957	.34061
#1	4074.1	75588.	13367.
#2	4083.7	75015.	13276.
#3	4094.5	75959.	13329.

Sample Name: lcsd 140-73514/7-a Acquired: 5/26/2023 9:56:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04893	1.8985	.10734	F 131.96	.10375	.04979
Stddev	.00030	.0162	.00052	1.25	.00020	.00025
%RSD	.60898	.85455	.48744	.94426	.19196	.49593
#1	.04879	1.8801	.10793	131.37	.10352	.04950
#2	.04927	1.9047	.10714	131.12	.10391	.04989
#3	.04873	1.9108	.10694	133.39	.10381	.04996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.025	.05022	.10119	.20244	.24938	.98896
Stddev	.049	.00005	.00023	.00137	.00104	.00296
%RSD	.09786	.09428	.22919	.67527	.41627	.29929
#1	50.080	.05022	.10139	.20151	.25040	.98914
#2	49.987	.05017	.10094	.20180	.24833	.99183
#3	50.008	.05027	.10125	.20401	.24941	.98592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73514/7-a Acquired: 5/26/2023 9:56:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.293	.10126	9.6085	.09906	.50163	50.857
Stddev	.158	.00029	.0173	.00059	.00124	.495
%RSD	.31957	.28427	.17973	.59996	.24669	.97402
#1	49.171	.10156	9.6042	.09856	.50227	50.771
#2	49.471	.10099	9.5939	.09891	.50020	51.390
#3	49.237	.10123	9.6276	.09972	.50242	50.411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.134	.50830	5.0230	.09855	.09662	.50543
Stddev	.118	.00049	.0101	.00509	.00062	.00128
%RSD	.23944	.09587	.20078	5.1598	.63669	.25393
#1	49.107	.50884	5.0338	.09731	.09700	.50691
#2	49.264	.50792	5.0138	.10415	.09694	.50470
#3	49.033	.50812	5.0215	.09421	.09591	.50469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73514/7-a Acquired: 5/26/2023 9:56:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14498	F 7.0254	.48698	.49837	.10070	.39842
Stddev	.00150	.0365	.00120	.00123	.00137	.00167
%RSD	1.0344	.51881	.24641	.24699	1.3599	.41919
#1	.14669	7.0639	.48836	.49751	.09929	.40034
#2	.14391	7.0208	.48633	.49978	.10077	.39751
#3	.14433	6.9915	.48625	.49781	.10203	.39740
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20025	.51642
Stddev	.00111	.00069
%RSD	.55385	.13421
#1	.20001	.51697
#2	.19928	.51564
#3	.20146	.51665
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-73514/7-a Acquired: 5/26/2023 9:56:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4060.6	75325.	13371.
Stddev	9.9	417.	98.
%RSD	.24307	.55313	.72925
#1	4052.3	75491.	13268.
#2	4071.5	75633.	13462.
#3	4058.1	74851.	13383.

Sample Name: mb 140-73444/14-a Acquired: 5/26/2023 10:01:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00041	F .28044	.00457	F 129.64	.00029	-.00016
Stddev	.00042	.46959	.00149	1.27	.00009	.00001
%RSD	102.25	167.45	32.549	.97615	31.589	3.5670
#1	.00002	.82267	.00567	130.45	.00040	-.00016
#2	-.00043	.00686	.00515	128.18	.00027	-.00015
#3	-.00083	.01179	.00288	130.29	.00021	-.00016
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.20000		.20000		
Low Limit		-.20000		-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04630	-.00003	-.00006	-.00103	.00245	.00526
Stddev	.01549	.00006	.00010	.00024	.00022	.00503
%RSD	33.455	167.94	178.19	23.007	8.9103	95.651
#1	.06418	-.00000	-.00011	-.00080	.00252	.01076
#2	.03742	-.00010	-.00011	-.00127	.00220	.00088
#3	.03729	-.00000	.00006	-.00102	.00262	.00414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73444/14-a Acquired: 5/26/2023 10:01:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04479	.00130	.09671	.00024	.00047	-.16497
Stddev	.03868	.00311	.13350	.00010	.00022	.11351
%RSD	86.364	239.14	138.04	40.699	46.634	68.806
#1	.07376	.00488	.25060	.00033	.00028	-.20078
#2	.05975	-.00024	.01190	.00014	.00071	-.03788
#3	.00086	-.00074	.02764	.00026	.00042	-.25626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07701	.00076	-.00054	-.00173	-.00233	-.00125
Stddev	.08178	.00008	.00062	.00227	.00088	.00054
%RSD	106.20	10.815	114.99	130.86	37.926	43.422
#1	.17140	.00085	-.00123	-.00130	-.00211	-.00172
#2	.02761	.00070	-.00001	-.00419	-.00158	-.00136
#3	.03200	.00073	-.00039	.00029	-.00330	-.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-73444/14-a Acquired: 5/26/2023 10:01:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00463	.34279	.00014	.00033	.00019	.00174
Stddev	.00045	.00905	.00055	.00013	.00114	.00193
%RSD	9.7115	2.6411	401.89	37.553	592.46	110.97
#1	-.00464	.35011	-.00012	.00048	.00144	.00390
#2	-.00417	.33267	.00076	.00026	-.00010	.00015
#3	-.00507	.34560	-.00023	.00026	-.00077	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00012	.00070
Stddev	.00028	.00006
%RSD	234.96	9.2168
#1	-.00013	.00070
#2	.00043	.00076
#3	.00007	.00064
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-73444/14-a Acquired: 5/26/2023 10:01:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4154.0	76271.	13501.
Stddev	16.7	350.	204.
%RSD	.40234	.45847	1.5077
#1	4169.3	76178.	13628.
#2	4136.2	76658.	13608.
#3	4156.6	75978.	13266.

Sample Name: lcs 140-73444/15-a Acquired: 5/26/2023 10:06:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04956	1.9086	.10632	F 132.07	.10210	.04981
Stddev	.00052	.0144	.00251	.20	.00062	.00029
%RSD	1.0578	.75581	2.3569	.15326	.60606	.57897
#1	.04954	1.8985	.10809	132.02	.10172	.04952
#2	.04904	1.9021	.10741	132.29	.10281	.05010
#3	.05009	1.9251	.10345	131.89	.10176	.04981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.092	.05054	.10165	.20342	.24980	.99713
Stddev	.219	.00024	.00035	.00162	.00044	.00149
%RSD	.43701	.47952	.33995	.79865	.17686	.14906
#1	50.174	.05080	.10188	.20205	.24960	.99727
#2	50.258	.05050	.10181	.20521	.25030	.99558
#3	49.844	.05032	.10125	.20298	.24949	.99854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73444/15-a Acquired: 5/26/2023 10:06:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.191	.10232	9.6051	.09929	.49989	50.417
Stddev	.098	.00036	.0662	.00047	.00227	.412
%RSD	.20313	.34814	.68909	.46926	.45329	.81690
#1	48.083	.10192	9.6577	.09880	.49999	50.201
#2	48.217	.10260	9.6269	.09973	.50211	50.892
#3	48.274	.10243	9.5308	.09932	.49758	50.157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.699	.51056	4.9944	.09997	.09579	.49852
Stddev	.107	.00176	.0144	.00352	.00153	.00275
%RSD	.21939	.34404	.28768	3.5225	1.5979	.55166
#1	48.582	.51104	5.0047	.10120	.09699	.49936
#2	48.722	.51202	5.0005	.09600	.09631	.50076
#3	48.792	.50861	4.9780	.10271	.09406	.49545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-73444/15-a Acquired: 5/26/2023 10:06:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14551	4.9519	.48405	.49986	.10101	.40156
Stddev	.00246	.0213	.00162	.00162	.00105	.00124
%RSD	1.6917	.42963	.33526	.32394	1.0367	.30916
#1	.14834	4.9274	.48402	.49808	.09989	.40042
#2	.14385	4.9631	.48569	.50124	.10117	.40288
#3	.14433	4.9653	.48244	.50027	.10197	.40138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20105	.51543
Stddev	.00055	.00163
%RSD	.27593	.31655
#1	.20087	.51581
#2	.20167	.51684
#3	.20061	.51364
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-73444/15-a Acquired: 5/26/2023 10:06:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4035.3	74728.	13085.
Stddev	8.0	333.	121.
%RSD	.19926	.44557	.92778
#1	4032.1	75025.	12946.
#2	4029.3	74368.	13143.
#3	4044.4	74791.	13168.

Sample Name: lcsd 140-73444/16-a Acquired: 5/26/2023 10:11:46 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04828	1.8737	.10434	F 129.98	.10104	.04879
Stddev	.00037	.0033	.00068	.83	.00022	.00016
%RSD	.77261	.17757	.64993	.63718	.21587	.32271
#1	.04795	1.8738	.10401	130.74	.10123	.04897
#2	.04819	1.8770	.10389	129.10	.10109	.04868
#3	.04868	1.8703	.10512	130.11	.10080	.04872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.477	.04949	.09939	.20082	.24553	.98231
Stddev	.100	.00029	.00021	.00149	.00024	.00179
%RSD	.20163	.58244	.21334	.74126	.09573	.18268
#1	49.371	.04982	.09948	.20145	.24545	.98406
#2	49.569	.04935	.09915	.19912	.24535	.98239
#3	49.492	.04931	.09955	.20189	.24580	.98047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73444/16-a Acquired: 5/26/2023 10:11:46 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.391	.10052	9.4328	.09701	.49215	50.019
Stddev	.331	.00117	.0102	.00044	.00222	.320
%RSD	.69934	1.1619	.10790	.45613	.45023	.63938
#1	47.719	.10133	9.4240	.09713	.49444	49.835
#2	47.398	.10105	9.4303	.09652	.49200	50.388
#3	47.056	.09918	9.4439	.09738	.49002	49.833
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.002	.49941	4.9131	.09935	.09495	.49115
Stddev	.380	.00114	.0072	.00480	.00099	.00311
%RSD	.79174	.22756	.14704	4.8279	1.0451	.63363
#1	48.405	.50065	4.9207	.09766	.09576	.49432
#2	47.950	.49919	4.9124	.09563	.09384	.49105
#3	47.650	.49841	4.9063	.10476	.09525	.48810
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-73444/16-a Acquired: 5/26/2023 10:11:46 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14073	4.9275	.47302	.48939	.09951	.39188
Stddev	.00065	.0163	.00191	.00321	.00015	.00290
%RSD	.45974	.33123	.40467	.65537	.15040	.74043
#1	.14015	4.9461	.47520	.49243	.09959	.39351
#2	.14061	4.9154	.47225	.48971	.09961	.38853
#3	.14143	4.9211	.47160	.48604	.09934	.39359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19828	.50390
Stddev	.00036	.00190
%RSD	.18287	.37700
#1	.19789	.50609
#2	.19834	.50270
#3	.19861	.50291
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-73444/16-a Acquired: 5/26/2023 10:11:46 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4110.0	75788.	13299.
Stddev	14.6	488.	26.
%RSD	.35623	.64404	.19661
#1	4093.2	75484.	13284.
#2	4120.1	76351.	13284.
#3	4116.7	75528.	13329.

Sample Name: 140-31669-a-3-a Acquired: 5/26/2023 10:16:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05193	1.3103	.01679	F 112.22	.03068	-.00007
Stddev	.00030	.0159	.00231	.75	.00014	.00002
%RSD	.58348	1.2176	13.783	.67018	.44863	30.586
#1	.05159	1.2951	.01412	111.54	.03052	-.00009
#2	.05217	1.3089	.01804	113.03	.03078	-.00005
#3	.05203	1.3269	.01820	112.10	.03073	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8213	.00057	-.01854	.08243	.03038	.79731
Stddev	.0169	.00007	.00022	.00021	.00026	.00940
%RSD	.92964	11.776	1.1806	.25314	.86382	1.1792
#1	1.8018	.00057	-.01869	.08237	.03069	.78650
#2	1.8315	.00051	-.01829	.08226	.03027	.80189
#3	1.8306	.00064	-.01864	.08266	.03020	.80355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-3-a Acquired: 5/26/2023 10:16:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.22648	.00011	.29657	.02434	.14822	1.6436
Stddev	.00665	.00042	.00735	.00014	.00014	.1846
%RSD	2.9366	389.85	2.4796	.56255	.09443	11.230
#1	.22666	.00023	.28851	.02419	.14836	1.4709
#2	.21973	.00046	.30291	.02445	.14822	1.8381
#3	.23303	-.00036	.29830	.02438	.14808	1.6219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9220	.08840	.00059	.03973	.11069	.02378
Stddev	.0156	.00019	.00212	.00495	.00143	.00066
%RSD	.81177	.21269	361.49	12.459	1.2910	2.7822
#1	1.9119	.08822	-.00070	.04543	.11111	.02307
#2	1.9140	.08859	.00303	.03734	.10910	.02388
#3	1.9399	.08838	-.00057	.03643	.11186	.02438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-3-a Acquired: 5/26/2023 10:16:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02419	F 1700.7	.04838	.00524	.07033	-.01147
Stddev	.00164	28.8	.00071	.00007	.00079	.00052
%RSD	6.7708	1.6909	1.4586	1.3597	1.1206	4.5434
#1	.02283	1670.0	.04918	.00527	.06973	-.01088
#2	.02601	1727.0	.04788	.00516	.07004	-.01187
#3	.02372	1705.0	.04806	.00528	.07122	-.01167
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00217	.06137
Stddev	.00028	.00010
%RSD	13.079	.16837
#1	.00245	.06125
#2	.00219	.06145
#3	.00188	.06140
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-3-a Acquired: 5/26/2023 10:16:37 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4190.8	76536.	13391.
Stddev	20.8	518.	117.
%RSD	.49540	.67704	.87269
#1	4168.7	76182.	13516.
#2	4193.6	76294.	13284.
#3	4209.9	77130.	13373.

Sample Name: 140-31669-a-10-a Acquired: 5/26/2023 10:21:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00162	1.1876	.01678	F 110.43	.02145	-.00009
Stddev	.00035	.0057	.00120	.37	.00014	.00001
%RSD	21.711	.48241	7.1440	.33523	.66929	16.134
#1	.00141	1.1828	.01730	110.68	.02128	-.00007
#2	.00202	1.1861	.01541	110.61	.02156	-.00010
#3	.00142	1.1939	.01763	110.00	.02150	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1733	.00071	-.01936	.03294	.02367	.40094
Stddev	.0060	.00009	.00026	.00079	.00007	.00178
%RSD	.51496	12.101	1.3340	2.4008	.27528	.44431
#1	1.1666	.00062	-.01965	.03249	.02367	.39907
#2	1.1783	.00079	-.01916	.03385	.02361	.40112
#3	1.1751	.00072	-.01926	.03248	.02374	.40262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a Acquired: 5/26/2023 10:21:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20920	.00051	.25457	.01535	.14105	1.6326
Stddev	.01437	.00051	.00776	.00007	.00053	.4597
%RSD	6.8706	99.662	3.0472	.44065	.37559	28.160
#1	.22571	.00080	.24637	.01527	.14057	1.1018
#2	.19955	.00082	.26179	.01540	.14162	1.9037
#3	.20232	-.00008	.25553	.01537	.14096	1.8922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8767	.05464	-.02376	.03301	.10333	.02027
Stddev	.0041	.00041	.00359	.00238	.00337	.00168
%RSD	.21654	.75531	15.128	7.1951	3.2634	8.2803
#1	1.8743	.05416	-.02229	.03030	.10601	.01834
#2	1.8745	.05483	-.02786	.03475	.10443	.02100
#3	1.8814	.05492	-.02113	.03398	.09954	.02145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a Acquired: 5/26/2023 10:21:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02287	F 1666.9	.04477	.00434	.03421	-.01100
Stddev	.00321	23.7	.00069	.00016	.00011	.00053
%RSD	14.024	1.4224	1.5444	3.7045	.32166	4.8349
#1	.02142	1642.2	.04440	.00446	.03409	-.01150
#2	.02064	1669.1	.04433	.00441	.03422	-.01105
#3	.02654	1689.5	.04557	.00416	.03431	-.01045
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00199	.04695
Stddev	.00010	.00003
%RSD	4.9299	.05350
#1	.00208	.04693
#2	.00189	.04695
#3	.00201	.04698
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-10-a Acquired: 5/26/2023 10:21:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4274.2	78136.	13721.
Stddev	8.2	233.	78.
%RSD	.19273	.29790	.57118
#1	4265.4	77877.	13748.
#2	4281.7	78204.	13782.
#3	4275.4	78327.	13632.

Sample Name: 140-31669-a-10-a PDS Acquired: 5/26/2023 10:26:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04743	2.8876	.10272	F 108.68	.11780	.04529
Stddev	.00176	.0586	.00310	.38	.00258	.00150
%RSD	3.7096	2.0298	3.0220	.35305	2.1892	3.3124
#1	.04564	2.8318	.09927	108.38	.11522	.04374
#2	.04751	2.8824	.10529	109.11	.11780	.04541
#3	.04915	2.9486	.10360	108.55	.12037	.04673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.976	.04567	.07350	.22506	.26769	1.3107
Stddev	.517	.00119	.00230	.00606	.00658	.0268
%RSD	1.0547	2.6148	3.1331	2.6944	2.4594	2.0439
#1	48.398	.04431	.07085	.21841	.26026	1.2864
#2	49.138	.04617	.07456	.22648	.27002	1.3062
#3	49.392	.04654	.07507	.23029	.27279	1.3394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a PDS Acquired: 5/26/2023 10:26:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	45.246	.09514	9.0706	.10744	.60487	49.270
Stddev	.536	.00229	.1418	.00300	.01515	.533
%RSD	1.1855	2.4082	1.5633	2.7967	2.5040	1.0821
#1	44.743	.09282	8.9082	.10423	.58858	49.065
#2	45.185	.09518	9.1337	.10790	.60752	49.875
#3	45.810	.09740	9.1699	.11019	.61852	48.869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.597	.50946	4.3840	.11231	.18421	.45504
Stddev	.414	.01122	.1286	.00805	.00583	.01359
%RSD	.87086	2.2019	2.9336	7.1701	3.1658	2.9860
#1	47.208	.49692	4.2415	.10337	.18133	.43988
#2	47.549	.51294	4.4194	.11455	.18038	.45912
#3	48.033	.51853	4.4913	.11900	.19092	.46612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a PDS Acquired: 5/26/2023 10:26:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14184	F 1631.9	.46342	.47972	.12807	.32944
Stddev	.00263	7.9	.01257	.01313	.00372	.00697
%RSD	1.8535	.48168	2.7128	2.7369	2.9043	2.1151
#1	.13881	1633.8	.44925	.46711	.12448	.32181
#2	.14346	1638.7	.46780	.47875	.12781	.33546
#3	.14325	1623.3	.47323	.49331	.13191	.33106
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19232	.49759
Stddev	.00568	.01152
%RSD	2.9531	2.3145
#1	.18609	.48472
#2	.19366	.50111
#3	.19721	.50694
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-10-a PDS Acquired: 5/26/2023 10:26:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4222.4	77693.	13678.
Stddev	11.4	153.	112.
%RSD	.26958	.19696	.81878
#1	4209.5	77570.	13607.
#2	4227.1	77864.	13620.
#3	4230.8	77644.	13807.

Sample Name: 31669-a-10-a SD@5 Acquired: 5/26/2023 10:31:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00122	.25177	.00521	25.709	.00431	-.00013
Stddev	.00020	.02252	.00058	.046	.00009	.00001
%RSD	16.497	8.9455	11.168	.17878	1.9875	10.412
#1	.00108	.26510	.00532	25.664	.00427	-.00014
#2	.00145	.26445	.00573	25.708	.00440	-.00014
#3	.00112	.22577	.00458	25.756	.00424	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25586	.00027	-.00401	.00643	.00550	.08385
Stddev	.00193	.00010	.00010	.00035	.00011	.00090
%RSD	.75571	38.819	2.5631	5.4063	2.0017	1.0691
#1	.25710	.00020	-.00406	.00682	.00550	.08373
#2	.25684	.00039	-.00409	.00614	.00539	.08302
#3	.25363	.00021	-.00390	.00634	.00561	.08480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a SD@5 Acquired: 5/26/2023 10:31:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09911	-.00026	.06521	.00323	.02950	.11416
Stddev	.00447	.00039	.00860	.00005	.00004	.53739
%RSD	4.5055	149.79	13.185	1.4093	.14126	470.75
#1	.10059	.00016	.05607	.00318	.02953	-.06996
#2	.09410	-.00061	.07314	.00325	.02945	.71940
#3	.10265	-.00034	.06640	.00327	.02951	-.30697
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40147	.01294	-.00598	.00607	.01935	.00267
Stddev	.00181	.00029	.00095	.00163	.00215	.00167
%RSD	.45012	2.2529	15.828	26.875	11.122	62.362
#1	.40186	.01327	-.00520	.00759	.01929	.00231
#2	.40305	.01271	-.00703	.00628	.02154	.00449
#3	.39950	.01285	-.00570	.00434	.01723	.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a SD@5 Acquired: 5/26/2023 10:31:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00477	369.26	.00976	.00100	.00671	.00099
Stddev	.00096	.74	.00087	.00003	.00013	.00404
%RSD	20.087	.19933	8.8866	3.3510	1.8638	408.05
#1	.00373	368.46	.01074	.00096	.00682	-.00084
#2	.00498	369.40	.00909	.00102	.00657	.00562
#3	.00561	369.91	.00945	.00100	.00674	-.00181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00043	.01125
Stddev	.00034	.00002
%RSD	78.612	.18515
#1	.00009	.01127
#2	.00043	.01123
#3	.00076	.01124
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31669-a-10-a SD@5 Acquired: 5/26/2023 10:31:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4196.1	76952.	13321.
Stddev	8.6	60.	70.
%RSD	.20394	.07735	.52773
#1	4203.9	76884.	13249.
#2	4186.9	76994.	13327.
#3	4197.5	76978.	13389.

Sample Name: CCV Acquired: 5/26/2023 10:36:45 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98824	24.453	.49174	2.0135	1.9958	2.0192
Stddev	.00168	.106	.00339	.0073	.0057	.0075
%RSD	.17012	.43255	.68844	.36226	.28809	.37269
#1	.98640	24.399	.48928	2.0127	1.9900	2.0227
#2	.98860	24.575	.49035	2.0067	2.0015	2.0243
#3	.98971	24.385	.49560	2.0212	1.9959	2.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.821	.50585	1.9983	2.0173	1.9674	24.703
Stddev	.132	.00039	.0027	.0039	.0034	.120
%RSD	.26042	.07661	.13250	.19487	.17058	.48664
#1	50.777	.50567	1.9958	2.0128	1.9655	24.651
#2	50.970	.50557	1.9980	2.0200	1.9654	24.840
#3	50.716	.50629	2.0011	2.0191	1.9712	24.617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 10:36:45 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.154	1.9928	49.707	2.0013	2.0468	49.605
Stddev	.330	.0096	.225	.0029	.0047	.763
%RSD	.67206	.48051	.45358	.14693	.23164	1.5391
#1	49.214	1.9851	49.645	1.9979	2.0413	50.482
#2	49.450	2.0035	49.958	2.0029	2.0491	49.246
#3	48.797	1.9898	49.520	2.0031	2.0499	49.088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.464	2.0123	1.9680	.51706	.50106	.48864
Stddev	.245	.0034	.0026	.00592	.00134	.00268
%RSD	.49576	.17016	.13022	1.1458	.26840	.54794
#1	49.349	2.0098	1.9667	.51531	.49955	.48779
#2	49.745	2.0108	1.9663	.52367	.50212	.49164
#3	49.296	2.0162	1.9709	.51221	.50152	.48649
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 10:36:45 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49886	F 10.607	1.9535	2.0071	1.9640	1.0055
Stddev	.00147	.489	.0015	.0082	.0102	.0032
%RSD	.29511	4.6143	.07863	.40895	.51872	.31301
#1	.50026	11.020	1.9545	2.0023	1.9567	1.0021
#2	.49901	10.735	1.9518	2.0165	1.9756	1.0060
#3	.49732	10.066	1.9543	2.0024	1.9596	1.0084
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0158	1.9937
Stddev	.0027	.0025
%RSD	.13575	.12654
#1	2.0129	1.9915
#2	2.0163	1.9931
#3	2.0183	1.9965
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 10:36:45 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4074.3	75517.	13115.
Stddev	4.3	119.	59.
%RSD	.10484	.15809	.45244
#1	4077.7	75394.	13103.
#2	4075.7	75525.	13062.
#3	4069.5	75633.	13179.

Sample Name: CCB Acquired: 5/26/2023 10:41:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	-.00634	.00130	F .04174	-.00004	-.00011
Stddev	.00012	.01159	.00136	.00267	.00005	.00002
%RSD	21.522	182.91	104.68	6.3951	113.39	19.212
#1	.00070	-.01169	.00227	.04448	.00001	-.00009
#2	.00051	.00696	-.00026	.04160	-.00007	-.00012
#3	.00048	-.01428	.00188	.03915	-.00008	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00650	.00009	.00001	-.00032	F .00137	.00100
Stddev	.00148	.00002	.00011	.00011	.00029	.00084
%RSD	22.701	24.874	1246.3	34.257	21.446	83.514
#1	.00728	.00009	-.00007	-.00042	.00161	.00069
#2	.00741	.00011	-.00003	-.00020	.00145	.00036
#3	.00480	.00007	.00013	-.00034	.00104	.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					.00130	
Low Limit					-.00130	

Sample Name: CCB Acquired: 5/26/2023 10:41:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04943	-.00062	.01104	.00001	-.00032	-.31134
Stddev	.03615	.00028	.01522	.00005	.00021	.27893
%RSD	73.126	45.354	137.80	779.95	65.042	89.590
#1	.08614	-.00064	.02859	.00005	-.00055	.01070
#2	.04828	-.00089	.00306	.00002	-.00026	-.47652
#3	.01388	-.00033	.00148	-.00005	-.00015	-.46820
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00104	.00067	.00079	F -.00330	-.00198	-.00288
Stddev	.00119	.00013	.00111	.00161	.00185	.00070
%RSD	114.56	20.170	140.95	48.795	93.310	24.439
#1	.00014	.00051	-.00046	-.00503	-.00368	-.00207
#2	.00059	.00074	.00117	-.00304	-.00226	-.00329
#3	.00239	.00075	.00165	-.00184	-.00001	-.00329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/26/2023 10:41:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00066	F 5.9312	-.00006	.00008	-.00090	.00258
Stddev	.00243	.3186	.00039	.00002	.00091	.00239
%RSD	368.90	5.3724	715.29	19.655	101.24	92.595
#1	.00345	6.2514	-.00051	.00009	.00014	.00026
#2	-.00052	5.9279	.00014	.00006	-.00159	.00504
#3	-.00096	5.6142	.00020	.00009	-.00126	.00245
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00012	-.00033
Stddev	.00010	.00006
%RSD	83.133	16.985
#1	-.00003	-.00028
#2	-.00011	-.00030
#3	-.00022	-.00039
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 10:41:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4167.8	75944.	13104.
Stddev	11.6	106.	139.
%RSD	.27863	.13942	1.0607
#1	4154.7	75892.	12980.
#2	4171.9	76066.	13078.
#3	4176.9	75874.	13255.

Sample Name: 31669-a-10-a PDSD Acquired: 5/26/2023 10:46:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04897	2.9772	.10525	F 109.92	.12125	.04689
Stddev	.00050	.0183	.00112	.48	.00030	.00022
%RSD	1.0175	.61519	1.0660	.43746	.24543	.47665
#1	.04955	2.9561	.10537	110.18	.12110	.04685
#2	.04870	2.9861	.10632	109.36	.12159	.04669
#3	.04867	2.9893	.10408	110.20	.12106	.04713
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.108	.04683	.07601	.23041	.27444	1.3566
Stddev	.100	.00005	.00042	.00054	.00063	.0042
%RSD	.20043	.10682	.54612	.23487	.23096	.30587
#1	50.074	.04677	.07643	.23091	.27371	1.3519
#2	50.221	.04685	.07600	.22984	.27480	1.3579
#3	50.029	.04687	.07560	.23048	.27482	1.3599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDSD Acquired: 5/26/2023 10:46:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.492	.09797	9.3725	.11065	.63543	51.039
Stddev	.125	.00087	.0303	.00047	.00098	.729
%RSD	.26961	.88340	.32305	.42429	.15407	1.4275
#1	46.396	.09881	9.3376	.11029	.63454	51.180
#2	46.446	.09708	9.3878	.11048	.63528	50.251
#3	46.634	.09801	9.3920	.11119	.63648	51.687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.734	.52251	4.6431	.12055	.18744	.48363
Stddev	.126	.00041	.0041	.00689	.00256	.00426
%RSD	.25832	.07900	.08829	5.7147	1.3637	.88064
#1	48.785	.52206	4.6395	.11385	.18477	.47888
#2	48.591	.52287	4.6422	.12761	.18769	.48711
#3	48.826	.52260	4.6475	.12019	.18986	.48489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDSD Acquired: 5/26/2023 10:46:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14318	F 1636.4	.48647	.49675	.13556	.33976
Stddev	.00111	9.1	.00125	.00074	.00094	.00420
%RSD	.77204	.55851	.25710	.14934	.69575	1.2371
#1	.14192	1645.0	.48553	.49620	.13524	.34444
#2	.14398	1637.4	.48789	.49645	.13482	.33857
#3	.14363	1626.8	.48599	.49759	.13662	.33629
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19828	.50858
Stddev	.00080	.00024
%RSD	.40151	.04673
#1	.19846	.50835
#2	.19897	.50883
#3	.19741	.50856
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31669-a-10-a PDSD Acquired: 5/26/2023 10:46:30 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4177.2	76628.	13477.
Stddev	8.0	367.	90.
%RSD	.19104	.47919	.67068
#1	4168.0	76320.	13376.
#2	4182.2	77034.	13505.
#3	4181.4	76531.	13551.

Sample Name: 140-31669-a-17-a Acquired: 5/26/2023 10:51:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01372	1.1540	.01612	F 111.47	.02507	-.00011
Stddev	.00016	.0089	.00120	.38	.00011	.00001
%RSD	1.1349	.76976	7.4734	.33703	.43275	12.429
#1	.01357	1.1630	.01479	111.51	.02503	-.00010
#2	.01388	1.1452	.01643	111.07	.02498	-.00011
#3	.01371	1.1537	.01714	111.82	.02519	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3647	.00081	-.01966	.03447	.02853	.36398
Stddev	.0009	.00008	.00024	.00031	.00009	.00356
%RSD	.06347	10.067	1.2196	.90201	.32910	.97855
#1	1.3649	.00086	-.01940	.03446	.02860	.36010
#2	1.3654	.00085	-.01988	.03478	.02857	.36710
#3	1.3637	.00071	-.01970	.03416	.02843	.36474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-17-a Acquired: 5/26/2023 10:51:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40493	-.00035	.28784	.01708	.14355	2.6093
Stddev	.03015	.00105	.00275	.00002	.00042	.2479
%RSD	7.4464	299.96	.95645	.14537	.29206	9.5013
#1	.42939	-.00156	.29080	.01706	.14378	2.5593
#2	.41415	.00029	.28736	.01706	.14380	2.8784
#3	.37124	.00022	.28536	.01710	.14306	2.3902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2727	.05704	.09788	.03782	.11246	.02228
Stddev	.0140	.00028	.00334	.00376	.00121	.00177
%RSD	.61794	.48993	3.4161	9.9427	1.0776	7.9290
#1	2.2582	.05690	.09990	.03710	.11281	.02109
#2	2.2735	.05736	.09402	.04189	.11346	.02431
#3	2.2863	.05685	.09972	.03448	.11111	.02143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-17-a Acquired: 5/26/2023 10:51:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02269	F 1721.4	.07677	.00468	.16491	-.01030
Stddev	.00098	5.1	.00089	.00008	.00070	.00215
%RSD	4.3321	.29520	1.1630	1.6742	.42688	20.890
#1	.02379	1722.2	.07706	.00459	.16502	-.01257
#2	.02236	1726.0	.07576	.00469	.16555	-.01002
#3	.02191	1715.9	.07748	.00475	.16416	-.00830
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00207	.07935
Stddev	.00026	.00010
%RSD	12.414	.12306
#1	.00180	.07935
#2	.00231	.07945
#3	.00211	.07925
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-17-a Acquired: 5/26/2023 10:51:28 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4204.3	76706.	13458.
Stddev	27.6	422.	48.
%RSD	.65681	.55005	.35969
#1	4176.4	76259.	13405.
#2	4205.1	77097.	13469.
#3	4231.6	76762.	13500.

Sample Name: 140-31669-a-23-a Acquired: 5/26/2023 10:56:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	.01608	.00539	F 128.78	.01152	-.00017
Stddev	.00050	.01840	.00073	.52	.00013	.00001
%RSD	186.34	114.46	13.594	.40328	1.0910	5.9060
#1	-.00084	.00205	.00586	128.19	.01146	-.00016
#2	-.00004	.03692	.00455	129.14	.01167	-.00016
#3	.00008	.00926	.00576	129.02	.01144	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.23688	.00001	-.00009	-.00045	.00224	.02129
Stddev	.00272	.00004	.00005	.00024	.00014	.00145
%RSD	1.1497	278.12	49.066	53.794	6.1741	6.8149
#1	.23462	-.00002	-.00005	-.00070	.00219	.01970
#2	.23611	.00000	-.00014	-.00041	.00239	.02161
#3	.23991	.00005	-.00010	-.00023	.00213	.02255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-23-a Acquired: 5/26/2023 10:56:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14880	-.00007	.03721	.00159	.00039	.51035
Stddev	.02196	.00077	.00317	.00007	.00012	.44407
%RSD	14.759	1156.8	8.5195	4.5200	31.889	87.013
#1	.14307	-.00032	.03644	.00158	.00052	.99023
#2	.13027	.00080	.03449	.00167	.00028	.42692
#3	.17306	-.00068	.04069	.00153	.00036	.11391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0741	.00126	.00080	-.00049	-.00303	-.00379
Stddev	.0057	.00007	.00037	.00198	.00086	.00068
%RSD	.53262	5.6689	45.599	404.68	28.284	18.070
#1	1.0686	.00134	.00105	.00102	-.00222	-.00445
#2	1.0800	.00124	.00098	-.00274	-.00295	-.00309
#3	1.0738	.00120	.00038	.00025	-.00392	-.00382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-23-a Acquired: 5/26/2023 10:56:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00487	1.6585	.02925	.00058	.00337	.00197
Stddev	.00149	.0554	.00085	.00004	.00062	.00117
%RSD	30.600	3.3423	2.9204	6.2142	18.506	59.409
#1	-.00361	1.7186	.02854	.00053	.00407	.00330
#2	-.00448	1.6475	.03020	.00060	.00318	.00144
#3	-.00651	1.6094	.02901	.00060	.00286	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00017	.00324
Stddev	.00007	.00006
%RSD	41.948	1.7934
#1	.00023	.00318
#2	.00009	.00324
#3	.00020	.00329
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-23-a Acquired: 5/26/2023 10:56:38 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4154.2	76511.	13298.
Stddev	3.5	98.	80.
%RSD	.08504	.12849	.59866
#1	4154.9	76444.	13389.
#2	4157.4	76465.	13238.
#3	4150.4	76624.	13269.

Sample Name: 140-31774-a-1-a Acquired: 5/26/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00554	1.5040	.01616	F 120.44	.12838	-.00012
Stddev	.00069	.0126	.00038	.71	.00007	.00001
%RSD	12.414	.83522	2.3394	.58846	.05715	6.2953
#1	.00507	1.5148	.01576	120.07	.12845	-.00012
#2	.00633	1.5068	.01652	119.99	.12831	-.00012
#3	.00523	1.4902	.01621	121.26	.12837	-.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.4794	.00113	-.01304	.03407	.02940	2.9410
Stddev	.0173	.00007	.00008	.00059	.00038	.0074
%RSD	.23147	6.2524	.59729	1.7364	1.2870	.25241
#1	7.4842	.00108	-.01298	.03462	.02983	2.9344
#2	7.4602	.00109	-.01313	.03345	.02924	2.9490
#3	7.4938	.00121	-.01301	.03413	.02913	2.9397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-1-a Acquired: 5/26/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.69947	.00197	.52826	.09010	.11292	1.5446
Stddev	.02824	.00073	.01228	.00028	.00049	.1938
%RSD	4.0370	36.928	2.3240	.30917	.43654	12.550
#1	.67451	.00149	.54020	.08995	.11262	1.4832
#2	.73012	.00281	.51567	.08993	.11264	1.3890
#3	.69378	.00162	.52890	.09042	.11349	1.7618
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7275	.00673	.09226	-.00200	.05578	.01219
Stddev	.0040	.00029	.00200	.00175	.00263	.00145
%RSD	.23095	4.2453	2.1639	87.355	4.7181	11.885
#1	1.7239	.00704	.09249	-.00374	.05356	.01221
#2	1.7269	.00670	.09016	-.00025	.05510	.01074
#3	1.7318	.00647	.09413	-.00202	.05869	.01363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-1-a Acquired: 5/26/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01723	F 1283.6	.01844	.04317	.05454	.00995
Stddev	.00097	6.8	.00058	.00015	.00035	.00124
%RSD	5.6015	.52674	3.1392	.33712	.63361	12.449
#1	.01621	1290.6	.01849	.04300	.05459	.01050
#2	.01813	1277.2	.01899	.04325	.05485	.00853
#3	.01734	1282.9	.01784	.04325	.05417	.01082
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00308	.17211
Stddev	.00032	.00047
%RSD	10.353	.27056
#1	.00273	.17243
#2	.00315	.17158
#3	.00336	.17233
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-1-a Acquired: 5/26/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4202.2	76520.	13330.
Stddev	11.7	25.	72.
%RSD	.27878	.03273	.53799
#1	4188.7	76545.	13250.
#2	4209.9	76494.	13353.
#3	4207.9	76522.	13388.

Sample Name: 140-31774-a-6-a Acquired: 5/26/2023 11:06:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00153	1.7813	.01747	F 119.01	.18823	-.00011
Stddev	.00047	.0129	.00044	.33	.00159	.00002
%RSD	30.868	.72139	2.5411	.27697	.84686	17.391
#1	.00202	1.7675	.01704	118.64	.18871	-.00013
#2	.00107	1.7929	.01745	119.16	.18953	-.00009
#3	.00150	1.7834	.01793	119.25	.18645	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.223	.00190	-.01492	.04011	.03138	2.5388
Stddev	.086	.00005	.00007	.00079	.00045	.0121
%RSD	.84559	2.4161	.49560	1.9750	1.4333	.47481
#1	10.287	.00195	-.01498	.04020	.03163	2.5446
#2	10.257	.00186	-.01484	.04086	.03166	2.5469
#3	10.124	.00191	-.01495	.03928	.03086	2.5250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-6-a Acquired: 5/26/2023 11:06:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.80979	.00200	.66056	.09531	.13113	.98489
Stddev	.02507	.00019	.00469	.00037	.00083	.46143
%RSD	3.0954	9.7196	.70967	.39135	.63389	46.851
#1	.81369	.00186	.66597	.09529	.13149	.54577
#2	.83268	.00192	.65792	.09570	.13173	.94311
#3	.78300	.00222	.65779	.09495	.13018	1.4658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7969	.00270	.01980	.00238	.06640	.01491
Stddev	.0164	.00048	.00216	.00443	.00424	.00074
%RSD	.91336	17.675	10.917	186.10	6.3825	4.9331
#1	1.8016	.00284	.02155	.00750	.06919	.01575
#2	1.8104	.00217	.01738	-.00013	.06849	.01442
#3	1.7786	.00310	.02046	-.00022	.06153	.01455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-6-a Acquired: 5/26/2023 11:06:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01892	F 1477.8	.12721	.05898	.04888	.01148
Stddev	.00148	10.6	.00127	.00036	.00045	.00206
%RSD	7.8128	.71753	1.0007	.60601	.92534	17.947
#1	.01979	1469.4	.12768	.05905	.04925	.00912
#2	.01975	1474.1	.12818	.05930	.04838	.01295
#3	.01721	1489.7	.12577	.05860	.04902	.01236
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00378	.21652
Stddev	.00020	.00144
%RSD	5.1727	.66351
#1	.00357	.21757
#2	.00395	.21712
#3	.00381	.21488
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-6-a Acquired: 5/26/2023 11:06:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4216.3	76578.	13252.
Stddev	31.6	263.	166.
%RSD	.75034	.34323	1.2553
#1	4187.8	76443.	13076.
#2	4210.8	76410.	13274.
#3	4250.4	76881.	13406.

Sample Name: 140-31774-a-11-a Acquired: 5/26/2023 11:12:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	1.9611	.01725	F 120.00	.15002	-.00011
Stddev	.00012	.0113	.00230	.37	.00040	.00001
%RSD	8.2448	.57405	13.311	.30867	.26422	7.1395
#1	.00157	1.9487	.01728	120.01	.14960	-.00010
#2	.00133	1.9642	.01494	120.36	.15038	-.00012
#3	.00145	1.9705	.01953	119.62	.15010	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.444	.00189	-.01495	.04143	.02980	3.3785
Stddev	.095	.00010	.00013	.00029	.00027	.0234
%RSD	.83331	5.2648	.84063	.69541	.90346	.69297
#1	11.408	.00197	-.01507	.04148	.02969	3.3591
#2	11.372	.00193	-.01482	.04112	.02960	3.3720
#3	11.553	.00178	-.01496	.04168	.03010	3.4045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-11-a Acquired: 5/26/2023 11:12:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82413	.00231	.76243	.07778	.12996	1.2991
Stddev	.02010	.00079	.00695	.00030	.00024	.2759
%RSD	2.4392	34.060	.91121	.39004	.18355	21.239
#1	.84469	.00279	.77034	.07747	.13005	1.0476
#2	.82319	.00140	.75960	.07807	.12968	1.5942
#3	.80452	.00274	.75735	.07780	.13013	1.2556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5612	-.00072	.03857	-.00052	.06343	.01390
Stddev	.0065	.00004	.00284	.00100	.00364	.00084
%RSD	.41675	5.8730	7.3628	191.27	5.7392	6.0198
#1	1.5585	-.00075	.03722	.00015	.06352	.01301
#2	1.5564	-.00068	.03666	-.00167	.06702	.01468
#3	1.5686	-.00075	.04183	-.00005	.05974	.01401
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-11-a Acquired: 5/26/2023 11:12:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01705	F 1484.7	.02849	.06494	.05788	.01218
Stddev	.00189	27.5	.00048	.00030	.00080	.00033
%RSD	11.069	1.8541	1.6850	.46157	1.3750	2.7295
#1	.01747	1472.2	.02793	.06460	.05714	.01208
#2	.01869	1465.6	.02873	.06509	.05777	.01192
#3	.01499	1516.2	.02879	.06514	.05872	.01256
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00364	.16678
Stddev	.00019	.00030
%RSD	5.2648	.17865
#1	.00386	.16683
#2	.00350	.16646
#3	.00356	.16705
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-11-a Acquired: 5/26/2023 11:12:01 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4194.6	76258.	13169.
Stddev	8.8	388.	126.
%RSD	.20911	.50875	.95981
#1	4184.5	76472.	13139.
#2	4199.1	75810.	13308.
#3	4200.2	76491.	13060.

Sample Name: 140-31774-a-16-a Acquired: 5/26/2023 11:17:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00015	.01145	.00550	F 127.39	.00132	-.00019
Stddev	.00040	.00521	.00082	.48	.00007	.00002
%RSD	269.46	45.546	14.879	.37553	5.3357	8.2953
#1	.00023	.01526	.00463	127.03	.00138	-.00017
#2	-.00012	.00551	.00562	127.22	.00125	-.00020
#3	-.00056	.01358	.00626	127.94	.00135	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20705	.00020	.00011	.00129	.00339	.01820
Stddev	.00110	.00006	.00013	.00028	.00026	.00155
%RSD	.53363	29.588	118.54	21.534	7.5592	8.5321
#1	.20620	.00027	.00026	.00101	.00310	.01766
#2	.20830	.00017	.00006	.00128	.00359	.01995
#3	.20665	.00016	.00001	.00157	.00349	.01699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-16-a Acquired: 5/26/2023 11:17:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01245	.00002	.04162	.00074	.00044	.43729
Stddev	.00334	.00034	.00702	.00004	.00019	.18386
%RSD	26.820	2028.3	16.867	4.7707	42.956	42.045
#1	-.00860	-.00038	.04642	.00073	.00022	.64958
#2	-.01445	.00024	.03356	.00079	.00054	.33287
#3	-.01430	.00019	.04488	.00072	.00056	.32942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49735	.00125	.00172	-.00419	-.00225	-.00476
Stddev	.00350	.00006	.00102	.00260	.00092	.00092
%RSD	.70388	4.5153	59.070	62.024	41.030	19.309
#1	.49338	.00127	.00288	-.00547	-.00172	-.00452
#2	.50001	.00129	.00133	-.00120	-.00172	-.00578
#3	.49865	.00118	.00096	-.00589	-.00332	-.00398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-16-a Acquired: 5/26/2023 11:17:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00523	1.0391	.00362	.00050	.00016	.00391
Stddev	.00220	.1010	.00027	.00006	.00068	.00069
%RSD	42.128	9.7199	7.3758	12.092	425.67	17.526
#1	-.00518	1.1538	.00382	.00048	-.00036	.00467
#2	-.00746	1.0004	.00332	.00045	.00092	.00333
#3	-.00305	.96327	.00372	.00056	-.00009	.00374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00035	.00305
Stddev	.00039	.00007
%RSD	112.11	2.1947
#1	.00032	.00305
#2	.00076	.00312
#3	-.00003	.00299
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-16-a Acquired: 5/26/2023 11:17:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4178.7	76267.	13351.
Stddev	7.4	305.	122.
%RSD	.17685	.39935	.91005
#1	4170.8	76496.	13246.
#2	4180.0	75921.	13323.
#3	4185.4	76384.	13484.

Sample Name: 140-31774-a-17-a Acquired: 5/26/2023 11:22:13 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00094	.38905	.01594	F 168.76	.11553	-.00017
Stddev	.00026	.00953	.00194	.52	.00052	.00001
%RSD	27.877	2.4499	12.159	.31045	.45376	7.0463
#1	-.00104	.39855	.01383	168.37	.11613	-.00018
#2	-.00114	.38913	.01636	169.35	.11520	-.00017
#3	-.00065	.37949	.01763	168.55	.11525	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25703	.00062	-.01452	.01389	.00354	.09287
Stddev	.00034	.00008	.00020	.00020	.00009	.00108
%RSD	.13091	12.222	1.3437	1.4202	2.4827	1.1625
#1	.25742	.00053	-.01444	.01385	.00364	.09408
#2	.25688	.00065	-.01437	.01371	.00351	.09201
#3	.25680	.00067	-.01474	.01410	.00348	.09251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-17-a Acquired: 5/26/2023 11:22:13 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06660	.00040	.11590	.01276	.11927	-.04578
Stddev	.00376	.00026	.01193	.00004	.00039	.39112
%RSD	5.6501	64.898	10.292	.30215	.32722	854.30
#1	.06825	.00014	.12732	.01274	.11883	-.21675
#2	.06926	.00066	.11687	.01273	.11941	.40171
#3	.06230	.00039	.10352	.01280	.11956	-.32231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.25693	-.01451	-.03357	-.01096	.05126	.01156
Stddev	.00491	.00019	.00167	.00096	.00144	.00072
%RSD	1.9095	1.3240	4.9722	8.7705	2.8136	6.2558
#1	.25185	-.01463	-.03312	-.01134	.05193	.01101
#2	.25730	-.01461	-.03218	-.00987	.04960	.01129
#3	.26164	-.01429	-.03542	-.01167	.05224	.01238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-17-a Acquired: 5/26/2023 11:22:13 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01410	F 1383.9	-.00321	.00233	.00850	-.00837
Stddev	.00098	22.7	.00061	.00009	.00067	.00275
%RSD	6.9277	1.6383	19.045	3.9839	7.8472	32.869
#1	.01415	1357.7	-.00297	.00224	.00784	-.01061
#2	.01504	1397.1	-.00390	.00232	.00918	-.00530
#3	.01309	1396.9	-.00275	.00243	.00848	-.00919
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00114	.09265
Stddev	.00013	.00021
%RSD	11.170	.23101
#1	.00104	.09248
#2	.00110	.09289
#3	.00129	.09258
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-17-a Acquired: 5/26/2023 11:22:13 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4208.0	76176.	13076.
Stddev	1.7	271.	31.
%RSD	.03979	.35572	.23850
#1	4209.9	76275.	13111.
#2	4207.1	76383.	13050.
#3	4206.9	75869.	13067.

Sample Name: 140-31774-a-22-a Acquired: 5/26/2023 11:27:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00425	145.11	.09998	F 184.32	.42451	.04385
Stddev	.00016	.17	.00278	.55	.00170	.00023
%RSD	3.7654	.11398	2.7783	.30040	.40067	.53546
#1	.00430	145.18	.09683	184.96	.42321	.04390
#2	.00438	145.23	.10105	184.05	.42389	.04405
#3	.00407	144.93	.10207	183.96	.42644	.04359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	374.33	.00200	-.00452	.41163	.14005	17.371
Stddev	5.13	.00008	.00034	.00284	.00082	.085
%RSD	1.3699	3.8763	7.5670	.69074	.58260	.49052
#1	377.95	.00209	-.00430	.41400	.13952	17.426
#2	376.58	.00197	-.00491	.41241	.14099	17.414
#3	368.47	.00194	-.00434	.40848	.13965	17.273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-22-a Acquired: 5/26/2023 11:27:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.497	.64580	78.096	.32811	.00967	2.4129
Stddev	.042	.00433	.907	.00142	.00026	.3557
%RSD	.33604	.67057	1.1620	.43400	2.6998	14.741
#1	12.451	.64331	78.588	.32875	.00981	2.5031
#2	12.534	.64329	78.651	.32910	.00936	2.0209
#3	12.506	.65080	77.048	.32648	.00982	2.7149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.7656	.06687	.46040	.09913	.12712	.00268
Stddev	.0087	.00024	.00278	.00503	.00343	.00235
%RSD	.09959	.35761	.60321	5.0699	2.6991	87.691
#1	8.7602	.06674	.46272	.10465	.12964	.00106
#2	8.7757	.06715	.46117	.09482	.12850	.00537
#3	8.7610	.06672	.45732	.09793	.12321	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-22-a Acquired: 5/26/2023 11:27:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	893.00	.09962	1.0445	11.975	-.00077
Stddev	.00105	2.95	.00055	.0037	.007	.00322
%RSD	157.71	.33061	.54823	.35778	.06203	416.77
#1	.00101	893.96	.09923	1.0413	11.975	-.00023
#2	.00150	895.35	.10025	1.0435	11.983	.00214
#3	-.00051	889.68	.09939	1.0486	11.968	-.00423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.16684	.46206
Stddev	.00131	.00114
%RSD	.78812	.24605
#1	.16737	.46259
#2	.16780	.46282
#3	.16534	.46075
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-22-a Acquired: 5/26/2023 11:27:22 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4016.3	74162.	13238.
Stddev	22.3	653.	267.
%RSD	.55413	.88012	2.0206
#1	4001.9	73666.	13097.
#2	4005.0	73918.	13071.
#3	4041.9	74901.	13547.

Sample Name: 140-31774-a-27-a Acquired: 5/26/2023 11:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00361	198.26	.10250	F 179.94	.42803	.04320
Stddev	.00028	2.06	.00198	1.67	.00046	.00037
%RSD	7.7422	1.0407	1.9318	.92656	.10781	.86056
#1	.00329	196.21	.10170	178.02	.42757	.04277
#2	.00377	198.22	.10105	180.97	.42802	.04342
#3	.00377	200.33	.10476	180.84	.42849	.04341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	427.95	.00225	-.00368	.40930	.10807	18.008
Stddev	7.40	.00012	.00025	.00214	.00025	.247
%RSD	1.7295	5.1680	6.9337	.52373	.23509	1.3688
#1	419.45	.00214	-.00397	.40844	.10831	17.773
#2	432.98	.00237	-.00351	.40772	.10781	17.987
#3	431.42	.00225	-.00355	.41174	.10811	18.264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-27-a Acquired: 5/26/2023 11:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.310	.64078	84.079	.33406	.00897	3.4060
Stddev	.106	.00073	1.750	.00277	.00001	.9830
%RSD	.86291	.11416	2.0813	.83053	.13916	28.862
#1	12.189	.64161	82.397	.33100	.00896	2.4601
#2	12.349	.64053	83.950	.33477	.00898	3.3354
#3	12.390	.64021	85.890	.33641	.00897	4.4224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.9874	.07335	.45269	.08845	.12180	.00060
Stddev	.0507	.00031	.00148	.00301	.00106	.00327
%RSD	.56428	.42543	.32635	3.4016	.87317	544.43
#1	8.9301	.07299	.45282	.08738	.12140	.00072
#2	9.0055	.07357	.45115	.08612	.12301	.00381
#3	9.0265	.07348	.45410	.09184	.12100	-.00273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-27-a Acquired: 5/26/2023 11:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	868.44	.01623	1.0338	11.695	-.00155
Stddev	.00241	11.05	.00039	.0018	.099	.00189
%RSD	17619.	1.2722	2.4067	.16957	.84691	121.86
#1	.00050	857.82	.01580	1.0322	11.598	-.00238
#2	-.00260	867.63	.01655	1.0335	11.691	-.00289
#3	.00214	879.87	.01635	1.0356	11.796	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.16303	.36041
Stddev	.00073	.00159
%RSD	.45055	.44089
#1	.16266	.35874
#2	.16256	.36060
#3	.16388	.36190
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-27-a Acquired: 5/26/2023 11:32:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4107.4	75973.	13251.
Stddev	5.4	326.	317.
%RSD	.13114	.42901	2.3886
#1	4113.5	76337.	13548.
#2	4103.2	75877.	13288.
#3	4105.5	75707.	12918.

Sample Name: CCV Acquired: 5/26/2023 11:37:25 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99834	24.742	.49911	2.0633	2.0120	2.0834
Stddev	.00208	.203	.00116	.0110	.0054	.0016
%RSD	.20786	.81998	.23143	.53489	.27025	.07855
#1	.99755	24.517	.49957	2.0516	2.0061	2.0831
#2	1.0007	24.799	.49996	2.0646	2.0133	2.0851
#3	.99678	24.911	.49779	2.0736	2.0167	2.0819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.727	.51830	2.0249	2.0861	1.9617	24.918
Stddev	.153	.00059	.0020	.0030	.0041	.172
%RSD	.28934	.11373	.09709	.14473	.20786	.69024
#1	52.667	.51832	2.0271	2.0873	1.9570	24.720
#2	52.900	.51887	2.0239	2.0883	1.9635	25.030
#3	52.614	.51770	2.0236	2.0826	1.9645	25.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 11:37:25 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.343	1.9845	51.621	2.0628	2.0734	51.658
Stddev	.353	.0126	.293	.0017	.0032	.122
%RSD	.71561	.63275	.56760	.08181	.15251	.23601
#1	48.956	1.9708	51.322	2.0639	2.0769	51.795
#2	49.427	1.9872	51.908	2.0637	2.0709	51.620
#3	49.647	1.9955	51.632	2.0609	2.0723	51.560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.113	2.0427	1.9953	.54100	.51420	.48858
Stddev	.233	.0026	.0098	.00219	.00346	.00187
%RSD	.46524	.12819	.49103	.40474	.67348	.38318
#1	49.867	2.0438	2.0066	.54196	.51257	.49074
#2	50.140	2.0447	1.9895	.54254	.51817	.48741
#3	50.331	2.0398	1.9898	.53849	.51185	.48761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 11:37:25 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50395	F 14.639	1.9797	2.0191	1.9874	1.0194
Stddev	.00311	.614	.0072	.0091	.0141	.0040
%RSD	.61640	4.1924	.36382	.44889	.71188	.39518
#1	.50556	15.210	1.9787	2.0089	1.9714	1.0238
#2	.50593	14.716	1.9873	2.0220	1.9925	1.0185
#3	.50037	13.990	1.9730	2.0263	1.9983	1.0158
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0706	2.0122
Stddev	.0029	.0045
%RSD	.13877	.22554
#1	2.0689	2.0171
#2	2.0739	2.0112
#3	2.0690	2.0082
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 11:37:25 Type: QC
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4031.5	73105.	12394.
Stddev	19.8	391.	85.
%RSD	.49140	.53538	.68273
#1	4011.6	72672.	12367.
#2	4031.5	73211.	12326.
#3	4051.2	73433.	12489.

Sample Name: CCB Acquired: 5/26/2023 11:42:12 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00084	-.01324	.00235	F .08247	.00027	-.00016
Stddev	.00004	.01189	.00019	.00546	.00010	.00006
%RSD	5.0112	89.791	8.2845	6.6188	35.948	35.826
#1	.00080	-.02416	.00217	.08756	.00019	-.00009
#2	.00088	-.00058	.00232	.08315	.00024	-.00019
#3	.00085	-.01498	.00256	.07671	.00037	-.00019
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.00077			.03600		
Low Limit	-.00077			-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01261	.00019	.00012	-.00050	F .00162	.00036
Stddev	.00241	.00004	.00018	.00021	.00012	.00062
%RSD	19.070	19.192	151.60	42.723	7.2032	171.57
#1	.01468	.00023	.00017	-.00043	.00173	.00087
#2	.01318	.00016	-.00008	-.00033	.00150	-.00033
#3	.00997	.00018	.00026	-.00074	.00162	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					.00130	
Low Limit					-.00130	

Sample Name: CCB Acquired: 5/26/2023 11:42:12 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04338	.00013	.01252	.00010	-.00024	-.24268
Stddev	.02510	.00078	.01000	.00002	.00017	.16433
%RSD	57.867	581.31	79.838	18.020	73.553	67.715
#1	-.04378	.00046	.01039	.00008	-.00004	-.19440
#2	-.06829	.00069	.00376	.00011	-.00038	-.10789
#3	-.01808	-.00075	.02341	.00011	-.00029	-.42573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00736	.00095	-.00034	F -.00387	-.00059	-.00312
Stddev	.00707	.00004	.00119	.00360	.00152	.00075
%RSD	96.181	4.2141	351.70	92.926	256.51	23.975
#1	.01197	.00090	-.00166	-.00696	.00102	-.00269
#2	.01088	.00097	-.00002	-.00473	-.00079	-.00269
#3	-.00079	.00098	.00066	.00008	-.00201	-.00398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 5/26/2023 11:42:12 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00020	F 9.0528	-.00032	.00004	.00004	.00208
Stddev	.00257	.3948	.00027	.00012	.00028	.00054
%RSD	1270.7	4.3609	83.185	330.61	761.76	26.151
#1	.00277	9.4098	-.00063	.00016	.00028	.00259
#2	.00021	9.1199	-.00017	.00002	.00010	.00150
#3	-.00237	8.6288	-.00017	-.00007	-.00027	.00215
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00005	-.00050
Stddev	.00015	.00007
%RSD	296.96	13.427
#1	.00011	-.00043
#2	-.00019	-.00054
#3	-.00007	-.00054
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 11:42:12 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4133.9	73737.	12353.
Stddev	25.4	255.	76.
%RSD	.61341	.34629	.61860
#1	4111.4	73450.	12361.
#2	4128.9	73821.	12272.
#3	4161.4	73940.	12424.

Sample Name: 140-31774-a-27-a PDS Acquired: 5/26/2023 11:47:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05348	196.58	.19474	F 178.27	.51601	.08947
Stddev	.00032	.71	.00251	2.34	.00138	.00095
%RSD	.60511	.35991	1.2878	1.3141	.26688	1.0608
#1	.05384	196.13	.19200	178.22	.51485	.08956
#2	.05321	196.22	.19532	175.95	.51753	.08848
#3	.05340	197.40	.19692	180.64	.51563	.09037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	455.98	.04878	.09132	.59837	.35480	18.556
Stddev	10.85	.00004	.00025	.00780	.00033	.110
%RSD	2.3788	.08542	.27829	1.3031	.09385	.59305
#1	444.18	.04874	.09107	.59885	.35495	18.465
#2	458.24	.04878	.09133	.59035	.35504	18.525
#3	465.52	.04883	.09158	.60592	.35442	18.678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-27-a PDS Acquired: 5/26/2023 11:47:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	59.077	.72823	92.316	.42289	.48233	52.002
Stddev	.230	.00171	1.160	.00417	.00116	.399
%RSD	.38915	.23484	1.2560	.98692	.24101	.76634
#1	58.959	.72844	91.596	.42295	.48099	52.424
#2	58.930	.72982	91.698	.41868	.48313	51.633
#3	59.342	.72642	93.653	.42703	.48286	51.949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.023	.54080	5.2116	.18048	.20471	.46962
Stddev	.067	.00143	.0167	.00069	.00144	.00186
%RSD	.11732	.26398	.31972	.38420	.70417	.39547
#1	56.986	.53947	5.1924	.18050	.20365	.47163
#2	56.982	.54063	5.2197	.18117	.20414	.46926
#3	57.100	.54231	5.2227	.17978	.20635	.46796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-27-a PDS Acquired: 5/26/2023 11:47:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13266	847.83	.44697	1.4948	11.581	.35297
Stddev	.00310	4.67	.00034	.0024	.036	.00293
%RSD	2.3348	.55117	.07658	.15726	.31349	.83110
#1	.13590	844.68	.44725	1.4922	11.556	.35635
#2	.12973	845.61	.44659	1.4967	11.565	.35144
#3	.13235	853.20	.44707	1.4956	11.623	.35112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.35507	.83110
Stddev	.00269	.00149
%RSD	.75803	.17908
#1	.35478	.82940
#2	.35254	.83168
#3	.35790	.83220
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-27-a PDS Acquired: 5/26/2023 11:47:10 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4092.8	74855.	13004.
Stddev	13.5	1027.	193.
%RSD	.32983	1.3718	1.4845
#1	4078.1	74566.	13006.
#2	4104.7	75996.	13196.
#3	4095.5	74004.	12810.

Sample Name: 31774-a-27-a PDSD Acquired: 5/26/2023 11:52:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05283	196.59	.19592	F 179.75	.51701	.09020
Stddev	.00046	1.52	.00340	.53	.00016	.00038
%RSD	.87398	.77576	1.7345	.29728	.03058	.42317
#1	.05337	195.34	.19201	179.60	.51685	.08981
#2	.05255	196.13	.19815	180.34	.51716	.09021
#3	.05259	198.29	.19759	179.31	.51704	.09057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	464.98	.04910	.09170	.60721	.35427	18.612
Stddev	3.13	.00016	.00006	.00152	.00211	.134
%RSD	.67349	.32098	.06352	.25081	.59515	.72160
#1	465.54	.04900	.09176	.60553	.35670	18.474
#2	467.79	.04929	.09169	.60761	.35324	18.620
#3	461.61	.04903	.09164	.60850	.35287	18.742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31774-a-27-a PDSD Acquired: 5/26/2023 11:52:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.902	.72357	94.200	.42696	.49804	54.283
Stddev	.422	.00393	.730	.00168	.00065	.800
%RSD	.69364	.54324	.77489	.39336	.13135	1.4735
#1	60.657	.71992	93.578	.42545	.49729	55.177
#2	60.659	.72306	94.020	.42668	.49850	54.040
#3	61.390	.72773	95.004	.42877	.49832	53.634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.710	.54216	5.3765	.18869	.20860	.47840
Stddev	.358	.00072	.0097	.00039	.00257	.00311
%RSD	.60902	.13280	.18061	.20694	1.2318	.65079
#1	58.459	.54144	5.3738	.18889	.20603	.48172
#2	58.552	.54288	5.3873	.18893	.21117	.47792
#3	59.120	.54216	5.3685	.18824	.20861	.47555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31774-a-27-a PDSD Acquired: 5/26/2023 11:52:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13278	854.71	.46465	1.4904	11.552	.35647
Stddev	.00127	6.72	.00065	.0055	.099	.00286
%RSD	.95397	.78673	.14092	.37114	.85649	.80323
#1	.13293	848.09	.46477	1.4849	11.480	.35433
#2	.13396	854.51	.46394	1.4903	11.512	.35973
#3	.13144	861.53	.46523	1.4960	11.665	.35537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.35838	.83298
Stddev	.00067	.00046
%RSD	.18679	.05544
#1	.35915	.83257
#2	.35800	.83289
#3	.35799	.83348
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31774-a-27-a PDSD Acquired: 5/26/2023 11:52:08 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4056.1	73349.	12451.
Stddev	4.0	57.	72.
%RSD	.09916	.07735	.57892
#1	4053.7	73286.	12458.
#2	4053.9	73395.	12519.
#3	4060.8	73368.	12376.

Sample Name: 140-31774-a-32-a Acquired: 5/26/2023 11:57:04 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00576	59.736	.04537	F 171.24	.28768	.00015
Stddev	.00037	.304	.00010	2.25	.00140	.00001
%RSD	6.4961	.50813	.20959	1.3169	.48831	9.9268
#1	.00619	60.062	.04541	173.42	.28826	.00016
#2	.00561	59.684	.04544	168.92	.28871	.00016
#3	.00549	59.462	.04526	171.37	.28608	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	173.72	.00132	-.00722	.21224	.03965	3.4598
Stddev	1.68	.00013	.00028	.00261	.00021	.0087
%RSD	.96701	10.003	3.8525	1.2292	.53887	.25187
#1	175.55	.00138	-.00735	.21512	.03988	3.4698
#2	173.39	.00116	-.00741	.21156	.03962	3.4557
#3	172.24	.00140	-.00690	.21004	.03946	3.4539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-32-a Acquired: 5/26/2023 11:57:04 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.177	.01717	65.712	.09097	.00077	393.93
Stddev	.098	.00070	.382	.00051	.00015	1.93
%RSD	.48654	4.0845	.58161	.56405	19.835	.49050
#1	20.260	.01766	66.153	.09146	.00059	395.51
#2	20.202	.01749	65.483	.09102	.00084	394.51
#3	20.068	.01637	65.499	.09044	.00088	391.78
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 380.78	.01673	.10258	.00542	.04328	.00675
Stddev	2.43	.00038	.00094	.00151	.00200	.00222
%RSD	.63872	2.2923	.91489	27.863	4.6266	32.873
#1	378.10	.01717	.10277	.00661	.04096	.00435
#2	381.40	.01655	.10157	.00372	.04446	.00872
#3	382.84	.01647	.10342	.00594	.04441	.00718
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	200.00					
Low Limit	-200.00					

Sample Name: 140-31774-a-32-a Acquired: 5/26/2023 11:57:04 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00247	F 1037.2	.09832	.14552	.29432	.00783
Stddev	.00316	2.0	.00021	.00048	.00231	.00565
%RSD	128.05	.19687	.21010	.32905	.78511	72.120
#1	-.00010	1039.5	.09854	.14569	.29573	.00202
#2	.00151	1035.8	.09813	.14590	.29557	.00818
#3	.00599	1036.2	.09828	.14498	.29165	.01330
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.01321	.27648
Stddev	.00034	.00021
%RSD	2.5993	.07559
#1	.01359	.27657
#2	.01311	.27625
#3	.01293	.27664
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-32-a Acquired: 5/26/2023 11:57:04 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4162.9	74367.	12602.
Stddev	21.5	1253.	130.
%RSD	.51759	1.6849	1.0277
#1	4138.1	72925.	12460.
#2	4172.9	74990.	12713.
#3	4177.5	75186.	12634.

Sample Name: 140-31777-a-1-a Acquired: 5/26/2023 12:02:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00224	.75859	.08695	F 122.60	.04845	-.00017
Stddev	.00018	.00838	.00009	.60	.00021	.00001
%RSD	8.2271	1.1042	.10605	.49122	.42350	6.4205
#1	.00240	.75931	.08700	122.79	.04829	-.00018
#2	.00228	.76659	.08685	123.09	.04837	-.00016
#3	.00204	.74988	.08702	121.93	.04868	-.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82993	.03231	-.01081	.03456	.17050	.56802
Stddev	.00785	.00005	.00014	.00042	.00113	.00116
%RSD	.94533	.15882	1.2585	1.2125	.66285	.20441
#1	.83883	.03233	-.01072	.03496	.16920	.56693
#2	.82400	.03235	-.01074	.03413	.17104	.56924
#3	.82696	.03225	-.01096	.03459	.17125	.56789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-1-a Acquired: 5/26/2023 12:02:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24056	.00067	.19620	.01232	.08095	5.7623
Stddev	.03366	.00050	.01375	.00008	.00048	.4992
%RSD	13.993	75.033	7.0086	.68299	.59427	8.6631
#1	.20379	.00094	.21166	.01234	.08042	5.2168
#2	.24805	.00097	.19161	.01223	.08110	6.1962
#3	.26985	.00009	.18533	.01239	.08134	5.8740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.0838	.03438	.00348	.16109	.20914	.02356
Stddev	.0156	.00040	.00051	.00822	.00391	.00161
%RSD	.25662	1.1670	14.773	5.1045	1.8713	6.8227
#1	6.0663	.03440	.00350	.16667	.21052	.02433
#2	6.0962	.03397	.00398	.15165	.21217	.02171
#3	6.0890	.03477	.00295	.16496	.20472	.02464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-1-a Acquired: 5/26/2023 12:02:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01558	F 1198.2	.00422	.00478	.03474	-.00515
Stddev	.00121	6.4	.00012	.00007	.00084	.00049
%RSD	7.7771	.53754	2.9256	1.3704	2.4226	9.5330
#1	.01675	1190.8	.00435	.00470	.03386	-.00552
#2	.01567	1201.3	.00410	.00483	.03553	-.00459
#3	.01433	1202.5	.00422	.00479	.03484	-.00533
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00126	.21067
Stddev	.00017	.00066
%RSD	13.295	.31322
#1	.00113	.20991
#2	.00120	.21109
#3	.00145	.21101
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-1-a Acquired: 5/26/2023 12:02:25 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4227.5	75945.	13003.
Stddev	6.4	567.	131.
%RSD	.15064	.74607	1.0039
#1	4233.5	75292.	12854.
#2	4220.9	76231.	13097.
#3	4228.2	76310.	13058.

Sample Name: 140-31777-a-6-a Acquired: 5/26/2023 12:07:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.68420	.06690	F 121.72	.03297	-.00018
Stddev	.00062	.02531	.00217	1.12	.00032	.00002
%RSD	96.633	3.6991	3.2464	.91816	.97164	10.466
#1	.00121	.65978	.06441	121.01	.03262	-.00020
#2	.00073	.71031	.06840	121.14	.03302	-.00019
#3	-.00002	.68250	.06789	123.01	.03325	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.76608	.03083	-.01178	.02453	.09767	.30886
Stddev	.00863	.00010	.00026	.00049	.00021	.00576
%RSD	1.1259	.31268	2.2407	1.9877	.21128	1.8656
#1	.75631	.03089	-.01200	.02398	.09747	.30221
#2	.77264	.03072	-.01149	.02470	.09766	.31218
#3	.76929	.03088	-.01186	.02490	.09788	.31220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a Acquired: 5/26/2023 12:07:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.47240	-.00062	.17413	.01345	.07927	3.9894
Stddev	.00444	.00029	.01085	.00011	.00019	.4047
%RSD	.93976	46.333	6.2311	.84610	.24241	10.143
#1	.47169	-.00064	.16926	.01334	.07938	3.5366
#2	.46836	-.00033	.18656	.01343	.07905	4.1160
#3	.47715	-.00090	.16656	.01357	.07938	4.3157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.1919	.00844	.01165	.13665	.18401	.02353
Stddev	.0548	.00029	.00062	.00463	.00192	.00237
%RSD	1.3079	3.4781	5.3445	3.3905	1.0450	10.068
#1	4.1291	.00814	.01109	.13145	.18614	.02575
#2	4.2304	.00845	.01155	.13819	.18346	.02381
#3	4.2163	.00873	.01232	.14033	.18242	.02104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a Acquired: 5/26/2023 12:07:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01757	F 1202.6	.00415	.00419	.03827	-.00537
Stddev	.00121	40.5	.00096	.00004	.00014	.00150
%RSD	6.8694	3.3694	23.063	1.0594	.36852	27.896
#1	.01821	1156.1	.00496	.00414	.03843	-.00697
#2	.01618	1230.4	.00309	.00422	.03815	-.00514
#3	.01833	1221.2	.00441	.00422	.03825	-.00400
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00100	.17125
Stddev	.00015	.00028
%RSD	14.727	.16391
#1	.00097	.17122
#2	.00116	.17100
#3	.00087	.17155
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-6-a Acquired: 5/26/2023 12:07:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4222.8	75507.	12935.
Stddev	3.1	216.	304.
%RSD	.07304	.28606	2.3467
#1	4219.4	75685.	13247.
#2	4225.4	75569.	12641.
#3	4223.6	75267.	12917.

Sample Name: 140-31777-a-6-a PDS Acquired: 5/26/2023 12:12:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04861	2.4945	.16020	F 118.94	.13099	.04881
Stddev	.00057	.0353	.00095	.32	.00015	.00043
%RSD	1.1691	1.4141	.59362	.27277	.11452	.87168
#1	.04877	2.4570	.16039	118.75	.13084	.04848
#2	.04798	2.5270	.15917	119.31	.13114	.04866
#3	.04908	2.4997	.16104	118.75	.13099	.04929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.561	.07727	.08541	.22544	.33577	1.2475
Stddev	.217	.00020	.00016	.00158	.00091	.0138
%RSD	.42989	.25651	.19284	.69993	.27162	1.1092
#1	50.310	.07710	.08559	.22477	.33607	1.2316
#2	50.678	.07722	.08526	.22431	.33650	1.2540
#3	50.695	.07749	.08538	.22724	.33475	1.2568
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a PDS Acquired: 5/26/2023 12:12:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.352	.09804	9.6140	.11061	.57344	52.834
Stddev	.223	.00042	.0998	.00074	.00220	.258
%RSD	.47175	.42744	1.0383	.66934	.38355	.48822
#1	47.095	.09814	9.5036	.11003	.57381	53.130
#2	47.456	.09758	9.6406	.11036	.57108	52.712
#3	47.504	.09840	9.6978	.11144	.57543	52.660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.030	.48788	4.8179	.22947	.26524	.49259
Stddev	.199	.00123	.0113	.00317	.00256	.00169
%RSD	.38266	.25138	.23547	1.3810	.96699	.34279
#1	51.800	.48762	4.8278	.22686	.26424	.49416
#2	52.150	.48681	4.8055	.22854	.26332	.49081
#3	52.140	.48922	4.8202	.23300	.26815	.49281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a PDS Acquired: 5/26/2023 12:12:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14925	F 1169.8	.45415	.49188	.13594	.36015
Stddev	.00259	20.0	.00157	.00122	.00088	.00154
%RSD	1.7348	1.7103	.34465	.24749	.64625	.42728
#1	.15195	1153.0	.45318	.49064	.13567	.35903
#2	.14679	1192.0	.45331	.49308	.13523	.35952
#3	.14899	1164.5	.45595	.49191	.13692	.36191
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20036	.64051
Stddev	.00040	.00117
%RSD	.19987	.18265
#1	.20042	.64073
#2	.19994	.63924
#3	.20073	.64154
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-6-a PDS Acquired: 5/26/2023 12:12:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4223.5	75773.	12902.
Stddev	2.6	262.	17.
%RSD	.06134	.34581	.13186
#1	4220.9	75711.	12921.
#2	4226.0	76060.	12888.
#3	4223.6	75547.	12897.

Sample Name: 140-31777-a-6-a PDSD Acquired: 5/26/2023 12:17:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05203	2.6224	.16735	F 121.12	.13747	.05179
Stddev	.00028	.0316	.00192	1.09	.00090	.00030
%RSD	.53344	1.2032	1.1445	.90186	.65661	.57157
#1	.05180	2.5877	.16955	120.93	.13666	.05168
#2	.05234	2.6303	.16601	120.14	.13730	.05156
#3	.05196	2.6493	.16651	122.30	.13844	.05212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.238	.08107	.09111	.24054	.35226	1.3142
Stddev	.203	.00026	.00012	.00155	.00181	.0080
%RSD	.37436	.32152	.12948	.64502	.51298	.61048
#1	54.106	.08081	.09100	.24039	.35047	1.3099
#2	54.136	.08106	.09124	.23908	.35225	1.3092
#3	54.472	.08133	.09110	.24217	.35408	1.3234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a PDSD Acquired: 5/26/2023 12:17:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.445	.10306	10.326	.11692	.59683	56.449
Stddev	.274	.00154	.072	.00073	.00434	.542
%RSD	.54296	1.4914	.69257	.62560	.72705	.95960
#1	50.347	.10131	10.327	.11688	.59182	56.959
#2	50.234	.10369	10.254	.11621	.59955	55.881
#3	50.755	.10419	10.397	.11767	.59911	56.507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.431	.51864	5.0258	.23674	.27640	.51163
Stddev	.410	.00236	.0221	.00195	.00310	.00506
%RSD	.73923	.45417	.43921	.82571	1.1228	.98894
#1	55.127	.51599	5.0003	.23838	.27296	.50597
#2	55.269	.51943	5.0387	.23458	.27899	.51321
#3	55.897	.52050	5.0384	.23727	.27725	.51571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a PDSD Acquired: 5/26/2023 12:17:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15732	F 1193.4	.47301	.51971	.14121	.38050
Stddev	.00152	14.8	.00138	.00414	.00090	.00532
%RSD	.96817	1.2362	.29089	.79584	.63667	1.3990
#1	.15875	1206.6	.47152	.51635	.14067	.37499
#2	.15572	1177.4	.47325	.51845	.14071	.38091
#3	.15750	1196.2	.47424	.52433	.14225	.38561
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21331	.67510
Stddev	.00094	.00387
%RSD	.43889	.57261
#1	.21301	.67066
#2	.21256	.67692
#3	.21436	.67772
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-6-a PDSD Acquired: 5/26/2023 12:17:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4133.3	73904.	12586.
Stddev	9.3	467.	103.
%RSD	.22562	.63126	.81516
#1	4143.5	73693.	12480.
#2	4131.1	74438.	12685.
#3	4125.3	73579.	12594.

Sample Name: 140-31777-a-11-a Acquired: 5/26/2023 12:22:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.67769	.09156	F 122.57	.03216	-.00020
Stddev	.00034	.00787	.00091	.50	.00014	.00001
%RSD	108.83	1.1619	.99583	.41150	.42054	5.2249
#1	.00022	.67946	.09191	123.13	.03206	-.00021
#2	.00003	.68453	.09053	122.43	.03232	-.00019
#3	.00069	.66908	.09225	122.14	.03211	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.68289	.04340	-.01149	.02450	.11070	.26766
Stddev	.00123	.00010	.00020	.00065	.00033	.00199
%RSD	.17977	.23766	1.7361	2.6474	.29993	.74286
#1	.68422	.04344	-.01153	.02522	.11107	.26537
#2	.68181	.04328	-.01167	.02432	.11044	.26897
#3	.68263	.04348	-.01128	.02396	.11059	.26863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-11-a Acquired: 5/26/2023 12:22:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34487	-.00035	.16873	.01222	.07920	3.0133
Stddev	.02644	.00105	.00597	.00006	.00045	.4257
%RSD	7.6670	295.89	3.5393	.52868	.57221	14.127
#1	.37463	.00085	.16246	.01215	.07973	3.0195
#2	.33591	-.00088	.16937	.01225	.07896	2.5846
#3	.32408	-.00103	.17435	.01227	.07893	3.4359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.5402	.00645	-.01070	.21921	.25721	.03196
Stddev	.0044	.00019	.00189	.00359	.00102	.00236
%RSD	.12402	2.9689	17.655	1.6388	.39491	7.4005
#1	3.5390	.00624	-.01133	.22054	.25672	.03420
#2	3.5451	.00650	-.00857	.21514	.25837	.02948
#3	3.5365	.00661	-.01219	.22195	.25653	.03219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-11-a Acquired: 5/26/2023 12:22:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01764	F 1209.7	.01023	.00381	.01767	-.00343
Stddev	.00101	22.3	.00035	.00011	.00089	.00312
%RSD	5.7122	1.8474	3.4627	2.9463	5.0439	91.032
#1	.01809	1205.2	.01057	.00386	.01836	.00016
#2	.01648	1190.0	.00986	.00390	.01798	-.00493
#3	.01834	1234.0	.01026	.00369	.01666	-.00552
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00111	.22898
Stddev	.00023	.00034
%RSD	21.032	.14958
#1	.00138	.22925
#2	.00097	.22859
#3	.00097	.22909
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-11-a Acquired: 5/26/2023 12:22:36 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4222.4	75228.	12838.
Stddev	11.6	513.	89.
%RSD	.27559	.68230	.69666
#1	4209.4	74905.	12899.
#2	4225.9	74961.	12879.
#3	4231.8	75820.	12735.

Sample Name: 140-31777-a-16-a Acquired: 5/26/2023 12:27:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	.60526	.01267	F 123.82	.02267	-.00020
Stddev	.00050	.00876	.00046	.78	.00005	.00002
%RSD	257.72	1.4479	3.6254	.62940	.20298	7.8375
#1	-.00029	.60997	.01299	124.45	.02272	-.00020
#2	.00017	.59514	.01214	122.95	.02266	-.00021
#3	.00071	.61065	.01288	124.07	.02263	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21040	.00094	-.01172	.01333	.00418	.10880
Stddev	.00144	.00008	.00013	.00045	.00020	.00251
%RSD	.68527	8.1705	1.1410	3.3994	4.6863	2.3044
#1	.20904	.00103	-.01165	.01281	.00398	.10678
#2	.21191	.00092	-.01187	.01362	.00417	.10802
#3	.21024	.00088	-.01163	.01357	.00437	.11161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-16-a Acquired: 5/26/2023 12:27:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13375	-.00009	.09237	.00832	.07185	-.12442
Stddev	.01048	.00026	.01184	.00005	.00023	.16629
%RSD	7.8367	294.67	12.820	.56571	.31668	133.66
#1	.12230	-.00018	.10249	.00827	.07197	.06045
#2	.13609	-.00029	.07934	.00837	.07199	-.26181
#3	.14287	.00020	.09527	.00832	.07159	-.17189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17995	.00032	-.02971	-.00953	.04638	.01093
Stddev	.00354	.00039	.00200	.00159	.00056	.00206
%RSD	1.9656	122.70	6.7336	16.688	1.2105	18.818
#1	.18394	.00041	-.03200	-.00885	.04651	.01187
#2	.17718	-.00011	-.02827	-.01134	.04686	.01235
#3	.17875	.00066	-.02887	-.00838	.04576	.00857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-16-a Acquired: 5/26/2023 12:27:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01137	F 1229.2	-.00368	.00216	.00712	-.00516
Stddev	.00271	15.0	.00051	.00006	.00055	.00127
%RSD	23.817	1.2178	13.826	2.8919	7.7315	24.543
#1	.01440	1245.8	-.00309	.00222	.00700	-.00372
#2	.00919	1216.8	-.00399	.00215	.00664	-.00567
#3	.01051	1224.9	-.00396	.00210	.00772	-.00609
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00092	.01558
Stddev	.00017	.00005
%RSD	18.498	.30694
#1	.00096	.01558
#2	.00073	.01554
#3	.00107	.01563
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-16-a Acquired: 5/26/2023 12:27:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v4) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4196.9	75437.	12806.
Stddev	11.0	210.	51.
%RSD	.26106	.27881	.39648
#1	4186.0	75406.	12816.
#2	4196.7	75661.	12751.
#3	4207.9	75243.	12851.

Sample Name: 140-31777-a-6-a SD@5 Acquired: 5/26/2023 12:45:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00093	.12753	.01683	26.910	.00684	-.00026
Stddev	.00039	.00498	.00099	.061	.00008	.00000
%RSD	41.932	3.9035	5.8926	.22493	1.1504	1.4646
#1	.00072	.13190	.01583	26.972	.00690	-.00026
#2	.00069	.12211	.01781	26.906	.00675	-.00026
#3	.00138	.12856	.01685	26.851	.00688	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16895	.00675	-.00228	.00483	.02107	.06683
Stddev	.00042	.00006	.00003	.00062	.00024	.00026
%RSD	.25093	.93760	1.4541	12.807	1.1208	.39097
#1	.16856	.00670	-.00226	.00464	.02105	.06675
#2	.16940	.00674	-.00226	.00552	.02132	.06712
#3	.16889	.00682	-.00232	.00433	.02085	.06662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a SD@5 Acquired: 5/26/2023 12:45:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08509	.00034	.03380	.00274	.01626	.82630
Stddev	.00215	.00025	.00468	.00007	.00013	.19150
%RSD	2.5256	75.255	13.836	2.6342	.80202	23.175
#1	.08707	.00049	.03040	.00275	.01637	.97136
#2	.08281	.00048	.03187	.00281	.01611	.89829
#3	.08540	.00004	.03913	.00267	.01629	.60924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.89599	.00310	.00201	.02754	.03591	.00195
Stddev	.00665	.00009	.00043	.00560	.00036	.00172
%RSD	.74210	3.0517	21.517	20.314	.99306	88.198
#1	.88925	.00303	.00238	.03363	.03563	.00164
#2	.90255	.00306	.00154	.02639	.03577	.00381
#3	.89616	.00321	.00212	.02262	.03631	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a SD@5 Acquired: 5/26/2023 12:45:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	255.11	.00078	.00082	.00706	.00305
Stddev	.00141	.56	.00024	.00002	.00078	.00168
%RSD	144.57	.21806	31.313	2.0811	11.004	55.109
#1	-.00013	255.39	.00081	.00082	.00692	.00481
#2	.00050	255.47	.00052	.00083	.00789	.00146
#3	.00256	254.47	.00101	.00080	.00636	.00288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00022	.03594
Stddev	.00011	.00008
%RSD	47.971	.22454
#1	.00012	.03599
#2	.00034	.03599
#3	.00021	.03585
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-6-a SD@5 Acquired: 5/26/2023 12:45:07 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4164.3	74514.	12567.
Stddev	3.6	160.	20.
%RSD	.08756	.21507	.15798
#1	4168.5	74335.	12584.
#2	4163.1	74564.	12546.
#3	4161.5	74644.	12573.

Sample Name: CCV Acquired: 5/26/2023 12:50:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0050	24.526	.49639	2.0822	2.0376	2.1090
Stddev	.0012	.016	.00086	.0022	.0051	.0106
%RSD	.11854	.06461	.17339	.10590	.24926	.50016
#1	1.0036	24.525	.49602	2.0817	2.0317	2.1049
#2	1.0058	24.542	.49577	2.0846	2.0404	2.1210
#3	1.0056	24.511	.49737	2.0803	2.0406	2.1012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.814	.51949	2.0273	2.0914	1.9700	24.877
Stddev	.129	.00044	.0016	.0056	.0010	.063
%RSD	.24452	.08522	.07810	.26529	.05147	.25287
#1	52.717	.51922	2.0264	2.0857	1.9699	24.815
#2	52.961	.51924	2.0264	2.0968	1.9711	24.941
#3	52.764	.52000	2.0291	2.0918	1.9691	24.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 12:50:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.528	2.0140	51.635	2.0682	2.0930	50.840
Stddev	.188	.0014	.142	.0045	.0020	.408
%RSD	.37286	.07138	.27506	.21803	.09674	.80350
#1	50.313	2.0150	51.688	2.0633	2.0931	50.487
#2	50.665	2.0147	51.743	2.0722	2.0949	51.288
#3	50.605	2.0124	51.474	2.0689	2.0909	50.745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.167	2.0461	1.9853	.54090	.51174	.48539
Stddev	.059	.0022	.0033	.00344	.00183	.00132
%RSD	.11444	.10915	.16444	.63516	.35847	.27126
#1	51.218	2.0435	1.9837	.53747	.50975	.48690
#2	51.103	2.0471	1.9831	.54088	.51211	.48449
#3	51.179	2.0476	1.9891	.54434	.51337	.48478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 12:50:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50474	F 12.963	1.9574	2.0374	1.9740	1.0132
Stddev	.00078	.205	.0054	.0052	.0080	.0027
%RSD	.15387	1.5789	.27474	.25520	.40542	.26929
#1	.50551	13.106	1.9525	2.0317	1.9666	1.0139
#2	.50476	13.055	1.9567	2.0388	1.9825	1.0155
#3	.50396	12.728	1.9631	2.0418	1.9730	1.0102
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0837	2.0069
Stddev	.0037	.0021
%RSD	.17984	.10619
#1	2.0794	2.0084
#2	2.0864	2.0044
#3	2.0852	2.0077
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 12:50:03 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4064.4	73242.	12342.
Stddev	5.8	254.	125.
%RSD	.14225	.34659	1.0112
#1	4057.8	73061.	12215.
#2	4067.6	73133.	12348.
#3	4067.9	73532.	12464.

Sample Name: CCB Acquired: 5/26/2023 12:54:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	-.00105	.00124	F .05906	.00025	-.00019
Stddev	.00049	.00633	.00161	.00153	.00016	.00007
%RSD	67.651	605.22	129.88	2.5912	66.536	37.151
#1	.00026	.00007	.00065	.06071	.00035	-.00012
#2	.00123	-.00786	.00001	.05769	.00006	-.00021
#3	.00066	.00466	.00306	.05878	.00033	-.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00887	F .00029	.00028	-.00002	F .00217	.00084
Stddev	.00170	.00009	.00010	.00021	.00037	.00206
%RSD	19.192	30.304	35.014	860.78	17.151	245.86
#1	.01083	.00033	.00021	.00022	.00188	.00284
#2	.00776	.00019	.00025	-.00014	.00204	-.00128
#3	.00802	.00035	.00040	-.00015	.00259	.00095
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.00020			.00130	
Low Limit		-.00020			-.00130	

Sample Name: CCB Acquired: 5/26/2023 12:54:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02806	-.00112	.01132	.00016	-.00036	-.21553
Stddev	.01503	.00108	.00560	.00005	.00016	.19992
%RSD	53.548	96.110	49.513	30.761	43.403	92.757
#1	.03369	.00002	.00497	.00021	-.00027	-.02238
#2	.03946	-.00127	.01557	.00015	-.00054	-.20263
#3	.01103	-.00212	.01343	.00012	-.00028	-.42160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01076	F .00131	-.00196	-.00165	-.00152	F -.00435
Stddev	.00658	.00003	.00176	.00030	.00040	.00098
%RSD	61.200	2.0389	90.103	18.470	26.406	22.515
#1	.01426	.00134	-.00006	-.00200	-.00113	-.00530
#2	.01485	.00129	-.00228	-.00148	-.00151	-.00334
#3	.00316	.00129	-.00354	-.00146	-.00193	-.00440
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.00120				.00340
Low Limit		-.00120				-.00340

Sample Name: CCB Acquired: 5/26/2023 12:54:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	F 8.7526	-.00088	.00011	-.00007	.00286
Stddev	.00245	.1804	.00031	.00004	.00051	.00052
%RSD	346.02	2.0609	34.943	36.183	734.25	18.268
#1	.00098	8.9223	-.00053	.00014	.00041	.00330
#2	.00301	8.7723	-.00109	.00007	-.00000	.00228
#3	-.00186	8.5631	-.00102	.00010	-.00061	.00299
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00011	-.00053
Stddev	.00034	.00009
%RSD	309.32	17.826
#1	.00042	-.00043
#2	-.00024	-.00053
#3	.00014	-.00062
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 12:54:51 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4175.1	74368.	12514.
Stddev	1.8	363.	77.
%RSD	.04248	.48777	.61340
#1	4173.2	74038.	12452.
#2	4176.7	74756.	12600.
#3	4175.5	74309.	12490.

Sample Name: 140-31777-a-17-a Acquired: 5/26/2023 12:59:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00013	.01427	.00527	F 134.06	.00159	-.00026
Stddev	.00021	.00816	.00100	1.22	.00011	.00002
%RSD	161.21	57.183	18.980	.90972	6.7274	6.3877
#1	-.00026	.00492	.00625	135.45	.00171	-.00024
#2	-.00024	.01997	.00425	133.16	.00151	-.00026
#3	.00011	.01792	.00531	133.57	.00156	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16533	.00010	.00019	-.00003	.00430	.05549
Stddev	.00212	.00006	.00002	.00058	.00041	.00205
%RSD	1.2838	60.393	12.477	1802.7	9.6336	3.6885
#1	.16321	.00009	.00016	-.00070	.00478	.05695
#2	.16532	.00005	.00020	.00021	.00408	.05315
#3	.16745	.00017	.00020	.00039	.00405	.05637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-17-a Acquired: 5/26/2023 12:59:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04948	-.00036	.03998	.00094	.00010	.11152
Stddev	.04584	.00065	.00505	.00005	.00022	.62103
%RSD	92.657	179.86	12.643	5.5220	212.60	556.87
#1	.08847	-.00052	.03976	.00096	-.00002	.55060
#2	-.00102	.00035	.03504	.00088	.00036	.38299
#3	.06098	-.00092	.04515	.00098	-.00003	-.59903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33451	.00167	-.00331	-.00134	-.00126	-.00487
Stddev	.00429	.00009	.00112	.00084	.00061	.00064
%RSD	1.2835	5.1760	33.733	62.527	48.207	13.059
#1	.32956	.00159	-.00276	-.00228	-.00079	-.00477
#2	.33713	.00177	-.00459	-.00107	-.00194	-.00429
#3	.33685	.00167	-.00258	-.00067	-.00104	-.00555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-17-a Acquired: 5/26/2023 12:59:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00469	.39658	.00045	.00038	-.00001	.00424
Stddev	.00293	.02428	.00021	.00005	.00106	.00154
%RSD	62.596	6.1218	46.649	13.225	7160.1	36.413
#1	-.00341	.41954	.00067	.00044	.00117	.00564
#2	-.00260	.39904	.00046	.00038	-.00088	.00450
#3	-.00804	.37117	.00024	.00034	-.00033	.00258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00009	.00182
Stddev	.00021	.00007
%RSD	233.46	3.5937
#1	-.00013	.00177
#2	.00029	.00180
#3	.00011	.00189
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-17-a Acquired: 5/26/2023 12:59:48 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4098.4	73754.	12365.
Stddev	10.5	547.	116.
%RSD	.25677	.74201	.94032
#1	4086.4	73218.	12402.
#2	4103.2	74312.	12459.
#3	4105.7	73731.	12235.

Sample Name: CRI Acquired: 5/26/2023 13:04:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01050	.20567	.01030	.22361	.01019	.00522
Stddev	.00027	.01539	.00145	.00748	.00014	.00003
%RSD	2.5491	7.4824	14.087	3.3452	1.3380	.66289
#1	.01045	.19015	.01160	.21602	.01025	.00518
#2	.01079	.22093	.00874	.22384	.01004	.00522
#3	.01026	.20593	.01057	.23098	.01030	.00525
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2326	.00541	.05059	.00984	.02864	.10056
Stddev	.0234	.00003	.00002	.00019	.00054	.00125
%RSD	.44656	.52198	.04600	1.8812	1.9002	1.2396
#1	5.2058	.00538	.05056	.00983	.02916	.09918
#2	5.2436	.00544	.05060	.01003	.02808	.10161
#3	5.2484	.00542	.05060	.00966	.02868	.10088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 13:04:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0493	.04964	4.9308	.01525	.04052	4.8328
Stddev	.0216	.00117	.0437	.00005	.00029	.2395
%RSD	.42746	2.3506	.88601	.35738	.71074	4.9547
#1	5.0742	.04900	4.8950	.01522	.04021	4.9090
#2	5.0364	.05098	4.9179	.01531	.04057	5.0249
#3	5.0372	.04893	4.9795	.01522	.04078	4.5645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1477	.04239	.30761	.01007	.00964	.05819
Stddev	.0076	.00013	.00175	.00367	.00036	.00122
%RSD	.14786	.30548	.56793	36.435	3.7555	2.0912
#1	5.1458	.04227	.30622	.01146	.00945	.05679
#2	5.1413	.04238	.30957	.01285	.00941	.05884
#3	5.1561	.04253	.30705	.00591	.01005	.05894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 13:04:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01117	F 2.6406	.09621	.05001	.04782	.01169
Stddev	.00146	.7187	.00062	.00012	.00083	.00023
%RSD	13.099	27.217	.64036	.23354	1.7372	1.9553
#1	.01285	1.9211	.09573	.05015	.04743	.01178
#2	.01043	2.6423	.09691	.04996	.04878	.01185
#3	.01022	3.3585	.09600	.04994	.04726	.01143
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02577	.02191
Stddev	.00010	.00002
%RSD	.37153	.06924
#1	.02584	.02189
#2	.02582	.02191
#3	.02566	.02192
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/26/2023 13:04:56 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3978.4	71117.	12393.
Stddev	3.7	119.	48.
%RSD	.09280	.16795	.38975
#1	3975.0	71140.	12449.
#2	3982.3	70987.	12367.
#3	3977.8	71223.	12363.

Sample Name: CCV Acquired: 5/26/2023 13:09:53 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0297	24.403	.51694	2.1061	2.0593	2.1395
Stddev	.0027	.082	.00256	.0054	.0032	.0019
%RSD	.26623	.33804	.49516	.25579	.15439	.08904
#1	1.0301	24.308	.51638	2.1011	2.0609	2.1393
#2	1.0321	24.456	.51470	2.1118	2.0613	2.1377
#3	1.0267	24.445	.51973	2.1053	2.0556	2.1415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.564	.52750	2.0596	2.1168	2.0319	24.665
Stddev	.106	.00082	.0014	.0082	.0019	.078
%RSD	.20234	.15608	.06791	.38616	.09081	.31730
#1	52.539	.52845	2.0611	2.1252	2.0305	24.600
#2	52.473	.52702	2.0583	2.1088	2.0340	24.642
#3	52.681	.52704	2.0594	2.1163	2.0312	24.752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 13:09:53 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.486	2.0275	50.824	2.0888	2.1210	50.956
Stddev	.065	.0051	.139	.0025	.0008	.329
%RSD	.12784	.25228	.27332	.12014	.03618	.64544
#1	50.470	2.0227	50.727	2.0913	2.1213	50.591
#2	50.432	2.0329	50.762	2.0888	2.1216	51.051
#3	50.558	2.0268	50.983	2.0863	2.1201	51.227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.362	2.0834	2.0857	.55047	.52154	.51395
Stddev	.116	.0017	.0020	.00513	.00084	.00141
%RSD	.22663	.08357	.09593	.93161	.16187	.27374
#1	51.248	2.0853	2.0875	.54649	.52169	.51432
#2	51.481	2.0828	2.0861	.54866	.52064	.51514
#3	51.356	2.0820	2.0836	.55625	.52231	.51240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 13:09:53 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54888	F 7.1761	1.9672	2.0466	1.9695	1.0338
Stddev	.00401	.3567	.0034	.0034	.0077	.0024
%RSD	.73029	4.9706	.17140	.16354	.38895	.22928
#1	.55283	6.8400	1.9710	2.0438	1.9607	1.0341
#2	.54482	7.1380	1.9659	2.0503	1.9730	1.0312
#3	.54899	7.5503	1.9646	2.0457	1.9748	1.0359
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.1123	2.0762
Stddev	.0038	.0010
%RSD	.17943	.04751
#1	2.1154	2.0770
#2	2.1081	2.0751
#3	2.1136	2.0766
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 13:09:53 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3858.9	70079.	12243.
Stddev	2.2	383.	104.
%RSD	.05629	.54602	.85010
#1	3858.3	69681.	12160.
#2	3861.3	70112.	12360.
#3	3857.1	70445.	12209.

Sample Name: CCB Acquired: 5/26/2023 13:14:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	.01961	-.00092	F .04608	.00024	-.00021
Stddev	.00028	.04409	.00079	.00058	.00007	.00007
%RSD	47.989	224.90	86.312	1.2600	29.212	31.085
#1	.00089	.00469	-.00130	.04550	.00030	-.00014
#2	.00053	.06922	-.00145	.04666	.00025	-.00026
#3	.00034	-.01510	-.00001	.04609	.00017	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.03600		
Low Limit				-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01325	F .00021	-.00010	-.00070	F .00350	.00114
Stddev	.00409	.00002	.00016	.00041	.00013	.00227
%RSD	30.878	10.121	156.81	59.584	3.7092	200.34
#1	.01201	.00019	-.00019	-.00081	.00342	.00374
#2	.01782	.00022	-.00021	-.00104	.00364	.00009
#3	.00993	.00023	.00008	-.00024	.00342	-.00043
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.00020			.00130	
Low Limit		-.00020			-.00130	

Sample Name: CCB Acquired: 5/26/2023 13:14:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03960	.00017	.01841	.00022	-.00031	-.30085
Stddev	.02189	.00068	.01969	.00009	.00019	.43617
%RSD	55.274	388.17	106.95	42.233	61.507	144.98
#1	.06103	.00025	-.00187	.00031	-.00053	-.19467
#2	.01728	.00081	.03745	.00021	-.00022	.07243
#3	.04049	-.00054	.01966	.00013	-.00018	-.78031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01347	F .00137	-.00139	F -.00433	-.00130	-.00103
Stddev	.00625	.00026	.00082	.00200	.00110	.00045
%RSD	46.419	18.761	58.695	46.286	84.358	43.929
#1	.00865	.00110	-.00191	-.00592	-.00004	-.00154
#2	.02054	.00161	-.00045	-.00498	-.00189	-.00067
#3	.01123	.00140	-.00180	-.00208	-.00199	-.00089
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.00120		.00200		
Low Limit		-.00120		-.00200		

Sample Name: CCB Acquired: 5/26/2023 13:14:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00201	F 5.7284	-.00071	.00010	-.00091	.00086
Stddev	.00089	.0796	.00026	.00005	.00054	.00281
%RSD	44.431	1.3891	37.410	46.124	59.666	326.54
#1	.00304	5.6375	-.00059	.00013	-.00150	-.00153
#2	.00146	5.7621	-.00052	.00012	-.00044	.00015
#3	.00153	5.7856	-.00101	.00005	-.00077	.00396
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00014	-.00020
Stddev	.00025	.00018
%RSD	175.40	88.041
#1	.00038	-.00007
#2	-.00011	-.00013
#3	.00015	-.00040
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 13:14:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3997.9	71536.	12363.
Stddev	54.1	818.	63.
%RSD	1.3542	1.1431	.50724
#1	3952.4	71114.	12311.
#2	3983.6	71016.	12433.
#3	4057.8	72478.	12345.

Sample Name: 140-31669-a-3-a @3 Acquired: 5/26/2023 13:26:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01868	.44972	.00400	F 43.453	.01069	-.00025
Stddev	.00025	.00989	.00076	.136	.00010	.00002
%RSD	1.3545	2.1992	18.975	.31287	.92412	8.0820
#1	.01887	.44096	.00346	43.376	.01073	-.00023
#2	.01878	.46045	.00487	43.610	.01058	-.00025
#3	.01839	.44774	.00368	43.373	.01077	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.64887	.00080	-.00719	.02845	.01318	.27102
Stddev	.00198	.00003	.00034	.00051	.00024	.00094
%RSD	.30549	4.1037	4.7317	1.8025	1.8045	.34777
#1	.64700	.00079	-.00687	.02903	.01345	.27005
#2	.65095	.00078	-.00755	.02822	.01302	.27106
#3	.64867	.00084	-.00715	.02809	.01306	.27194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-3-a @3 Acquired: 5/26/2023 13:26:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06012	.00027	.10909	.00858	.05216	.21170
Stddev	.03147	.00046	.00807	.00008	.00009	.40480
%RSD	52.345	169.85	7.3959	.90587	.17157	191.21
#1	.04137	.00033	.11819	.00856	.05227	.58916
#2	.04254	-.00022	.10625	.00851	.05210	-.21580
#3	.09645	.00070	.10282	.00866	.05212	.26175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.69222	.03309	-.00056	.00809	.04128	.00794
Stddev	.00611	.00043	.00050	.00524	.00151	.00047
%RSD	.88238	1.2898	89.266	64.809	3.6557	5.9430
#1	.68597	.03355	-.00004	.01296	.04299	.00827
#2	.69817	.03271	-.00060	.00254	.04067	.00814
#3	.69251	.03300	-.00104	.00877	.04016	.00740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-3-a @3 Acquired: 5/26/2023 13:26:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01315	582.62	.01702	.00175	.02363	-.00603
Stddev	.00233	1.11	.00049	.00006	.00044	.00081
%RSD	17.710	.19019	2.8799	3.6400	1.8694	13.380
#1	.01545	581.39	.01646	.00175	.02336	-.00559
#2	.01320	583.55	.01730	.00169	.02338	-.00697
#3	.01079	582.90	.01731	.00182	.02413	-.00555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00090	.02390
Stddev	.00025	.00003
%RSD	27.779	.13971
#1	.00077	.02390
#2	.00119	.02393
#3	.00074	.02387
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-3-a @3 Acquired: 5/26/2023 13:26:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3981.0	71916.	12604.
Stddev	18.8	436.	43.
%RSD	.47266	.60666	.33952
#1	3964.6	71578.	12555.
#2	3976.7	71762.	12633.
#3	4001.5	72408.	12625.

Sample Name: 140-31669-a-10-a @3 Acquired: 5/26/2023 13:31:33 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00088	.40854	.00433	F 42.957	.00770	-.00026
Stddev	.00030	.00607	.00062	.079	.00005	.00002
%RSD	34.235	1.4868	14.225	.18396	.65919	8.8518
#1	.00062	.40186	.00376	43.043	.00771	-.00028
#2	.00082	.41002	.00498	42.942	.00775	-.00024
#3	.00121	.41373	.00425	42.887	.00765	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.43726	.00087	-.00733	.01084	.01107	.13701
Stddev	.00339	.00010	.00002	.00034	.00025	.00187
%RSD	.77483	11.077	.31558	3.1330	2.2370	1.3631
#1	.43399	.00079	-.00733	.01089	.01078	.13487
#2	.44076	.00098	-.00731	.01115	.01124	.13835
#3	.43702	.00085	-.00735	.01048	.01118	.13779
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a @3 Acquired: 5/26/2023 13:31:33 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08245	.00047	.09892	.00543	.04967	1.0718
Stddev	.01625	.00046	.00361	.00002	.00018	.5446
%RSD	19.713	99.915	3.6485	.37551	.35479	50.809
#1	.10117	.00039	.09499	.00546	.04959	1.3534
#2	.07421	.00004	.10207	.00542	.04954	.44407
#3	.07197	.00096	.09971	.00542	.04987	1.4179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.69256	.02092	-.00992	.00953	.03848	.00565
Stddev	.00876	.00015	.00079	.00428	.00133	.00056
%RSD	1.2646	.73594	7.9499	44.913	3.4544	9.8421
#1	.68884	.02088	-.00958	.01026	.04001	.00501
#2	.70256	.02109	-.01082	.01339	.03768	.00597
#3	.68627	.02079	-.00936	.00493	.03775	.00597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-10-a @3 Acquired: 5/26/2023 13:31:33 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01156	573.78	.01590	.00145	.01128	-.00413
Stddev	.00211	2.41	.00017	.00006	.00075	.00309
%RSD	18.209	.42030	1.0926	3.9442	6.6587	74.906
#1	.00931	571.20	.01580	.00149	.01138	-.00598
#2	.01189	575.98	.01580	.00148	.01049	-.00056
#3	.01349	574.16	.01610	.00138	.01198	-.00584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00064	.01927
Stddev	.00032	.00010
%RSD	50.600	.52804
#1	.00090	.01939
#2	.00073	.01925
#3	.00028	.01919
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-10-a @3 Acquired: 5/26/2023 13:31:33 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4039.5	73001.	12769.
Stddev	13.4	169.	47.
%RSD	.33090	.23142	.36764
#1	4027.2	72880.	12782.
#2	4037.6	72929.	12717.
#3	4053.7	73194.	12807.

Sample Name: 31669-a-10-a PDS@3 Acquired: 5/26/2023 13:36:29 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05154	2.3156	.10805	F 43.408	.11235	.05169
Stddev	.00019	.0090	.00007	.147	.00007	.00038
%RSD	.37623	.38849	.06655	.33842	.06328	.72573
#1	.05163	2.3059	.10797	43.257	.11234	.05136
#2	.05131	2.3173	.10808	43.416	.11242	.05163
#3	.05166	2.3236	.10811	43.550	.11228	.05210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.372	.05251	.09611	.22327	.26783	1.1229
Stddev	.293	.00011	.00025	.00118	.00137	.0063
%RSD	.56990	.20972	.26397	.52685	.50993	.56403
#1	51.042	.05264	.09602	.22216	.26853	1.1186
#2	51.602	.05243	.09640	.22314	.26870	1.1301
#3	51.471	.05248	.09591	.22450	.26625	1.1198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDS@3 Acquired: 5/26/2023 13:36:29 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.350	.10424	9.7261	.10752	.57782	51.079
Stddev	.185	.00073	.0819	.00070	.00027	.605
%RSD	.38218	.69597	.84254	.65110	.04667	1.1835
#1	48.158	.10341	9.6334	.10691	.57761	51.535
#2	48.527	.10453	9.7889	.10736	.57773	50.393
#3	48.364	.10477	9.7559	.10828	.57813	51.308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.543	.53648	5.1086	.11045	.13613	.51530
Stddev	.050	.00023	.0004	.00580	.00167	.00284
%RSD	.09824	.04298	.00841	5.2544	1.2235	.55087
#1	50.498	.53651	5.1091	.10375	.13423	.51246
#2	50.596	.53669	5.1082	.11381	.13735	.51814
#3	50.535	.53623	5.1085	.11380	.13680	.51530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDS@3 Acquired: 5/26/2023 13:36:29 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15717	573.89	.49452	.51232	.11437	.38956
Stddev	.00151	3.54	.00119	.00079	.00134	.00487
%RSD	.96190	.61729	.23994	.15495	1.1697	1.2513
#1	.15841	569.80	.49423	.51141	.11385	.38842
#2	.15762	575.93	.49350	.51287	.11589	.38536
#3	.15548	575.93	.49582	.51268	.11337	.39491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21035	.53381
Stddev	.00119	.00042
%RSD	.56393	.07796
#1	.20898	.53420
#2	.21107	.53385
#3	.21100	.53337
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31669-a-10-a PDS@3 Acquired: 5/26/2023 13:36:29 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3949.6	71839.	12536.
Stddev	14.3	154.	112.
%RSD	.36269	.21368	.89631
#1	3934.7	71875.	12641.
#2	3950.8	71971.	12417.
#3	3963.2	71670.	12548.

Sample Name: 31669-a-10-a PDSD@3 Acquired: 5/26/2023 13:41:09 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05222	2.3058	.10697	F 43.522	.11241	.05187
Stddev	.00046	.0189	.00049	.091	.00029	.00010
%RSD	.88372	.82017	.45830	.20907	.25358	.18872
#1	.05241	2.2850	.10709	43.472	.11215	.05181
#2	.05255	2.3107	.10739	43.466	.11271	.05182
#3	.05169	2.3219	.10643	43.627	.11236	.05198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.275	.05247	.09591	.22254	.26707	1.1318
Stddev	.259	.00018	.00010	.00109	.00044	.0095
%RSD	.48598	.34498	.10215	.48898	.16329	.84153
#1	53.003	.05247	.09597	.22269	.26756	1.1222
#2	53.519	.05229	.09580	.22138	.26692	1.1413
#3	53.303	.05265	.09597	.22354	.26672	1.1319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDSD@3 Acquired: 5/26/2023 13:41:09 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.449	.10494	10.122	.10784	.56984	52.793
Stddev	.238	.00146	.083	.00034	.00111	.749
%RSD	.47081	1.3906	.81929	.31395	.19396	1.4180
#1	50.207	.10563	10.049	.10772	.56877	51.962
#2	50.681	.10326	10.212	.10758	.56977	53.003
#3	50.457	.10592	10.106	.10823	.57098	53.414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.658	.53612	5.0200	.10840	.13603	.50647
Stddev	.193	.00073	.0050	.00585	.00059	.00266
%RSD	.36663	.13638	.10061	5.3965	.43414	.52501
#1	52.448	.53530	5.0163	.10592	.13574	.50946
#2	52.828	.53638	5.0180	.10419	.13563	.50437
#3	52.697	.53669	5.0258	.11508	.13671	.50557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a PDSD@3 Acquired: 5/26/2023 13:41:09 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15766	575.58	.48451	.51245	.11316	.38671
Stddev	.00277	2.45	.00123	.00061	.00026	.00214
%RSD	1.7591	.42492	.25353	.11835	.22742	.55369
#1	.16083	572.81	.48414	.51214	.11339	.38548
#2	.15651	577.43	.48350	.51205	.11289	.38546
#3	.15565	576.51	.48587	.51315	.11322	.38918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21041	.53266
Stddev	.00056	.00047
%RSD	.26801	.08813
#1	.20977	.53284
#2	.21085	.53213
#3	.21061	.53301
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31669-a-10-a PDSD@3 Acquired: 5/26/2023 13:41:09 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3942.4	71424.	12389.
Stddev	11.3	209.	125.
%RSD	.28666	.29252	1.0082
#1	3929.5	71201.	12383.
#2	3950.3	71615.	12267.
#3	3947.5	71455.	12517.

Sample Name: 140-31669-a-17-a @3 Acquired: 5/26/2023 13:45:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00543	.40615	.00434	F 42.600	.00868	-.00026
Stddev	.00030	.00404	.00013	.178	.00006	.00001
%RSD	5.5281	.99417	3.0640	.41819	.66034	2.5620
#1	.00511	.41073	.00440	42.806	.00873	-.00026
#2	.00570	.40461	.00419	42.503	.00862	-.00026
#3	.00549	.40311	.00444	42.491	.00868	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48673	.00089	-.00715	.01149	.01240	.12327
Stddev	.00396	.00007	.00009	.00019	.00021	.00117
%RSD	.81279	7.4692	1.2809	1.6553	1.6598	.94572
#1	.49065	.00095	-.00705	.01159	.01254	.12201
#2	.48680	.00082	-.00722	.01161	.01250	.12431
#3	.48273	.00091	-.00718	.01127	.01216	.12349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-17-a @3 Acquired: 5/26/2023 13:45:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11808	.00006	.11168	.00596	.04989	.65125
Stddev	.03073	.00072	.00389	.00008	.00046	.73366
%RSD	26.029	1232.6	3.4875	1.3821	.92464	112.65
#1	.13082	-.00052	.10724	.00605	.04986	1.0571
#2	.14038	.00086	.11333	.00595	.05036	-.19567
#3	.08302	-.00017	.11449	.00588	.04944	1.0923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.82704	.02159	.03507	.01072	.04023	.00407
Stddev	.01075	.00040	.00359	.00205	.00046	.00063
%RSD	1.2995	1.8619	10.237	19.134	1.1412	15.451
#1	.83939	.02204	.03644	.01275	.04003	.00335
#2	.81982	.02145	.03100	.00865	.04076	.00436
#3	.82191	.02128	.03778	.01076	.03991	.00451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31669-a-17-a @3 Acquired: 5/26/2023 13:45:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01129	587.19	.02643	.00161	.05551	-.00726
Stddev	.00069	.55	.00056	.00004	.00134	.00032
%RSD	6.1049	.09379	2.1314	2.5527	2.4180	4.4006
#1	.01209	587.10	.02700	.00161	.05705	-.00720
#2	.01088	586.69	.02643	.00164	.05491	-.00761
#3	.01091	587.78	.02587	.00156	.05458	-.00698
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00072	.03006
Stddev	.00027	.00002
%RSD	36.949	.06457
#1	.00055	.03007
#2	.00059	.03004
#3	.00103	.03008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31669-a-17-a @3 Acquired: 5/26/2023 13:45:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4032.7	73062.	12574.
Stddev	19.2	965.	116.
%RSD	.47593	1.3203	.92496
#1	4010.6	72098.	12439.
#2	4045.7	73061.	12640.
#3	4041.6	74027.	12641.

Sample Name: 140-31774-a-1-a @2 Acquired: 5/26/2023 13:50:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00310	.74935	.00745	F 65.887	.06566	-.00026
Stddev	.00041	.00562	.00099	.427	.00013	.00001
%RSD	13.091	.75054	13.337	.64761	.19352	5.4833
#1	.00291	.75382	.00802	65.901	.06555	-.00025
#2	.00283	.75119	.00803	66.307	.06580	-.00025
#3	.00356	.74303	.00631	65.454	.06562	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.8341	.00114	-.00704	.01716	.01727	1.4742
Stddev	.0153	.00004	.00012	.00010	.00020	.0026
%RSD	.39884	3.4969	1.7297	.60295	1.1747	.17885
#1	3.8382	.00111	-.00710	.01725	.01719	1.4757
#2	3.8469	.00119	-.00713	.01705	.01750	1.4757
#3	3.8172	.00112	-.00690	.01718	.01711	1.4712
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-1-a @2 Acquired: 5/26/2023 13:50:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.35999	.00078	.26946	.04628	.05798	.30439
Stddev	.00382	.00007	.00847	.00029	.00026	.49949
%RSD	1.0612	9.1860	3.1419	.62329	.45292	164.09
#1	.35798	.00071	.26736	.04632	.05768	.20068
#2	.36439	.00085	.26224	.04654	.05818	-.13510
#3	.35759	.00077	.27878	.04597	.05808	.84759
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.91029	.00382	.04630	-.00457	.02875	.00739
Stddev	.00516	.00031	.00164	.00261	.00262	.00196
%RSD	.56642	8.1229	3.5334	57.174	9.1010	26.514
#1	.90982	.00397	.04441	-.00749	.02701	.00756
#2	.90539	.00402	.04713	-.00379	.02748	.00535
#3	.91567	.00346	.04736	-.00244	.03176	.00926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-1-a @2 Acquired: 5/26/2023 13:50:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01102	643.23	.00867	.02180	.02661	.00418
Stddev	.00190	.47	.00068	.00003	.00017	.00190
%RSD	17.281	.07279	7.7917	.14692	.64197	45.439
#1	.01001	642.82	.00826	.02178	.02670	.00517
#2	.00984	643.74	.00945	.02178	.02671	.00199
#3	.01322	643.13	.00831	.02184	.02641	.00539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00162	.09170
Stddev	.00006	.00029
%RSD	4.0082	.31414
#1	.00166	.09163
#2	.00154	.09201
#3	.00165	.09145
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-1-a @2 Acquired: 5/26/2023 13:50:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4006.9	72424.	12470.
Stddev	14.2	485.	112.
%RSD	.35469	.66911	.89708
#1	4005.0	72102.	12407.
#2	3993.7	72189.	12404.
#3	4021.9	72981.	12599.

Sample Name: 140-31774-a-6-a @2 Acquired: 5/26/2023 13:55:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00143	.90238	.00783	F 65.852	.09703	-.00024
Stddev	.00013	.00826	.00100	.069	.00079	.00001
%RSD	9.3686	.91581	12.824	.10463	.81885	4.1033
#1	.00143	.89740	.00884	65.776	.09775	-.00024
#2	.00130	.91192	.00683	65.871	.09716	-.00024
#3	.00157	.89782	.00782	65.910	.09618	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2572	.00167	-.00853	.02051	.01898	1.2661
Stddev	.0267	.00004	.00011	.00019	.00005	.0014
%RSD	.50786	2.6246	1.3003	.94053	.27208	.11391
#1	5.2535	.00163	-.00850	.02073	.01895	1.2646
#2	5.2855	.00166	-.00843	.02040	.01895	1.2675
#3	5.2325	.00171	-.00865	.02040	.01904	1.2663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-6-a @2 Acquired: 5/26/2023 13:55:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.38933	.00081	.34814	.04922	.06791	.27808
Stddev	.01207	.00092	.00765	.00019	.00026	.18426
%RSD	3.1002	113.56	2.1971	.38350	.38794	66.262
#1	.39254	.00159	.35691	.04908	.06766	.20888
#2	.37598	.00106	.34460	.04943	.06789	.13843
#3	.39947	-.00021	.34290	.04913	.06819	.48691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.95067	.00188	.01081	-.00424	.03476	.00815
Stddev	.00751	.00033	.00061	.00404	.00175	.00179
%RSD	.79049	17.419	5.6579	95.465	5.0428	21.961
#1	.94484	.00171	.01053	-.00875	.03676	.00630
#2	.95915	.00225	.01038	-.00094	.03348	.00826
#3	.94802	.00166	.01151	-.00302	.03404	.00988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-6-a @2 Acquired: 5/26/2023 13:55:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01257	744.53	.06532	.02978	.02355	.00376
Stddev	.00038	2.60	.00028	.00017	.00041	.00209
%RSD	3.0510	.34949	.42535	.55442	1.7375	55.564
#1	.01239	743.14	.06515	.02993	.02390	.00618
#2	.01301	747.53	.06564	.02982	.02310	.00249
#3	.01232	742.91	.06518	.02961	.02366	.00262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00187	.11638
Stddev	.00024	.00055
%RSD	12.623	.47162
#1	.00175	.11698
#2	.00172	.11590
#3	.00214	.11625
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-6-a @2 Acquired: 5/26/2023 13:55:45 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3992.4	72028.	12452.
Stddev	11.1	280.	86.
%RSD	.27713	.38910	.68975
#1	3980.1	71721.	12440.
#2	3995.3	72092.	12373.
#3	4001.7	72270.	12543.

Sample Name: 140-31774-a-11-a @2 Acquired: 5/26/2023 14:00:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00161	.99966	.00715	F 66.612	.07832	-.00026
Stddev	.00050	.00979	.00174	.086	.00021	.00001
%RSD	31.301	.97926	24.350	.12960	.27439	2.0005
#1	.00218	.98887	.00596	66.699	.07829	-.00025
#2	.00144	1.0080	.00633	66.609	.07854	-.00026
#3	.00122	1.0022	.00914	66.527	.07811	-.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.9567	.00166	-.00869	.02147	.01863	1.7079
Stddev	.0166	.00007	.00034	.00023	.00032	.0038
%RSD	.27867	4.2363	3.9499	1.0738	1.7226	.22117
#1	5.9410	.00158	-.00830	.02161	.01900	1.7036
#2	5.9551	.00172	-.00885	.02160	.01850	1.7099
#3	5.9741	.00168	-.00892	.02120	.01839	1.7103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-11-a @2 Acquired: 5/26/2023 14:00:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40407	-.00007	.41083	.04064	.06748	-.51854
Stddev	.02462	.00098	.00611	.00016	.00050	.14528
%RSD	6.0922	1338.1	1.4870	.39656	.73885	28.016
#1	.40050	-.00031	.41760	.04069	.06805	-.35279
#2	.38143	.00101	.40918	.04046	.06729	-.62378
#3	.43027	-.00092	.40572	.04076	.06710	-.57905
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.83094	-.00004	.01778	-.00423	.03457	.00898
Stddev	.00477	.00001	.00015	.00352	.00162	.00051
%RSD	.57384	38.010	.86175	83.355	4.6821	5.6582
#1	.82747	-.00006	.01763	-.00277	.03626	.00939
#2	.83638	-.00003	.01778	-.00167	.03440	.00841
#3	.82897	-.00003	.01794	-.00825	.03304	.00914
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-11-a @2 Acquired: 5/26/2023 14:00:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01430	747.22	.01480	.03314	.02856	.00527
Stddev	.00165	3.40	.00061	.00012	.00094	.00154
%RSD	11.558	.45494	4.1173	.36197	3.2891	29.324
#1	.01251	743.35	.01545	.03328	.02749	.00677
#2	.01463	748.59	.01468	.03305	.02926	.00369
#3	.01576	749.73	.01425	.03309	.02893	.00534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00171	.09061
Stddev	.00007	.00021
%RSD	3.8700	.22656
#1	.00176	.09085
#2	.00172	.09049
#3	.00163	.09050
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-11-a @2 Acquired: 5/26/2023 14:00:46 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3957.1	71161.	12263.
Stddev	24.7	221.	17.
%RSD	.62534	.31095	.13991
#1	3931.6	71183.	12258.
#2	3958.6	70930.	12282.
#3	3981.1	71371.	12249.

Sample Name: 140-31774-a-17-a @2 Acquired: 5/26/2023 14:05:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	.33417	.00841	F 96.217	.06044	-.00031
Stddev	.00019	.23604	.00198	.617	.00035	.00000
%RSD	368.70	70.636	23.583	.64135	.57223	.62538
#1	-.00011	.19542	.00945	95.504	.06012	-.00031
#2	.00016	.20037	.00965	96.559	.06039	-.00031
#3	-.00020	.60671	.00612	96.587	.06081	-.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16184	.00094	-.00873	.00678	.00520	.04957
Stddev	.02987	.00005	.00012	.00028	.00021	.00260
%RSD	18.459	5.7201	1.4301	4.0742	4.0600	5.2441
#1	.14589	.00100	-.00883	.00683	.00498	.04806
#2	.14332	.00094	-.00876	.00648	.00541	.04807
#3	.19630	.00089	-.00859	.00702	.00522	.05257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-17-a @2 Acquired: 5/26/2023 14:05:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01233	-.00061	.09586	.00666	.06278	-.38029
Stddev	.02319	.00110	.05464	.00007	.00030	.31439
%RSD	188.17	180.50	56.994	1.0168	.48051	82.669
#1	.00033	-.00149	.05919	.00661	.06249	-.74302
#2	-.00241	-.00098	.06974	.00664	.06276	-.21156
#3	.03906	.00063	.15866	.00674	.06309	-.18630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16637	-.00778	-.01851	-.01139	.02988	.00645
Stddev	.05128	.00020	.00298	.00356	.00165	.00152
%RSD	30.826	2.5859	16.104	31.243	5.5346	23.568
#1	.14090	-.00774	-.01509	-.01313	.02897	.00815
#2	.13280	-.00760	-.02056	-.01375	.03179	.00598
#3	.22540	-.00800	-.01989	-.00730	.02888	.00522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-17-a @2 Acquired: 5/26/2023 14:05:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01131	700.38	-.00174	.00121	.00412	-.00462
Stddev	.00157	3.53	.00031	.00009	.00102	.00102
%RSD	13.920	.50472	17.856	7.0576	24.877	22.062
#1	.00978	696.30	-.00195	.00117	.00341	-.00558
#2	.01122	702.54	-.00138	.00116	.00365	-.00355
#3	.01292	702.29	-.00188	.00131	.00529	-.00474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00048	.05143
Stddev	.00032	.00012
%RSD	66.634	.22826
#1	.00065	.05129
#2	.00011	.05151
#3	.00066	.05148
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-17-a @2 Acquired: 5/26/2023 14:05:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3917.2	70489.	12014.
Stddev	8.7	60.	48.
%RSD	.22171	.08515	.39959
#1	3916.9	70503.	11963.
#2	3908.7	70423.	12058.
#3	3926.0	70541.	12020.

Sample Name: 31669-a-10-a SD@15 Acquired: 5/26/2023 14:10:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.10985	.00119	9.2554	.00163	-.00029
Stddev	.00047	.01593	.00091	.0198	.00009	.00000
%RSD	87.237	14.506	77.043	.21440	5.2272	.92942
#1	.00075	.12252	.00054	9.2326	.00160	-.00029
#2	.00087	.09196	.00223	9.2686	.00157	-.00029
#3	.00000	.11507	.00078	9.2651	.00173	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11626	.00030	-.00171	.00170	.00546	.03124
Stddev	.00079	.00004	.00002	.00022	.00018	.00192
%RSD	.67990	14.116	1.0791	13.077	3.3763	6.1530
#1	.11610	.00032	-.00170	.00155	.00548	.02965
#2	.11712	.00033	-.00169	.00159	.00563	.03070
#3	.11557	.00025	-.00173	.00195	.00527	.03338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a SD@15 Acquired: 5/26/2023 14:10:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02243	-.00025	.03541	.00129	.01013	.25705
Stddev	.00548	.00038	.00778	.00004	.00023	.55476
%RSD	24.427	154.14	21.968	3.2739	2.2341	215.82
#1	-.01882	.00018	.03346	.00125	.01022	.74785
#2	-.02873	-.00037	.02879	.00129	.00987	-.34486
#3	-.01973	-.00055	.04397	.00134	.01030	.36815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14461	.00554	-.00235	-.00280	.00604	-.00015
Stddev	.00321	.00025	.00169	.00109	.00076	.00101
%RSD	2.2200	4.5927	72.197	38.978	12.530	695.33
#1	.14627	.00535	-.00417	-.00312	.00649	-.00053
#2	.14091	.00583	-.00083	-.00369	.00517	-.00091
#3	.14665	.00545	-.00204	-.00158	.00647	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31669-a-10-a SD@15 Acquired: 5/26/2023 14:10:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00472	128.55	.00308	.00034	.00209	.00059
Stddev	.00228	.06	.00033	.00012	.00097	.00055
%RSD	48.229	.04965	10.780	34.557	46.455	93.439
#1	.00558	128.54	.00311	.00032	.00303	.00084
#2	.00643	128.61	.00273	.00024	.00213	-.00004
#3	.00214	128.48	.00340	.00047	.00110	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00007	.00494
Stddev	.00031	.00008
%RSD	421.85	1.6440
#1	-.00042	.00500
#2	.00001	.00498
#3	.00018	.00485
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31669-a-10-a SD@15 Acquired: 5/26/2023 14:10:54 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3961.1	71061.	12215.
Stddev	12.9	294.	111.
%RSD	.32661	.41423	.90862
#1	3946.4	70727.	12256.
#2	3970.7	71284.	12089.
#3	3966.2	71171.	12299.

Sample Name: CCV Acquired: 5/26/2023 14:15:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0129	24.603	.51343	2.1000	2.0335	2.1542
Stddev	.0015	.144	.00102	.0056	.0122	.0146
%RSD	.15236	.58706	.19890	.26858	.59868	.67739
#1	1.0138	24.493	.51229	2.1064	2.0243	2.1708
#2	1.0111	24.549	.51375	2.0957	2.0289	2.1432
#3	1.0138	24.766	.51426	2.0979	2.0473	2.1487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.933	.52214	2.0326	2.0779	1.9813	24.980
Stddev	.449	.00255	.0095	.0053	.0064	.125
%RSD	.86464	.48859	.46845	.25350	.32320	.50188
#1	51.504	.51949	2.0233	2.0743	1.9744	24.906
#2	51.897	.52234	2.0322	2.0753	1.9827	24.909
#3	52.400	.52459	2.0423	2.0839	1.9870	25.125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 14:15:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.998	2.0398	51.283	2.0823	2.1078	50.115
Stddev	.354	.0074	.504	.0032	.0103	.329
%RSD	.69356	.36317	.98317	.15521	.48789	.65654
#1	50.721	2.0380	50.850	2.0858	2.0963	50.492
#2	50.878	2.0335	51.163	2.0794	2.1111	49.968
#3	51.397	2.0479	51.837	2.0817	2.1160	49.884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.773	2.0576	2.0610	.53948	.51695	.50973
Stddev	.185	.0098	.0127	.00483	.00294	.00091
%RSD	.35657	.47521	.61785	.89506	.56866	.17885
#1	51.813	2.0478	2.0475	.53538	.51376	.50914
#2	51.572	2.0576	2.0628	.53825	.51752	.50927
#3	51.935	2.0673	2.0727	.54480	.51956	.51078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 14:15:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54375	F 9.7439	1.9400	2.0330	1.9806	1.0276
Stddev	.00320	.0261	.0104	.0077	.0105	.0085
%RSD	.58801	.26746	.53392	.38090	.52855	.82857
#1	.54643	9.7175	1.9297	2.0307	1.9730	1.0206
#2	.54022	9.7445	1.9398	2.0266	1.9761	1.0251
#3	.54461	9.7696	1.9504	2.0416	1.9925	1.0371
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0742	2.0517
Stddev	.0054	.0072
%RSD	.26170	.34830
#1	2.0684	2.0448
#2	2.0751	2.0513
#3	2.0792	2.0591
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 14:15:52 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3908.2	70798.	12211.
Stddev	5.1	517.	47.
%RSD	.13153	.73044	.38583
#1	3913.2	70217.	12230.
#2	3908.3	71209.	12245.
#3	3903.0	70967.	12157.

Sample Name: CCB Acquired: 5/26/2023 14:20:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00095	-.01691	-.00075	F .03947	.00023	-.00021
Stddev	.00043	.01363	.00062	.00083	.00013	.00005
%RSD	45.037	80.639	82.314	2.1127	55.463	25.808
#1	.00144	-.00196	-.00034	.03973	.00037	-.00015
#2	.00073	-.02866	-.00045	.04015	.00012	-.00023
#3	.00067	-.02010	-.00146	.03854	.00020	-.00025
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.00077			.03600		
Low Limit	-.00077			-.03600		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01059	F .00026	-.00004	-.00060	F .00343	.00248
Stddev	.00189	.00006	.00009	.00021	.00024	.00055
%RSD	17.815	23.635	250.32	34.584	6.9627	22.095
#1	.01277	.00029	-.00002	-.00078	.00366	.00310
#2	.00963	.00019	.00005	-.00063	.00344	.00209
#3	.00938	.00030	-.00013	-.00038	.00318	.00224
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.00020			.00130	
Low Limit		-.00020			-.00130	

Sample Name: CCB Acquired: 5/26/2023 14:20:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01767	-.00082	.01874	.00015	-.00011	.13211
Stddev	.03729	.00065	.00594	.00002	.00017	.74885
%RSD	211.10	80.003	31.713	15.901	160.08	566.82
#1	-.03998	-.00016	.01663	.00018	-.00003	.92628
#2	.02539	-.00082	.02544	.00013	-.00031	.03125
#3	-.03840	-.00147	.01414	.00015	.00001	-.56120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00734	F .00147	-.00128	F -.00356	-.00131	-.00300
Stddev	.00317	.00020	.00217	.00048	.00033	.00049
%RSD	43.183	13.743	169.14	13.586	25.195	16.178
#1	.00993	.00163	.00056	-.00300	-.00147	-.00245
#2	.00830	.00124	-.00368	-.00380	-.00153	-.00316
#3	.00380	.00154	-.00073	-.00388	-.00093	-.00338
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.00120		.00200		
Low Limit		-.00120		-.00200		

Sample Name: CCB Acquired: 5/26/2023 14:20:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00226	F 6.5572	-.00055	-.00002	-.00062	.00108
Stddev	.00170	.0524	.00052	.00010	.00058	.00083
%RSD	75.183	.79928	93.520	579.92	93.178	76.748
#1	.00077	6.4967	-.00022	.00007	-.00010	.00193
#2	.00190	6.5865	-.00030	-.00000	-.00125	.00104
#3	.00411	6.5884	-.00115	-.00012	-.00052	.00027
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00023	-.00020
Stddev	.00011	.00002
%RSD	48.019	11.543
#1	.00010	-.00018
#2	.00029	-.00022
#3	.00029	-.00020
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 14:20:40 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3982.6	71276.	12187.
Stddev	32.5	585.	151.
%RSD	.81548	.82059	1.2401
#1	3949.1	71210.	12347.
#2	3984.7	70727.	12167.
#3	4013.9	71891.	12047.

Sample Name: 140-31774-a-32-a @2 Acquired: 5/26/2023 14:25:39 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00363	31.132	.02473	F 96.580	.15233	-.00009
Stddev	.00024	.124	.00127	.534	.00041	.00002
%RSD	6.5317	.39920	5.1291	.55320	.26854	24.711
#1	.00390	31.228	.02327	96.554	.15189	-.00008
#2	.00345	31.177	.02534	96.059	.15240	-.00011
#3	.00355	30.992	.02558	97.126	.15270	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	90.880	.00119	-.00513	.10918	.02299	1.8218
Stddev	.254	.00007	.00014	.00054	.00051	.0024
%RSD	.27996	5.8786	2.6968	.49757	2.2280	.13401
#1	91.026	.00127	-.00514	.10876	.02241	1.8245
#2	91.027	.00115	-.00527	.10979	.02314	1.8199
#3	90.586	.00115	-.00499	.10899	.02340	1.8209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31774-a-32-a @2 Acquired: 5/26/2023 14:25:39 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.619	.00953	33.820	.04760	.00004	203.58
Stddev	.032	.00026	.278	.00019	.00026	.75
%RSD	.30298	2.7369	.82276	.40725	677.18	.36867
#1	10.652	.00971	34.042	.04783	.00027	202.72
#2	10.588	.00923	33.911	.04751	.00009	204.09
#3	10.617	.00964	33.508	.04747	-.00025	203.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 204.76	.00858	.05117	-.00396	.02428	.00505
Stddev	2.83	.00028	.00223	.00408	.00061	.00117
%RSD	1.3824	3.2727	4.3619	102.92	2.4976	23.193
#1	207.53	.00839	.05026	-.00461	.02481	.00590
#2	204.87	.00890	.05371	.00040	.02441	.00554
#3	201.88	.00846	.04954	-.00768	.02362	.00371
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	200.00					
Low Limit	-200.00					

Sample Name: 140-31774-a-32-a @2 Acquired: 5/26/2023 14:25:39 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00610	536.06	.05206	.07670	.15362	.00131
Stddev	.00128	2.05	.00047	.00009	.00157	.00271
%RSD	20.992	.38300	.90349	.11275	1.0246	206.40
#1	.00746	537.95	.05260	.07663	.15543	-.00158
#2	.00493	536.36	.05184	.07668	.15282	.00172
#3	.00590	533.88	.05173	.07680	.15260	.00379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00668	.15093
Stddev	.00012	.00035
%RSD	1.8041	.23146
#1	.00682	.15065
#2	.00659	.15132
#3	.00663	.15083
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31774-a-32-a @2 Acquired: 5/26/2023 14:25:39 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3930.3	71179.	12343.
Stddev	17.7	268.	193.
%RSD	.45042	.37645	1.5611
#1	3913.0	70871.	12156.
#2	3929.5	71308.	12333.
#3	3948.4	71359.	12541.

Sample Name: 140-31777-a-1-a @2 Acquired: 5/26/2023 14:30:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00141	.39198	.04487	F 66.944	.02525	-.00025
Stddev	.00033	.00798	.00082	.247	.00014	.00001
%RSD	23.201	2.0370	1.8197	.36931	.55251	5.9044
#1	.00129	.40111	.04564	66.741	.02510	-.00026
#2	.00116	.38630	.04496	66.871	.02537	-.00025
#3	.00178	.38853	.04401	67.220	.02527	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.46304	.01731	-.00673	.01835	.08980	.29792
Stddev	.00042	.00019	.00011	.00025	.00055	.00208
%RSD	.09133	1.0897	1.6435	1.3599	.60723	.69762
#1	.46271	.01728	-.00685	.01814	.09029	.29568
#2	.46352	.01751	-.00664	.01863	.08921	.29979
#3	.46288	.01714	-.00670	.01829	.08989	.29830
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-1-a @2 Acquired: 5/26/2023 14:30:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11203	-.00023	.10668	.00656	.04173	2.9613
Stddev	.00876	.00099	.01058	.00007	.00017	.5998
%RSD	7.8217	440.87	9.9208	1.0410	.40986	20.254
#1	.12203	.00091	.11235	.00661	.04172	2.2688
#2	.10570	-.00068	.11322	.00648	.04191	3.3089
#3	.10836	-.00091	.09447	.00658	.04157	3.3063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.1907	.01781	.00041	.08351	.11023	.01475
Stddev	.0092	.00016	.00063	.00309	.00284	.00047
%RSD	.28715	.92558	153.80	3.6991	2.5726	3.1641
#1	3.2009	.01770	.00054	.08681	.11255	.01526
#2	3.1880	.01773	.00097	.08069	.10707	.01462
#3	3.1831	.01800	-.00028	.08303	.11108	.01436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-1-a @2 Acquired: 5/26/2023 14:30:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01152	627.07	.00215	.00248	.01672	-.00271
Stddev	.00067	4.17	.00009	.00013	.00083	.00386
%RSD	5.7823	.66460	4.2683	5.0904	4.9469	142.75
#1	.01183	622.27	.00222	.00237	.01599	-.00249
#2	.01075	629.15	.00220	.00244	.01762	.00105
#3	.01197	629.79	.00205	.00262	.01656	-.00667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00067	.11387
Stddev	.00030	.00030
%RSD	45.033	.26334
#1	.00063	.11410
#2	.00039	.11397
#3	.00099	.11353
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-1-a @2 Acquired: 5/26/2023 14:30:47 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3964.6	71292.	12231.
Stddev	12.9	396.	90.
%RSD	.32593	.55549	.73445
#1	3949.8	70843.	12280.
#2	3970.9	71594.	12127.
#3	3973.2	71437.	12285.

Sample Name: 140-31777-a-6-a @2 Acquired: 5/26/2023 14:35:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00073	.37121	.03409	F 66.369	.01718	-.00025
Stddev	.00038	.01957	.00017	.289	.00015	.00001
%RSD	52.120	5.2710	.49890	.43570	.87671	3.5537
#1	.00117	.36332	.03405	66.281	.01703	-.00025
#2	.00050	.39349	.03428	66.133	.01733	-.00024
#3	.00052	.35682	.03394	66.691	.01718	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41345	.01641	-.00710	.01192	.05170	.16471
Stddev	.00396	.00005	.00005	.00011	.00024	.00243
%RSD	.95707	.31071	.74621	.91865	.45736	1.4763
#1	.41047	.01647	-.00704	.01202	.05188	.16229
#2	.41794	.01637	-.00711	.01194	.05143	.16715
#3	.41194	.01640	-.00714	.01180	.05179	.16470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a @2 Acquired: 5/26/2023 14:35:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.21649	-.00053	.11158	.00694	.04054	1.5542
Stddev	.00699	.00091	.00513	.00019	.00003	.1225
%RSD	3.2290	169.59	4.5954	2.8003	.08450	7.8826
#1	.22294	.00044	.11750	.00680	.04054	1.6626
#2	.21747	-.00070	.10851	.00686	.04058	1.4213
#3	.20906	-.00135	.10872	.00716	.04051	1.5789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2134	.00427	.00579	.06892	.09588	.01345
Stddev	.0057	.00028	.00182	.00280	.00176	.00112
%RSD	.25736	6.4797	31.440	4.0577	1.8400	8.3336
#1	2.2086	.00399	.00779	.06612	.09398	.01351
#2	2.2197	.00430	.00425	.06892	.09620	.01453
#3	2.2120	.00454	.00531	.07171	.09746	.01229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-6-a @2 Acquired: 5/26/2023 14:35:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01322	627.03	.00199	.00217	.01864	-.00289
Stddev	.00196	3.36	.00037	.00013	.00029	.00089
%RSD	14.791	.53619	18.548	5.9830	1.5743	30.912
#1	.01294	623.32	.00224	.00204	.01876	-.00386
#2	.01530	629.87	.00217	.00218	.01831	-.00211
#3	.01142	627.90	.00157	.00230	.01885	-.00268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00037	.09252
Stddev	.00051	.00027
%RSD	135.22	.29592
#1	.00071	.09229
#2	.00062	.09282
#3	-.00021	.09245
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-6-a @2 Acquired: 5/26/2023 14:35:49 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3980.7	71391.	12118.
Stddev	10.8	155.	129.
%RSD	.27161	.21702	1.0653
#1	3973.0	71495.	12266.
#2	3975.9	71465.	12025.
#3	3993.0	71213.	12065.

Sample Name: 31777-a-6-a PDS@2 Acquired: 5/26/2023 14:40:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05207	2.3286	.14053	F 66.149	.12320	.05364
Stddev	.00032	.0400	.00130	.305	.00046	.00025
%RSD	.60656	1.7161	.92833	.46140	.37087	.46839
#1	.05171	2.2912	.14027	66.448	.12268	.05356
#2	.05230	2.3241	.14194	65.838	.12355	.05344
#3	.05221	2.3707	.13937	66.161	.12336	.05393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.907	.06850	.09778	.22822	.30925	1.2021
Stddev	.179	.00010	.00026	.00079	.00139	.0062
%RSD	.33869	.14203	.26735	.34722	.44809	.51181
#1	52.703	.06856	.09781	.22866	.30939	1.1950
#2	52.984	.06855	.09750	.22870	.31056	1.2058
#3	53.035	.06838	.09802	.22731	.30780	1.2056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a PDS@2 Acquired: 5/26/2023 14:40:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.525	.10583	10.194	.11238	.56991	53.498
Stddev	.165	.00152	.121	.00053	.00085	.584
%RSD	.32582	1.4365	1.1915	.47522	.14843	1.0915
#1	50.348	.10414	10.148	.11202	.57051	52.913
#2	50.553	.10626	10.102	.11214	.57028	54.081
#3	50.674	.10709	10.332	.11300	.56895	53.500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.663	.52909	5.2958	.17378	.19437	.52615
Stddev	.119	.00096	.0134	.00333	.00013	.00155
%RSD	.22250	.18135	.25370	1.9173	.06844	.29497
#1	53.561	.52799	5.3097	.17509	.19447	.52761
#2	53.635	.52953	5.2951	.17000	.19443	.52452
#3	53.795	.52974	5.2828	.17626	.19422	.52631
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a PDS@2 Acquired: 5/26/2023 14:40:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16607	615.27	.48525	.52159	.12503	.39804
Stddev	.00305	3.44	.00114	.00191	.00061	.00291
%RSD	1.8356	.55917	.23439	.36679	.48536	.73169
#1	.16795	611.78	.48452	.51940	.12436	.40108
#2	.16256	615.39	.48656	.52291	.12518	.39527
#3	.16772	618.66	.48467	.52247	.12555	.39776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21375	.61751
Stddev	.00035	.00028
%RSD	.16352	.04597
#1	.21381	.61782
#2	.21338	.61745
#3	.21407	.61727
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31777-a-6-a PDS@2 Acquired: 5/26/2023 14:40:53 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3928.5	70532.	12152.
Stddev	12.2	293.	51.
%RSD	.31177	.41495	.42064
#1	3915.7	70244.	12101.
#2	3929.7	70521.	12203.
#3	3940.1	70829.	12152.

Sample Name: 31777-a-6-a PDSD@2 Acquired: 5/26/2023 14:45:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05219	2.3271	.14215	F 66.025	.12286	.05372
Stddev	.00018	.0263	.00140	.733	.00015	.00008
%RSD	.35362	1.1325	.98767	1.1103	.12574	.14331
#1	.05206	2.3313	.14270	66.015	.12271	.05369
#2	.05240	2.2989	.14319	66.763	.12302	.05381
#3	.05211	2.3511	.14055	65.297	.12283	.05367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.828	.06845	.09793	.22831	.30820	1.1940
Stddev	.057	.00006	.00010	.00185	.00041	.0042
%RSD	.10341	.08539	.10412	.80877	.13163	.35142
#1	54.788	.06845	.09802	.22637	.30865	1.1899
#2	54.893	.06851	.09782	.23004	.30787	1.1983
#3	54.803	.06839	.09795	.22853	.30807	1.1940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a PDSD@2 Acquired: 5/26/2023 14:45:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.634	.10517	10.605	.11209	.57020	55.879
Stddev	.108	.00089	.039	.00032	.00146	.542
%RSD	.20434	.84173	.36813	.28945	.25614	.96954
#1	52.648	.10425	10.564	.11172	.57169	55.255
#2	52.734	.10526	10.641	.11232	.57012	56.228
#3	52.521	.10601	10.610	.11225	.56878	56.154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.786	.52894	5.2977	.17345	.19198	.52685
Stddev	.069	.00090	.0141	.00473	.00069	.00469
%RSD	.12405	.17083	.26710	2.7241	.36187	.88965
#1	55.746	.52988	5.3035	.17637	.19119	.52925
#2	55.866	.52887	5.3080	.17599	.19246	.52986
#3	55.747	.52807	5.2816	.16800	.19230	.52145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a PDSD@2 Acquired: 5/26/2023 14:45:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.16724	614.30	.48139	.52085	.12324	.39811
Stddev	.00033	.78	.00075	.00065	.00031	.00406
%RSD	.19599	.12751	.15647	.12463	.25219	1.0194
#1	.16701	613.79	.48094	.52029	.12293	.40056
#2	.16762	615.21	.48096	.52156	.12325	.40034
#3	.16709	613.91	.48226	.52070	.12355	.39343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.21431	.61736
Stddev	.00068	.00193
%RSD	.31694	.31340
#1	.21354	.61899
#2	.21482	.61788
#3	.21457	.61522
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31777-a-6-a PDSD@2 Acquired: 5/26/2023 14:45:43 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3926.7	70444.	12135.
Stddev	21.0	355.	49.
%RSD	.53436	.50428	.40083
#1	3903.9	70303.	12114.
#2	3931.2	70181.	12100.
#3	3945.1	70848.	12191.

Sample Name: 140-31777-a-11-a @2 Acquired: 5/26/2023 14:50:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00066	.34689	.04696	F 66.063	.01651	-.00027
Stddev	.00021	.00621	.00146	.512	.00024	.00001
%RSD	32.304	1.7913	3.1170	.77483	1.4653	2.2602
#1	.00067	.33978	.04629	65.647	.01631	-.00026
#2	.00044	.34957	.04864	66.635	.01678	-.00027
#3	.00086	.35131	.04595	65.909	.01645	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.35920	.02277	-.00719	.01177	.05851	.13804
Stddev	.00460	.00006	.00009	.00028	.00038	.00183
%RSD	1.2814	.28069	1.2805	2.4158	.65582	1.3236
#1	.36105	.02284	-.00719	.01205	.05855	.13706
#2	.36258	.02275	-.00728	.01148	.05888	.14015
#3	.35396	.02271	-.00709	.01178	.05811	.13691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-11-a @2 Acquired: 5/26/2023 14:50:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17652	-.00032	.07705	.00618	.04019	1.2466
Stddev	.01001	.00082	.00615	.00008	.00038	.7447
%RSD	5.6728	256.15	7.9869	1.2845	.95774	59.733
#1	.18778	.00019	.08391	.00611	.04046	.44225
#2	.17319	-.00126	.07200	.00626	.04036	1.3857
#3	.16860	.00011	.07526	.00618	.03975	1.9120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8345	.00294	-.00521	.10580	.13517	.01752
Stddev	.0213	.00031	.00071	.00075	.00104	.00091
%RSD	1.1598	10.428	13.660	.71003	.76673	5.2064
#1	1.8153	.00259	-.00467	.10632	.13514	.01677
#2	1.8574	.00303	-.00602	.10615	.13622	.01853
#3	1.8308	.00318	-.00494	.10494	.13415	.01724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-11-a @2 Acquired: 5/26/2023 14:50:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01393	622.57	.00504	.00195	.00906	-.00300
Stddev	.00066	6.79	.00041	.00007	.00127	.00182
%RSD	4.7244	1.0914	8.0522	3.5070	13.989	60.757
#1	.01469	615.27	.00551	.00203	.01050	-.00493
#2	.01357	628.72	.00486	.00192	.00814	-.00131
#3	.01354	623.70	.00477	.00190	.00853	-.00275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00069	.12227
Stddev	.00012	.00061
%RSD	17.141	.50045
#1	.00058	.12253
#2	.00068	.12270
#3	.00082	.12157
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-11-a @2 Acquired: 5/26/2023 14:50:32 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3978.9	71987.	12419.
Stddev	15.4	677.	67.
%RSD	.38681	.94030	.53709
#1	3963.5	71703.	12480.
#2	3979.0	71499.	12348.
#3	3994.2	72760.	12429.

Sample Name: 140-31777-a-16-a @2 Acquired: 5/26/2023 14:55:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.31263	.00657	F 68.771	.01158	-.00026
Stddev	.00003	.00767	.00091	.270	.00008	.00001
%RSD	6.7323	2.4548	13.783	.39219	.68628	4.1256
#1	.00040	.32090	.00724	68.858	.01149	-.00027
#2	.00045	.31127	.00692	68.468	.01161	-.00027
#3	.00043	.30573	.00554	68.986	.01165	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12695	.00073	-.00736	.00665	.00512	.06005
Stddev	.00075	.00007	.00018	.00025	.00014	.00114
%RSD	.59098	9.5663	2.4599	3.7561	2.7043	1.8916
#1	.12677	.00068	-.00736	.00637	.00505	.05876
#2	.12631	.00069	-.00755	.00685	.00503	.06091
#3	.12778	.00081	-.00718	.00671	.00528	.06047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-16-a @2 Acquired: 5/26/2023 14:55:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07487	.00007	.06602	.00446	.03707	-.32292
Stddev	.03798	.00026	.00401	.00008	.00044	.18601
%RSD	50.728	401.09	6.0704	1.7629	1.1766	57.602
#1	.09324	-.00022	.06492	.00437	.03674	-.13986
#2	.03120	.00012	.06267	.00449	.03756	-.31715
#3	.10017	.00030	.07046	.00452	.03691	-.51174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10362	-.00031	-.00467	-.00746	.02649	.00832
Stddev	.00609	.00027	.00057	.00596	.00086	.00018
%RSD	5.8788	86.807	12.291	79.921	3.2363	2.2064
#1	.11006	-.00062	-.00401	-.00766	.02743	.00832
#2	.10287	-.00015	-.00495	-.00140	.02630	.00814
#3	.09794	-.00016	-.00506	-.01333	.02575	.00850
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-31777-a-16-a @2 Acquired: 5/26/2023 14:55:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01378	641.73	-.00163	.00118	.00295	-.00159
Stddev	.00281	2.55	.00048	.00003	.00105	.00119
%RSD	20.416	.39685	29.377	2.9053	35.655	75.258
#1	.01364	638.81	-.00159	.00114	.00395	-.00137
#2	.01667	643.53	-.00117	.00119	.00306	-.00051
#3	.01105	642.83	-.00213	.00120	.00185	-.00287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00062	.01011
Stddev	.00032	.00003
%RSD	52.024	.29041
#1	.00069	.01013
#2	.00027	.01013
#3	.00091	.01008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-31777-a-16-a @2 Acquired: 5/26/2023 14:55:35 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3918.1	70570.	12203.
Stddev	15.0	42.	22.
%RSD	.38268	.05946	.17929
#1	3902.2	70524.	12187.
#2	3920.1	70606.	12228.
#3	3932.0	70579.	12194.

Sample Name: 31777-a-6-a SD@10 Acquired: 5/26/2023 15:00:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00141	.08851	.00701	13.612	.00349	-.00028
Stddev	.00032	.00965	.00096	.071	.00009	.00002
%RSD	23.002	10.904	13.686	.52248	2.4675	7.5469
#1	.00174	.09807	.00777	13.554	.00347	-.00030
#2	.00140	.07877	.00593	13.591	.00358	-.00027
#3	.00109	.08870	.00733	13.691	.00341	-.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.08481	.00346	-.00173	.00161	.01295	.03573
Stddev	.00132	.00009	.00011	.00045	.00043	.00232
%RSD	1.5570	2.7289	6.6326	28.216	3.3206	6.4859
#1	.08608	.00343	-.00176	.00213	.01326	.03531
#2	.08492	.00338	-.00182	.00128	.01314	.03366
#3	.08344	.00357	-.00160	.00142	.01246	.03823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a SD@10 Acquired: 5/26/2023 15:00:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00280	.00008	.03389	.00143	.00759	.54524
Stddev	.02166	.00049	.01122	.00005	.00028	.66676
%RSD	774.31	578.26	33.109	3.5833	3.6632	122.29
#1	.02778	-.00037	.02103	.00141	.00783	.48433
#2	-.01082	.00002	.03899	.00148	.00729	-.08898
#3	-.00857	.00060	.04166	.00139	.00766	1.2404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44522	.00195	.00007	.01125	.01885	.00097
Stddev	.00520	.00012	.00183	.00251	.00193	.00069
%RSD	1.1672	6.0894	2674.2	22.352	10.227	70.882
#1	.44057	.00188	.00078	.00959	.02059	.00091
#2	.44427	.00188	.00144	.01001	.01678	.00032
#3	.45083	.00208	-.00201	.01414	.01919	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 31777-a-6-a SD@10 Acquired: 5/26/2023 15:00:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00417	129.81	.00002	.00041	.00298	-.00104
Stddev	.00248	.26	.00030	.00007	.00055	.00222
%RSD	59.623	.19792	1631.8	16.498	18.511	212.70
#1	.00646	130.10	.00036	.00038	.00354	.00103
#2	.00451	129.60	-.00021	.00048	.00295	-.00338
#3	.00153	129.73	-.00009	.00036	.00244	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00014	.02037
Stddev	.00026	.00010
%RSD	184.76	.48333
#1	-.00034	.02027
#2	-.00024	.02036
#3	.00015	.02047
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 31777-a-6-a SD@10 Acquired: 5/26/2023 15:00:42 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3932.1	70818.	12287.
Stddev	4.2	340.	59.
%RSD	.10632	.47993	.48345
#1	3927.7	70888.	12227.
#2	3932.6	71118.	12346.
#3	3936.0	70449.	12288.

Sample Name: CRI Acquired: 5/26/2023 15:05:41 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01081	.20552	.00972	.25297	.01025	.00524
Stddev	.00037	.00835	.00041	.00171	.00013	.00003
%RSD	3.4276	4.0631	4.2251	.67758	1.3095	.62891
#1	.01075	.19588	.00982	.25156	.01011	.00521
#2	.01047	.21006	.01007	.25488	.01037	.00527
#3	.01120	.21061	.00927	.25246	.01028	.00526
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3322	.00548	.05136	.01007	.02944	.10210
Stddev	.0508	.00002	.00008	.00033	.00013	.00156
%RSD	.95194	.40443	.15175	3.2389	.43416	1.5303
#1	5.2821	.00550	.05127	.01001	.02933	.10334
#2	5.3310	.00546	.05143	.00979	.02958	.10261
#3	5.3836	.00547	.05137	.01043	.02941	.10035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 15:05:41 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1263	.05099	5.0488	.01550	.04133	5.1229
Stddev	.0381	.00081	.0631	.00012	.00040	.3990
%RSD	.74224	1.5878	1.2503	.74879	.95920	7.7886
#1	5.0867	.05011	4.9762	.01540	.04102	4.7441
#2	5.1296	.05118	5.0797	.01548	.04178	5.0851
#3	5.1626	.05169	5.0906	.01563	.04121	5.5394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2578	.04320	.31289	.00779	.01001	.05878
Stddev	.0341	.00010	.00025	.00340	.00139	.00088
%RSD	.64859	.24196	.08130	43.671	13.916	1.4957
#1	5.2273	.04315	.31272	.00467	.01155	.05956
#2	5.2514	.04314	.31276	.00729	.00962	.05897
#3	5.2946	.04332	.31318	.01142	.00885	.05783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 5/26/2023 15:05:41 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01417	F 8.3147	.09675	.05096	.04854	.01171
Stddev	.00114	.0184	.00040	.00014	.00046	.00103
%RSD	8.0351	.22107	.41199	.27228	.94025	8.8031
#1	.01544	8.3355	.09712	.05083	.04804	.01060
#2	.01384	8.3079	.09679	.05110	.04865	.01189
#3	.01323	8.3006	.09633	.05094	.04893	.01264
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02603	.02227
Stddev	.00032	.00008
%RSD	1.2204	.37518
#1	.02615	.02218
#2	.02567	.02232
#3	.02628	.02232
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 5/26/2023 15:05:41 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3918.9	70546.	12156.
Stddev	7.2	310.	173.
%RSD	.18319	.43889	1.4219
#1	3910.9	70245.	12292.
#2	3921.2	70531.	12215.
#3	3924.7	70863.	11961.

Sample Name: CCV Acquired: 5/26/2023 15:10:35 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0257	25.062	.51938	2.1160	2.0659	2.1714
Stddev	.0019	.134	.00118	.0101	.0033	.0164
%RSD	.18832	.53397	.22678	.47877	.15907	.75682
#1	1.0254	24.919	.51976	2.1075	2.0677	2.1607
#2	1.0240	25.084	.51806	2.1134	2.0679	2.1631
#3	1.0278	25.184	.52032	2.1272	2.0621	2.1903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.522	.52867	2.0617	2.1018	2.0146	25.582
Stddev	.259	.00134	.0034	.0069	.0025	.155
%RSD	.49273	.25368	.16687	.32911	.12614	.60628
#1	52.226	.53022	2.0656	2.1070	2.0156	25.438
#2	52.707	.52792	2.0601	2.0940	2.0164	25.561
#3	52.632	.52787	2.0593	2.1045	2.0117	25.746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 15:10:35 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.887	2.0809	52.094	2.1076	2.1338	50.864
Stddev	.269	.0066	.459	.0056	.0024	.585
%RSD	.51900	.31922	.88056	.26471	.11209	1.1498
#1	51.602	2.0882	51.576	2.1068	2.1365	50.282
#2	51.922	2.0752	52.259	2.1025	2.1318	50.860
#3	52.138	2.0793	52.448	2.1136	2.1332	51.452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.515	2.0870	2.0888	.55008	.52226	.51697
Stddev	.138	.0028	.0086	.00552	.00349	.00139
%RSD	.26322	.13482	.41339	1.0026	.66906	.26886
#1	52.643	2.0902	2.0964	.55521	.52316	.51793
#2	52.368	2.0853	2.0905	.54425	.51841	.51761
#3	52.533	2.0854	2.0794	.55080	.52522	.51538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 5/26/2023 15:10:35 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.54883	F 8.5334	1.9700	2.0651	2.0162	1.0410
Stddev	.00307	.1018	.0009	.0025	.0121	.0016
%RSD	.56012	1.1932	.04584	.12223	.60200	.15097
#1	.55133	8.4168	1.9690	2.0680	2.0051	1.0419
#2	.54976	8.6047	1.9706	2.0635	2.0143	1.0392
#3	.54540	8.5787	1.9705	2.0638	2.0292	1.0420
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.1007	2.0802
Stddev	.0049	.0045
%RSD	.23237	.21624
#1	2.1059	2.0854
#2	2.0962	2.0774
#3	2.1000	2.0777
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 5/26/2023 15:10:35 Type: QC
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3848.8	70091.	12126.
Stddev	17.1	651.	76.
%RSD	.44452	.92830	.62788
#1	3829.7	69377.	12211.
#2	3853.9	70652.	12105.
#3	3862.7	70243.	12063.

Sample Name: CCB Acquired: 5/26/2023 15:15:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .00125	-.00574	-.00074	.03553	.00029	-.00021
Stddev	.00033	.02405	.00031	.00091	.00014	.00007
%RSD	25.919	419.24	42.680	2.5608	46.178	32.388
#1	.00092	.01798	-.00039	.03591	.00034	-.00013
#2	.00127	-.03011	-.00082	.03619	.00040	-.00024
#3	.00157	-.00508	-.00100	.03449	.00014	-.00026
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00077					
Low Limit	-.00077					

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01048	F .00020	-.00020	-.00039	F .00384	.00246
Stddev	.00302	.00006	.00009	.00041	.00018	.00119
%RSD	28.820	27.137	44.047	104.20	4.7793	48.193
#1	.01393	.00027	-.00011	-.00047	.00384	.00337
#2	.00914	.00017	-.00021	.00005	.00402	.00112
#3	.00836	.00018	-.00029	-.00075	.00366	.00290
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit		.00020			.00130	
Low Limit		-.00020			-.00130	

Sample Name: CCB Acquired: 5/26/2023 15:15:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00410	.00009	.01463	.00020	-.00023	F -.54783
Stddev	.04048	.00021	.00214	.00009	.00016	.25736
%RSD	988.21	232.07	14.626	45.778	68.897	46.978
#1	.03609	.00003	.01610	.00031	-.00015	-.48452
#2	-.00350	-.00008	.01217	.00013	-.00014	-.32804
#3	-.04487	.00032	.01561	.00017	-.00042	-.83093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01174	F .00151	.00025	F -.00252	-.00022	-.00151
Stddev	.00581	.00021	.00205	.00046	.00099	.00054
%RSD	49.528	14.178	805.36	18.230	442.38	35.630
#1	.01749	.00128	-.00209	-.00199	-.00080	-.00210
#2	.01185	.00169	.00114	-.00275	.00092	-.00105
#3	.00587	.00158	.00170	-.00281	-.00080	-.00136
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.00120		.00200		
Low Limit		-.00120		-.00200		

Sample Name: CCB Acquired: 5/26/2023 15:15:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	F 5.5471	-.00041	.00012	-.00145	.00221
Stddev	.00180	.0539	.00024	.00006	.00017	.00282
%RSD	235.28	.97205	57.438	53.752	11.852	127.88
#1	.00207	5.5206	-.00047	.00014	-.00158	.00130
#2	-.00129	5.6091	-.00015	.00016	-.00151	.00537
#3	.00151	5.5115	-.00062	.00004	-.00126	-.00005
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00007	-.00015
Stddev	.00001	.00003
%RSD	17.960	17.585
#1	-.00007	-.00012
#2	-.00008	-.00016
#3	-.00006	-.00017
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 5/26/2023 15:15:24 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	3944.8	71075.	12148.
Stddev	8.9	372.	68.
%RSD	.22615	.52302	.56309
#1	3934.5	70795.	12189.
#2	3949.0	70933.	12069.
#3	3950.8	71497.	12186.

Sample Name: Sample-68 Acquired: 5/26/2023 15:20:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00204	-.03706	.02169	.00758	-.00018	-.00027
Stddev	.00016	.00450	.00094	.00053	.00017	.00000
%RSD	7.7530	12.131	4.3232	7.0418	97.262	1.7096
#1	.00213	-.03816	.02175	.00711	-.00036	-.00027
#2	.00213	-.03211	.02072	.00816	-.00002	-.00026
#3	.00186	-.04090	.02259	.00746	-.00016	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01732	.00089	.00214	-.00166	-.01320	-.01134
Stddev	.00088	.00003	.00009	.00026	.00003	.00056
%RSD	5.0577	2.8851	4.1898	15.453	.22950	4.9527
#1	-.01666	.00087	.00204	-.00195	-.01317	-.01168
#2	-.01699	.00087	.00219	-.00159	-.01323	-.01069
#3	-.01832	.00091	.00219	-.00145	-.01321	-.01166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: Sample-68 Acquired: 5/26/2023 15:20:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04719	-.00040	.01492	-.00032	-.00220	-.91175
Stddev	.03912	.00020	.00811	.00004	.00001	.04477
%RSD	82.893	49.408	54.349	12.679	.27791	4.9103
#1	-.00581	-.00018	.00983	-.00034	-.00220	-.94246
#2	-.08356	-.00055	.01066	-.00035	-.00221	-.93242
#3	-.05221	-.00047	.02427	-.00027	-.00220	-.86038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02128	.00143	-.00480	-.00125	-.00483	-.02702
Stddev	.00371	.00008	.00044	.00116	.00086	.00017
%RSD	17.434	5.3593	9.2290	92.670	17.789	.61443
#1	-.02408	.00143	-.00455	-.00016	-.00572	-.02721
#2	-.02268	.00150	-.00455	-.00112	-.00478	-.02692
#3	-.01707	.00135	-.00532	-.00247	-.00400	-.02693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: Sample-68 Acquired: 5/26/2023 15:20:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01834	1.8098	-.00436	-.00007	-.00127	.02201
Stddev	.00075	.0800	.00015	.00018	.00030	.00140
%RSD	4.1114	4.4209	3.4388	252.17	23.513	6.3707
#1	-.01822	1.7174	-.00450	.00012	-.00156	.02350
#2	-.01915	1.8533	-.00437	-.00023	-.00096	.02073
#3	-.01766	1.8586	-.00420	-.00011	-.00129	.02179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00057	-.00541
Stddev	.00018	.00006
%RSD	32.027	1.1879
#1	-.00078	-.00549
#2	-.00050	-.00537
#3	-.00043	-.00538
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: Sample-68 Acquired: 5/26/2023 15:20:23 Type: Unk
Method: MT0007(v23) HF AIR 042423(v3) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	10376.	163490.	20935.
Stddev	472.	7353.	1050.
%RSD	4.5482	4.4977	5.0130
#1	10920.	170890.	22095.
#2	10088.	163390.	20052.
#3	10118.	156190.	20658.

Eurofins Knoxville ICP Batch Review Checklist – SOPs: KNOX-MT-0007r28, KNOX-MT-0008r10

Chart Name:	F052623	Analysis Batch #:	73674	Analyst:	KNC	Instrument:	DUO

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated per SOP?	Y	Y	
2. Was CCVL within limits? (90-110%R)	Y	Y	
3. ICV analyzed within limits? (90-110%R and <5.0% RSD)	Y	Y	
4. CCV analyzed at required frequency & within limits? (90 - 110%R and <5.0% RSD)	Y	Y	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM#_____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste ≤RL)	Y	Y	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM#_____)
6. ICSA/ICSAB run before samples?	Y	Y	
7. ICSAB interferents and analytes within limits? (80 - 120%R)	Y	Y	ReAnalyzed 927
8. ICSA criteria for non-interfering elements met? (Water/Soil/Waste ±1x RL) (Air/SEP/PM10/JN ±2x RL if RL ≤10 µg/L; ±1x RL if RL >10 µg/L)	Y	Y	☐ **ICSA->2X MDL; Stock Impurities** (NCM#_____) ICSA 909 Adjust Pb Reanalyzed 922
9. Reporting Limit Check Standard (CRI) within limits? (Water/Soil/Waste=70-130%R; Air/SEP/PM10/JN Waste=50-150%)	Y	Y	
10. 6010C samples bracketed by RL Check Standards?	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with target element concentrations > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments: High Si (IEC)
2. Were all hits reported from a run with interfering elements < LR?	Y	Y	
3. Elements with F, k or ^ flags reported from a dilution if necessary?	Y	Y	
4. Were sample results reported as ND with elevated RLs?	Y	Y	☐ **RL-Dilution, Matrix** (NCM# _____) ☒ **RL-Dilution, Interferents** (NCM# 4599, 92, 93) ☐ **RL-Dilution, Matrix, Neg. Analyte** (NCM# _____)
5. Internal standard (IS) response ±30% of ICB IS? *If no, list details:*	Y	Y	☐ **ISTD – Matrix, DL Required** (NCM#_____) ☐ Low IS response. Reanalyzed.
6. Report flag turned to No for Mg-SEP Step1 and Na-Steps 2 & 5?	NA	NA	
7. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Zn <RL; Air/SEP/PM10/JN Waste <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM#_____) ☐ **Method Blank – Report, 10X** (NCM#_____) ☐ **Method Blank–Insufficient Sample** (NCM#_____) ☐ See narrative-common analyte in SEP leachate.
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCSD –Insufficient Sample** (NCM#_____) ☐ **LCS/LCSD - %R High** (NCM#_____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	NA	NA	☐ **MS/MSD/DUP-Insufficient Volume** (NCM#_____)
4. MS/MSD %R and RPD within QC limits?	NA	NA	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM#_____)
5. DUP RPD within limits?	NA	NA	☐ **DUP - %RPD** (NCM#_____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R)	Y	Y	☐ **Post Digestion Spike - %R** (NCM#_____) ☐ **MS/MSD; High Bias; PDS Acceptable** (NCM#_____)
7. Serial dilution per prep batch & ≤ 10% D for analytes >50X MDL?	Y	N	☐ **Serial Dilution - %D** (NCM#_____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: KNC 5-30-23	2nd Level Review by: CJ 5/30/23
Calculation: Pb at 1435	
0.06892 mg/L x 0.100L x 1000µg/mg x $\frac{10ml}{5ml}$ = 13.784 µg	

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard				
S:6	Standard #1 (0.1 ug/L)	Standard				
S:5	Standard #2 (0.2 ug/L)	Standard				
S:4	Standard #3 (0.5 ug/L)	Standard				
S:3	Standard #4 (1.0 ug/L)	Standard				
S:2	Standard #5 (5.0 ug/L)	Standard				
S:1	Standard #6 (10.0 ug/l)	Standard				
1:1	ICV 140-73581/20-A	ICV				
1:2	ICB 140-73581/21-A	ICB				
1:3	CRA 140-73581/22-A	CRDL Standard				
S:9	CCV 140-73581/23-A	CCV				
S:10	CCB 140-73581/24-A	CCB				
1:4	MB 140-73514/5-B	Method Blank				
1:5	LCS 140-73514/6-B	LCS				
1:6	LCSD 140-73514/7-B	LCS				
1:7	140-31669-A-3-B	Unknown				
1:8	140-31669-A-10-B	Unknown				
1:9	140-31669-A-10-B pds	Unknown				
1:10	140-31669-A-10-B pdsd	Unknown				
1:11	140-31669-A-17-B	Unknown				
1:12	140-31669-A-23-B	Unknown				
1:13	MB 140-73444/14-B	Method Blank				
S:9	CCV 140-73581/23-A	CCV				
S:10	CCB 140-73581/24-A	CCB				
1:14	LCS 140-73444/15-B	LCS				
1:15	LCSD 140-73444/16-B	LCS				
1:16	140-31777-A-1-B	Unknown				
1:17	140-31777-A-6-B	Unknown				
1:18	140-31777-A-6-B pds	Unknown				
1:19	140-31777-A-6-B pdsd	Unknown				
1:20	140-31777-A-11-B	Unknown				
1:21	140-31777-A-16-B	Unknown				
1:22	140-31777-A-17-B	Unknown				
1:23	MB 140-73511/1-B	Method Blank				
S:9	CCV 140-73581/23-A	CCV				
S:10	CCB 140-73581/24-A	CCB				
1:24	LCS 140-73511/2-B	LCS				
1:25	140-31777-A-3-B	Unknown				
1:26	140-31777-A-8-D	Unknown				
1:27	140-31777-A-8-E MS	Unknown				
1:28	140-31777-A-8-F MSD	Unknown				
1:29	140-31777-A-13-B	Unknown				
1:30	140-31858-A-3-B	Unknown				
1:31	140-31858-A-8-D	Unknown				
1:32	140-31858-A-8-E MS	Unknown				
1:33	140-31858-A-8-F MSD	Unknown				
S:9	CCV 140-73581/23-A	CCV				
S:10	CCB 140-73581/24-A	CCB				
1:34	140-31858-A-13-B	Unknown				
1:35	MB 140-73513/1-B	Method Blank				
1:36	LCS 140-73513/2-B	LCS				
1:37	140-31777-A-4-B	Unknown				
1:38	140-31777-A-9-D	Unknown				
1:39	140-31777-A-9-E MS	Unknown				
1:40	140-31777-A-9-F MSD	Unknown				
1:41	140-31777-A-14-B	Unknown				

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
1:42	140-31777-A-20-B	Unknown			
1:43	140-31858-A-4-B	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:44	140-31858-A-9-D	Unknown			
1:45	140-31858-A-9-E MS	Unknown			
1:46	140-31858-A-9-F MSD	Unknown			
1:47	140-31858-A-14-B	Unknown			
1:48	140-31858-A-17-B	Unknown			
1:49	140-31858-A-19-B	Unknown			
1:50	MB 140-73515/1-B	Method Blank			
1:51	LCS 140-73515/2-B	LCS			
1:52	140-31777-A-5-B	Unknown			
1:53	140-31777-A-10-D	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:54	140-31777-A-10-E MS	Unknown			
1:55	140-31777-A-10-F MSD	Unknown			
1:56	140-31777-A-15-B	Unknown			
1:57	140-31777-A-21-B	Unknown			
1:58	140-31858-A-5-B	Unknown			
1:59	140-31858-A-10-D	Unknown			
1:60	140-31858-A-10-E MS	Unknown			
2:1	140-31858-A-10-F MSD	Unknown			
2:2	140-31858-A-15-B	Unknown			
2:3	140-31858-A-20-B	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
2:4	MB 140-73593/1-B	Method Blank			
2:5	LCS 140-73593/2-B	LCS			
2:6	140-31777-A-2-C	Unknown			
2:7	140-31777-A-7-E	Unknown			
2:8	140-31777-A-7-F MS	Unknown			
2:9	140-31777-A-7-G MSD	Unknown			
2:10	140-31777-A-12-C	Unknown			
2:11	140-31777-A-18-C	Unknown			
2:12	140-31777-A-19-C	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
2:13	140-31858-A-9-D pds	Unknown			
2:14	140-31858-A-9-D pdsd	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard			
S:6	Standard #1 (0.1 ug/L)	Standard			
S:5	Standard #2 (0.2 ug/L)	Standard			
S:4	Standard #3 (0.5 ug/L)	Standard			
S:3	Standard #4 (1.0 ug/L)	Standard			
S:2	Standard #5 (5.0 ug/L)	Standard			
S:1	Standard #6 (10.0 ug/l)	Standard			
1:1	ICV 140-73581/20-A	ICV			
1:2	ICB 140-73581/21-A	ICB			
1:3	CRA 140-73581/22-A	CRDL Standard			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:4	MB 140-73514/5-B	Method Blank			
1:5	LCS 140-73514/6-B	LCS			
1:6	LCSD 140-73514/7-B	LCS			
1:7	140-31669-A-3-B	Unknown			
1:8	140-31669-A-10-B	Unknown			
1:9	140-31669-A-10-B pds	Unknown			
1:10	140-31669-A-10-B pdsd	Unknown			
1:11	140-31669-A-17-B	Unknown			
1:12	140-31669-A-23-B	Unknown			
1:13	MB 140-73444/14-B	Method Blank			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:14	LCS 140-73444/15-B	LCS			
1:15	LCSD 140-73444/16-B	LCS			
1:16	140-31777-A-1-B	Unknown			
1:17	140-31777-A-6-B	Unknown			
1:18	140-31777-A-6-B pds	Unknown			
1:19	140-31777-A-6-B pdsd	Unknown			
1:20	140-31777-A-11-B	Unknown			
1:21	140-31777-A-16-B	Unknown			
1:22	140-31777-A-17-B	Unknown			
1:23	MB 140-73511/1-B	Method Blank			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:24	LCS 140-73511/2-B	LCS			
1:25	140-31777-A-3-B	Unknown			
1:26	140-31777-A-8-D	Unknown			
1:27	140-31777-A-8-E MS	Unknown			
1:28	140-31777-A-8-F MSD	Unknown			
1:29	140-31777-A-13-B	Unknown			
1:30	140-31858-A-3-B	Unknown			
1:31	140-31858-A-8-D	Unknown			
1:32	140-31858-A-8-E MS	Unknown			
1:33	140-31858-A-8-F MSD	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:34	140-31858-A-13-B	Unknown			
1:35	MB 140-73513/1-B	Method Blank			
1:36	LCS 140-73513/2-B	LCS			
1:37	140-31777-A-4-B	Unknown			
1:38	140-31777-A-9-D	Unknown			
1:39	140-31777-A-9-E MS	Unknown			
1:40	140-31777-A-9-F MSD	Unknown			
1:41	140-31777-A-14-B	Unknown			

Tube	Sample Name	Sample Type	Weight	Prep Volume Aliquot Vol	Dilute To Vol
1:42	140-31777-A-20-B	Unknown			
1:43	140-31858-A-4-B	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:44	140-31858-A-9-D	Unknown			
1:45	140-31858-A-9-E MS	Unknown			
1:46	140-31858-A-9-F MSD	Unknown			
1:47	140-31858-A-14-B	Unknown			
1:48	140-31858-A-17-B	Unknown			
1:49	140-31858-A-19-B	Unknown			
1:50	MB 140-73515/1-B	Method Blank			
1:51	LCS 140-73515/2-B	LCS			
1:52	140-31777-A-5-B	Unknown			
1:53	140-31777-A-10-D	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
1:54	140-31777-A-10-E MS	Unknown			
1:55	140-31777-A-10-F MSD	Unknown			
1:56	140-31777-A-15-B	Unknown			
1:57	140-31777-A-21-B	Unknown			
1:58	140-31858-A-5-B	Unknown			
1:59	140-31858-A-10-D	Unknown			
1:60	140-31858-A-10-E MS	Unknown			
2:1	140-31858-A-10-F MSD	Unknown			
2:2	140-31858-A-15-B	Unknown			
2:3	140-31858-A-20-B	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			
2:4	MB 140-73593/1-B	Method Blank			
2:5	LCS 140-73593/2-B	LCS			
2:6	140-31777-A-2-C	Unknown			
2:7	140-31777-A-7-E	Unknown			
2:8	140-31777-A-7-F MS	Unknown			
2:9	140-31777-A-7-G MSD	Unknown			
2:10	140-31777-A-12-C	Unknown			
2:11	140-31777-A-18-C	Unknown			
2:12	140-31777-A-19-C	Unknown			
S:9	CCV 140-73581/23-A	CCV			
S:10	CCB 140-73581/24-A	CCB			

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73589

Analyst: Kincaid, Whitney S

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31669-A-3-A (29_7470A)	N/A (140-31669-1)	Digestate	5 mL	50 mL	5/26/23	15_Days	4		140-31669-A-3-B
2	140-31669-A-10-A (29_7470A)	N/A (140-31669-1)	Digestate	5 mL	50 mL	5/26/23	15_Days	4	PDS v PDSD	140-31669-A-10-B
3	140-31669-A-17-A (29_7470A)	N/A (140-31669-1)	Digestate	5 mL	50 mL	5/26/23	15_Days	4		140-31669-A-17-B
4	140-31669-A-23-A (29_7470A)	N/A (140-31669-1)	Digestate	5 mL	50 mL	5/26/23	15_Days	4		140-31669-A-23-B
5	MB~140-73514/5-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-73514/5-B
6	LCS~140-73514/6-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-73514/6-B
7	LCSD~140-73514/7-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-73514/7-B

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73591

Analyst: Kincaid, Whitney S

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-31777-A-1-A (29_7470A)	N/A (140-31777-1)	Digestate	5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-1-B
2	140-31777-A-6-A (29_7470A)	N/A (140-31777-1)	Digestate	5 mL	50 mL	5/26/23	8_Days	4	PDS & PDSD	140-31777-A-6-B
3	140-31777-A-11-A (29_7470A)	N/A (140-31777-1)	Digestate	5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-11-B
4	140-31777-A-16-A (29_7470A)	N/A (140-31777-1)	Digestate	5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-16-B
5	140-31777-A-17-A (29_7470A)	N/A (140-31777-1)	Digestate	5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-17-B
6	MB~140-73444/14-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-73444/14-B
7	LCS~140-73444/15-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-73444/15-B
8	LCSD~140-73444/16-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-73444/16-B

5/31/2023 10:32 AM

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73581

Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-73511/1-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		
2	LCS~140-73511/2-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		
3	140-31777-A-3-A (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		
4	140-31777-A-8-A (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		
5	140-31777-A-8-B~MS (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		
6	140-31777-A-8-C~MSD (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		
7	140-31777-A-13-A (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		
8	140-31858-A-3-A (29_7470A)	N/A (140-31858-1)	AT_Volume	2.5 mL	50 mL	6/13/23	15_Days	4		
9	140-31858-A-8-A (29_7470A)	N/A (140-31858-1)	AT_Volume	2.5 mL	50 mL	6/13/23	15_Days	4		
10	140-31858-A-8-B~MS (29_7470A)	N/A (140-31858-1)	AT_Volume	2.5 mL	50 mL	6/13/23	15_Days	4		
11	140-31858-A-8-C~MSD (29_7470A)	N/A (140-31858-1)	AT_Volume	2.5 mL	50 mL	6/13/23	15_Days	4		
12	140-31858-A-13-A (29_7470A)	N/A (140-31858-1)	AT_Volume	2.5 mL	50 mL	6/13/23	15_Days	4		
13	STD0~140-73581/13 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73581 Analyst: Harrison, Laurel A Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

14	STD1~140-73581/14 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/14-A
15	STD2~140-73581/15 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/15-A
16	STD3~140-73581/16 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/16-A
17	STD4~140-73581/17 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/17-A
18	STD5~140-73581/18 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/18-A
19	STD6~140-73581/19 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-73581/19-A
20	ICV~140-73581/20 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICV 140-73581/20-A
21	ICB~140-73581/21 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICB 140-73581/21-A
22	CRA~140-73581/22 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CRA 140-73581/22-A
23	CCV~140-73581/23 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCV 140-73581/23-A
24	CCB~140-73581/24 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCB 140-73581/24-A

5/31/2023
10:32 AM

HG_BH_KMNO4_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73582

Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 8:20:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-73513/1-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		MB 140-73513/1-B
2	LCS~140-73513/2-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		LCS 140-73513/2-B
3	140-31777-A-4-A (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-4-B
4	140-31777-A-9-A (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-9-D
5	140-31777-A-9-B~MS (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-9-E MS
6	140-31777-A-9-C~MSD (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-9-F MSD
7	140-31777-A-14-A (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-14-B
8	140-31777-A-20-A (29_7470A)	N/A (140-31777-1)	AT_Volume	25 mL	50 mL	5/26/23	8_Days	4		140-31777-A-20-B
9	140-31858-A-4-A (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4		140-31858-A-4-B
10	140-31858-A-9-A (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4		140-31858-A-9-D
11	140-31858-A-9-B~MS (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4		140-31858-A-9-E MS
12	140-31858-A-9-C~MSD (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4		140-31858-A-9-F MSD
13	140-31858-A-14-A (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4		140-31858-A-14-B

HG_BH_KMNO4_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73582

Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 8:20:00AM

Batch End: 5/25/2023 4:30:00PM

14	140-31858-A-17-A (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4	
15	140-31858-A-19-A (29_7470A)	N/A (140-31858-1)	AT_Volume	25 mL	50 mL	6/13/23	15_Days	4	

HG_BH_HCL_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73583

Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-73515/1-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		MB 140-73515/1-B
2	LCS~140-73515/2-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		LCS 140-73515/2-B
3	140-31777-A-5-A (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-5-B
4	140-31777-A-10-A (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-10-D
5	140-31777-A-10-B~MS (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-10-E MS
6	140-31777-A-10-C~MSD (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-10-F MSD
7	140-31777-A-15-A (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-15-B
8	140-31777-A-21-A (29_7470A)	N/A (140-31777-1)	AT_Volume	10 mL	50 mL	5/26/23	8_Days	4		140-31777-A-21-B
9	140-31858-A-5-A (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4		140-31858-A-5-B
10	140-31858-A-10-A (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4		140-31858-A-10-D
11	140-31858-A-10-B~MS (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4		140-31858-A-10-E MS
12	140-31858-A-10-C~MSD (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4		140-31858-A-10-F MSD
13	140-31858-A-15-A (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4		140-31858-A-15-B

HG_BH_HCL_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73583 Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

14	140-31858-A-20-A (29_7470A)	N/A (140-31858-1)	AT_Volume	10 mL	50 mL	6/13/23	15_Days	4	

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-73595

Analyst: Harrison, Laurel A

Batch Open: 5/25/2023 10:30:00AM

Batch End: 5/25/2023 4:30:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-73593/1-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-73593/1-B
2	LCS~140-73593/2-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		LCS 140-73593/2-B
3	140-31777-A-2-B (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-2-C
4	140-31777-A-7-B (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-7-E
5	140-31777-A-7-C~MS (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-7-F MS
6	140-31777-A-7-D~MSD (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-7-G MSD
7	140-31777-A-12-B (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-12-C
8	140-31777-A-18-B (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-18-C
9	140-31777-A-19-B (29_7470A)	N/A (140-31777-1)	AT_Volume	2.5 mL	50 mL	5/26/23	8_Days	4		140-31777-A-19-C

Eurofins Knoxville *WSK*

Report Generated By Teledyne Leeman QuickTrace

Analyst: knxinsthg2

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\A052623A.wszf

Creation Date: 5/26/2023 8:11:17 AM

Comment:

Results

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank					STD	05/26/23 09:49:49 am	0.00000	69	43.71			1.0000	N/A
Replicates	83.3	98.6	64.2	28.9									
Standard #1 (0.1 ug/L)					STD	05/26/23 09:52:22 am	0.10000	1244	0.79	3.18%		1.0000	N/A
Replicates	1231.5	1245.7	1255.3	1241.8									
Standard #2 (0.2 ug/L)					STD	05/26/23 09:54:55 am	0.20000	2456	1.12	1.47%		1.0000	N/A
Replicates	2468.3	2414.7	2472.7	2468.0									
Standard #3 (0.5 ug/L)					STD	05/26/23 09:57:28 am	0.50000	5927	0.16	-2.30%		1.0000	N/A
Replicates	5930.0	5936.2	5913.5	5926.7									
Standard #4 (1.0 ug/L)					STD	05/26/23 10:00:00 am	1.00000	11801	0.25	-2.81%		1.0000	N/A
Replicates	11802.1	11773.3	11787.2	11842.3									
Standard #5 (5.0 ug/L)					STD	05/26/23 10:02:33 am	5.00000	61330	0.20	0.95%		1.0000	N/A
Replicates	61186.0	61301.0	61353.6	61478.1									
Standard #6 (10.0 ug/l)					STD	05/26/23 10:05:04 am	10.00000	121273	0.08	-0.20%		1.0000	N/A
Replicates	121141.3	121254.6	121325.6	121368.9									

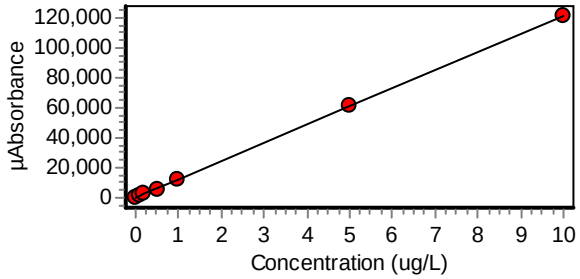
Calibration

Equation: Abs = 12153.041x + -10.396

R2: 0.99996 RSE: 2.57%

SEE: 327.6423

Flags:



ICV 140-73581/20-A					ICV	05/26/23 10:07:36 am	2.50350	30414	0.04			1.0000	100.14
Replicates	30408.1	30416.9	30400.9	30431.1									
ICB 140-73581/21-A					ICB	05/26/23 10:10:08 am	0.00128	5	87.51			1.0000	N/A
Replicates	-10.8	-1.4	17.4	15.6									
CRA 140-73581/22-A					CRDL	05/26/23 10:12:39 am	0.20030	2424	0.66			1.0000	100.15
Replicates	2440.4	2412.0	2408.5	2434.7									
CCV 140-73581/23-A					CCV	05/26/23 10:15:13 am	5.05270	61395	0.16			1.0000	101.05
Replicates	61418.3	61497.9	61396.7	61265.9									
CCB 140-73581/24-A					CCB	05/26/23 10:17:48 am	-0.00175	-32	72.28			1.0000	N/A
Replicates	-47.6	-37.9	-29.6	-11.4									

Sample Name			Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
MB 140-73514/5-B			MB	05/26/23 10:20:20 am	0.00283	24	55.94			1.0000	N/A
Replicates	49.5	27.8	8.7	9.7							
LCS 140-73514/6-B			LCS	05/26/23 10:22:52 am	5.49710	66797	0.05			1.0000	109.94
Replicates	66798.0	66834.5	66803.7	66749.9							
LCSD 140-73514/7-B			LCS	05/26/23 10:25:24 am	4.89560	59486	0.17			1.0000	97.91
Replicates	59347.4	59482.4	59536.0	59578.5							
140-31669-A-3-B			UNK	05/26/23 10:27:56 am	0.00268	22	39.14			1.0000	N/A
Replicates	13.3	35.4	9.4	30.6							
140-31669-A-10-B			UNK	05/26/23 10:30:28 am	0.00679	72	18.46			1.0000	N/A
Replicates	69.6	51.5	84.4	82.9							
140-31669-A-10-B pds			UNK	05/26/23 10:33:01 am	1.04050	12635	0.13			1.0000	N/A
Replicates	12616.1	12627.8	12654.3	12640.7							
140-31669-A-10-B pdsd			UNK	05/26/23 10:35:34 am	1.01940	12378	0.09			1.0000	N/A
Replicates	12369.8	12369.0	12392.3	12382.0							
140-31669-A-17-B			UNK	05/26/23 10:38:07 am	0.00831	91	25.50			1.0000	N/A
Replicates	75.8	81.3	129.0	76.1							
140-31669-A-23-B			UNK	05/26/23 10:40:40 am	0.00369	34	31.23			1.0000	N/A
Replicates	45.6	28.8	46.1	17.3							
MB 140-73444/14-B			MB	05/26/23 10:43:11 am	0.00445	44	33.05			1.0000	N/A
Replicates	34.8	70.5	35.3	34.1							
CCV 140-73581/23-A			CCV	05/26/23 10:45:45 am	5.06310	61521	0.14			1.0000	101.26
Replicates	61405.5	61504.7	61585.2	61590.4							
CCB 140-73581/24-A			CCB	05/26/23 10:48:20 am	-0.00167	-31	120.93			1.0000	N/A
Replicates	-11.0	-51.6	-7.9	-52.4							
LCS 140-73444/15-B			LCS	05/26/23 10:50:51 am	4.89890	59527	0.17			1.0000	97.98
Replicates	59639.7	59578.7	59464.0	59423.5							
LCSD 140-73444/16-B			LCS	05/26/23 10:53:23 am	4.90360	59583	0.04			1.0000	98.07
Replicates	59561.4	59573.4	59582.6	59613.4							
140-31777-A-1-B			UNK	05/26/23 10:55:55 am	0.11378	1372	0.76			1.0000	N/A
Replicates	1376.2	1384.7	1368.2	1360.4							
140-31777-A-6-B			UNK	05/26/23 10:58:27 am	0.08988	1082	1.90			1.0000	N/A
Replicates	1054.2	1087.8	1104.1	1081.8							
140-31777-A-6-B pds			UNK	05/26/23 11:00:59 am	1.08780	13209	0.14			1.0000	N/A
Replicates	13202.5	13196.8	13237.3	13199.8							
140-31777-A-6-B pdsd			UNK	05/26/23 11:03:31 am	1.07540	13059	0.14			1.0000	N/A
Replicates	13045.7	13082.2	13043.4	13065.2							
140-31777-A-11-B			UNK	05/26/23 11:06:04 am	0.03964	471	3.82			1.0000	N/A
Replicates	467.9	458.8	460.5	498.3							

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual Flags	DF	% Recovery
140-31777-A-16-B	UNK	05/26/23 11:08:37 am	-0.00128	-26	91.78		1.0000	N/A
Replicates	-26.9	-28.0	-7.2	-42.0				
140-31777-A-17-B	UNK	05/26/23 11:11:09 am	0.00149	8	85.99		1.0000	N/A
Replicates	19.8	-14.4	8.2	17.1				
MB 140-73511/1-B	MB	05/26/23 11:13:42 am	0.00107	3	111.01		1.0000	N/A
Replicates	-5.8	13.1	-13.3	16.4				
CCV 140-73581/23-A	CCV	05/26/23 11:16:16 am	5.01930	60989	0.11		1.0000	100.39
Replicates	60916.9	60957.1	61021.8	61061.3				
CCB 140-73581/24-A	CCB	05/26/23 11:18:51 am	-0.00105	-23	112.56		1.0000	N/A
Replicates	-15.4	-13.5	-44.5	-19.5				
LCS 140-73511/2-B	LCS	05/26/23 11:21:24 am	5.01080	60886	0.14		1.0000	100.22
Replicates	60776.2	60859.3	60943.9	60966.6				
140-31777-A-3-B	UNK	05/26/23 11:23:56 am	-0.00085	-21	252.15		1.0000	N/A
Replicates	-5.1	-4.5	-14.0	-59.4				
140-31777-A-8-D	UNK	05/26/23 11:26:27 am	0.00339	31	35.64		1.0000	N/A
Replicates	39.1	30.2	43.4	10.4				
140-31777-A-8-E MS	UNK	05/26/23 11:28:59 am	1.01900	12373	0.02		1.0000	N/A
Replicates	12372.0	12374.1	12376.6	12371.0				
140-31777-A-8-F MSD	UNK	05/26/23 11:31:31 am	1.00090	12153	0.17		1.0000	N/A
Replicates	12121.8	12163.0	12160.5	12167.2				
140-31777-A-13-B	UNK	05/26/23 11:34:03 am	0.00102	2	240.02		1.0000	N/A
Replicates	-8.0	-17.8	-12.5	46.0				
140-31858-A-3-B	UNK	05/26/23 11:36:35 am	0.01850	214	3.94		1.0000	N/A
Replicates	203.8	222.7	210.5	220.7				
140-31858-A-8-D	UNK	05/26/23 11:39:07 am	0.00735	79	9.81		1.0000	N/A
Replicates	89.3	78.0	80.5	68.0				
140-31858-A-8-E MS	UNK	05/26/23 11:41:40 am	0.99729	12110	0.15		1.0000	N/A
Replicates	12092.1	12105.3	12135.8	12105.8				
140-31858-A-8-F MSD	UNK	05/26/23 11:44:13 am	1.00980	12262	0.08		1.0000	N/A
Replicates	12272.8	12253.2	12252.8	12268.2				
CCV 140-73581/23-A	CCV	05/26/23 11:46:47 am	4.96670	60351	0.13		1.0000	99.33
Replicates	60245.9	60339.9	60417.1	60399.7				
CCB 140-73581/24-A	CCB	05/26/23 11:49:21 am	0.00051	-4	106.35		1.0000	N/A
Replicates	-12.8	-4.5	3.2	-2.7				
140-31858-A-13-B	UNK	05/26/23 11:51:54 am	0.00621	65	24.70		1.0000	N/A
Replicates	59.9	65.8	45.0	89.8				
MB 140-73513/1-B	MB	05/26/23 11:54:27 am	0.00473	47	24.67		1.0000	N/A
Replicates	63.3	34.4	54.6	35.9				

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
LCS 140-73513/2-B				LCS	05/26/23 11:57:00 am	5.03100	61131	0.24			1.0000	100.62
Replicates	60933.6	61105.5	61210.0	61274.8								
140-31777-A-4-B				UNK	05/26/23 11:59:32 am	0.16684	2017	0.96			1.0000	N/A
Replicates	2002.2	2039.5	2027.5	1999.6								
140-31777-A-9-D				UNK	05/26/23 12:02:03 pm	0.00722	77	43.16			1.0000	N/A
Replicates	62.1	32.1	97.7	117.4								
140-31777-A-9-E MS				UNK	05/26/23 12:04:35 pm	0.97876	11885	0.12			1.0000	N/A
Replicates	11869.0	11875.3	11899.5	11894.5								
140-31777-A-9-F MSD				UNK	05/26/23 12:07:07 pm	0.97790	11874	0.10			1.0000	N/A
Replicates	11891.6	11865.0	11871.5	11868.5								
140-31777-A-14-B				UNK	05/26/23 12:09:39 pm	0.02903	342	7.09			1.0000	N/A
Replicates	375.9	322.5	347.1	324.1								
140-31777-A-20-B				UNK	05/26/23 12:12:11 pm	0.00546	56	40.40			1.0000	N/A
Replicates	39.8	28.1	68.9	86.8								
140-31858-A-4-B				UNK	05/26/23 12:14:43 pm	1.40820	17104	0.10			1.0000	N/A
Replicates	17095.7	17098.9	17091.5	17129.5								
CCV 140-73581/23-A				CCV	05/26/23 12:17:18 pm	5.07820	61706	0.22			1.0000	101.56
Replicates	61511.5	61722.0	61774.6	61814.8								
CCB 140-73581/24-A				CCB	05/26/23 12:19:52 pm	-0.00266	-43	64.24			1.0000	N/A
Replicates	-51.3	-34.6	-18.4	-66.4								
140-31858-A-9-D				UNK	05/26/23 12:22:25 pm	1.24500	15120	0.07			1.0000	N/A
Replicates	15105.7	15126.0	15128.2	15121.0								
140-31858-A-9-E MS				UNK	05/26/23 12:24:57 pm	2.59140	31483	0.16			1.0000	N/A
Replicates	31428.7	31453.0	31511.5	31540.5								
140-31858-A-9-F MSD				UNK	05/26/23 12:27:30 pm	2.23500	27151	0.01			1.0000	N/A
Replicates	27150.7	27156.3	27147.3	27149.8								
140-31858-A-14-B				UNK	05/26/23 12:30:03 pm	0.90192	10951	0.93			1.0000	N/A
Replicates	10829.8	10913.8	10991.5	11067.5								
140-31858-A-17-B				UNK	05/26/23 12:32:36 pm	0.00844	92	10.05			1.0000	N/A
Replicates	82.1	91.8	106.3	88.2								
140-31858-A-19-B				UNK	05/26/23 12:35:08 pm	0.10035	1209	0.98			1.0000	N/A
Replicates	1192.3	1212.6	1211.5	1220.3								
MB 140-73515/1-B				MB	05/26/23 12:37:40 pm	0.00479	48	46.45			1.0000	N/A
Replicates	38.5	50.7	83.4	18.9								
LCS 140-73515/2-B				LCS	05/26/23 12:40:12 pm	4.93350	59946	0.08			1.0000	98.67
Replicates	59922.5	59902.8	59947.3	60013.4								
140-31777-A-5-B				UNK	05/26/23 12:42:44 pm	7.56150	91885	0.16			1.0000	N/A
Replicates	91743.1	91790.5	91938.8	92067.5								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-31777-A-10-D				UNK	05/26/23 12:45:16 pm	0.96497	11717	0.14			1.0000	N/A
Replicates	11722.7	11697.0	11712.8	11735.3								
CCV 140-73581/23-A				CCV	05/26/23 12:47:50 pm	4.99470	60690	0.17			1.0000	99.89
Replicates	60542.6	60690.8	60745.3	60780.6								
CCB 140-73581/24-A				CCB	05/26/23 12:50:24 pm	0.00024	-7	485.62			1.0000	N/A
Replicates	-8.7	-4.7	9.0	-25.5								
140-31777-A-10-E MS				UNK	05/26/23 12:52:57 pm	2.03890	24768	0.20			1.0000	N/A
Replicates	24712.1	24746.5	24787.8	24825.5								
140-31777-A-10-F MSD				UNK	05/26/23 12:55:29 pm	2.06450	25080	0.06			1.0000	N/A
Replicates	25064.9	25099.5	25078.0	25077.0								
140-31777-A-15-B				UNK	05/26/23 12:58:01 pm	0.90778	11022	3.45			1.0000	N/A
Replicates	10500.6	11020.8	11397.8	11168.3								
140-31777-A-21-B				UNK	05/26/23 01:00:34 pm	0.04909	586	1.76			1.0000	N/A
Replicates	574.3	591.6	581.3	597.8								
140-31858-A-5-B				UNK	05/26/23 01:03:07 pm	0.30001	3636	0.63			1.0000	N/A
Replicates	3626.6	3645.8	3608.4	3661.6								
140-31858-A-10-D				UNK	05/26/23 01:05:40 pm	0.27647	3350	0.23			1.0000	N/A
Replicates	3339.4	3357.8	3350.2	3351.0								
140-31858-A-10-E MS				UNK	05/26/23 01:08:13 pm	1.30460	15844	0.05			1.0000	N/A
Replicates	15835.7	15855.4	15839.7	15844.7								
140-31858-A-10-F MSD				UNK	05/26/23 01:10:45 pm	1.28420	15596	0.13			1.0000	N/A
Replicates	15568.5	15595.3	15618.5	15603.2								
140-31858-A-15-B				UNK	05/26/23 01:13:17 pm	0.01891	219	10.37			1.0000	N/A
Replicates	233.2	192.6	244.7	207.1								
140-31858-A-20-B				UNK	05/26/23 01:15:49 pm	0.00687	73	19.56			1.0000	N/A
Replicates	83.9	48.8	81.3	78.2								
CCV 140-73581/23-A				CCV	05/26/23 01:18:23 pm	5.01960	60993	0.18			1.0000	100.39
Replicates	60852.4	60967.1	61040.2	61110.4								
CCB 140-73581/24-A				CCB	05/26/23 01:20:58 pm	-0.00266	-43	40.97			1.0000	N/A
Replicates	-46.1	-37.0	-59.5	-28.5								
MB 140-73593/1-B				MB	05/26/23 01:23:30 pm	0.00141	7	68.86			1.0000	N/A
Replicates	-6.5	20.4	12.0	1.2								
LCS 140-73593/2-B				LCS	05/26/23 01:26:03 pm	5.09750	61940	0.11			1.0000	101.95
Replicates	61871.1	61907.0	61958.0	62024.3								
140-31777-A-2-C				UNK	05/26/23 01:28:35 pm	0.02078	242	5.66			1.0000	N/A
Replicates	226.4	258.1	234.6	249.4								
140-31777-A-7-E				UNK	05/26/23 01:31:07 pm	0.03848	457	2.80			1.0000	N/A
Replicates	447.7	474.8	459.8	446.8								

Sample Name					Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-31777-A-7-F MS					UNK	05/26/23 01:33:39 pm	1.05700	12836	0.23			1.0000	N/A
Replicates	12814.8	12806.8	12865.1	12856.9									
140-31777-A-7-G MSD					UNK	05/26/23 01:36:12 pm	1.04270	12662	0.26			1.0000	N/A
Replicates	12640.6	12640.8	12656.4	12710.3									
140-31777-A-12-C					UNK	05/26/23 01:38:45 pm	0.04301	512	3.54			1.0000	N/A
Replicates	491.2	502.3	526.3	529.3									
140-31777-A-18-C					UNK	05/26/23 01:41:18 pm	0.00078	-1	158.22			1.0000	N/A
Replicates	-11.1	15.3	8.3	-16.0									
140-31777-A-19-C					UNK	05/26/23 01:43:51 pm	0.02498	293	8.66			1.0000	N/A
Replicates	257.5	299.4	295.2	320.7									
CCV 140-73581/23-A					CCV	05/26/23 01:46:25 pm	0.20245	2450	64.38		Q	1.0000	4.05
Replicates	4605.4	2604.0	1603.5	987.0									
CCV 140-73581/23-A					CCV	05/26/23 01:50:09 pm	5.01600	60949	0.16			1.0000	100.32
Replicates	60825.7	60930.6	60995.5	61045.3									
CCB 140-73581/24-A					CCB	05/26/23 01:52:43 pm	-0.00117	-25	42.11			1.0000	N/A
Replicates	-32.6	-19.4	-20.7	-25.6									
140-31858-A-9-D pds					UNK	05/26/23 01:55:16 pm	2.14180	26019	0.04			1.0000	N/A
Replicates	26011.5	26029.8	26024.0	26009.6									
140-31858-A-9-D pdsd					UNK	05/26/23 01:57:48 pm	2.13730	25965	0.57			1.0000	N/A
Replicates	25776.7	25929.2	26025.8	26126.3									
CCV 140-73581/23-A					CCV	05/26/23 02:00:23 pm	5.11930	62205	0.08			1.0000	102.39
Replicates	62145.0	62183.5	62250.0	62240.1									
CCB 140-73581/24-A					CCB	05/26/23 02:02:57 pm	0.00165	10	94.76			1.0000	N/A
Replicates	1.9	11.1	35.1	-9.6									

Eurofins Knoxville Mercury Batch Review Checklist
SOPs: KNOX-MT-0009r16, KNOX-MT-0010r15, KNOX-MT-0008r8, KNOX-MT-0001r5

Chart Name:	AOS2623A	Analysis Batch #:	73672	Analyst:	LAH/WSK	Instrument:	ADT	

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated with at least 5 standards and a blank?	Y	Y	
2. Linearity and intercept verified? (r≥0.995 and x-intercept <RL)	Y	Y	
3. ICV analyzed at beginning of run & within limits? (90 - 110%R)	Y	Y	
4. CCV analyzed at required frequency & within limits? (80 - 120%R)	Y	Y	☒ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM# _____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM# _____)
6. Reporting Limit Check Standard (CRI) within limits? (±30%; ±50 % for Method 30B)	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with results > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments:
2. Were samples with negative results >RL reanalyzed at a dilution?	NA	NA	
3. Were samples analyzed with the holding time?	Y	Y	☐ **Holding Time-Receipt** (NCM# _____) ☐ **Holding Time-Initial Analysis** (NCM# _____) ☐ **Holding Time-Reanalysis** (NCM# _____) ☐ **Holding Time- Insufficient Time** (NCM# _____)
4. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM# _____) ☐ **Method Blank – Report, 10X** (NCM# _____) ☐ **Method Blank–Insufficient Sample** (NCM# _____)
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCS –Insufficient Sample** (NCM# _____) ☐ **LCS/LCSD - %R High** (NCM# _____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	Y	Y	☐ **MS/MSD/DUP-Insufficient Vol** (NCM# _____)
4. MS/MSD %R and RPD within QC limits?	N	N	☒ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ ~~**MS/MSD - %RPD** (NCM# 4-5498)~~ KNC 5-30-23
5. DUP RPD within limits?	NA	NA	☐ **DUP - %RPD** (NCM# _____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R and ≤20 RPD)	Y	Y	☐ **Post Digestion Spike - %R** (NCM# _____) ☐ **MS/MSD; High Bias; PDS Accept.** (NCM# _____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: LAH 05/30/23	2nd Level Review by: KNC 5-30-23
140-31777-A-15-B @ 12:58	
$(0.90778\ mg/L)(0.280L)\left(\frac{50mL}{10mL}\right) \approx 1.27\ mg/sample$	

Shipping and Receiving Documents

Chain of Custody Record

No. 118.01290.00025_0400

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

SLR

Project Name:	FMMI	Project Number:	118.01290.00025_0400
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsultin.com		

Page 1 of 2

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Full Metals List	Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
VF29-1, Container 1	05/11/23		Filter	1	X	X		
VF29-1, Container 3	05/11/23		0.1 N HNO_3	1	X	X		
VF29-1, Container 4	05/11/23		H_2O_2/HNO_3	1	X	X		
VF29-1, Container 5A	05/11/23		0.1 N HNO_3	1		X		
VF29-1, Container 5B	05/11/23		Acidified $KMnO_4$	1		X		
VF29-1, Container 5C	05/11/23		H_2O/HCl	1		X		
VF29-2, Container 1	05/11/23		Filter	1	X	X		
VF29-2, Container 3	05/11/23		0.1 N HNO_3	1	X	X		
VF29-2, Container 4	05/11/23		H_2O_2/HNO_3	1	X	X		
VF29-2, Container 5A	05/11/23		0.1 N HNO_3	1		X		
VF29-2, Container 5B	05/11/23		Acidified $KMnO_4$	1		X		
VF29-2, Container 5C	05/11/23		H_2O/HCl	1		X		
VF29-3, Container 1	05/11/23		Filter	1	X	X		
VF29-3, Container 3	05/11/23		0.1 N HNO_3	1	X	X		
VF29-3, Container 4	05/11/23		H_2O_2/HNO_3	1	X	X		
VF29-3, Container 5B	05/11/23		0.1 N HNO_3	1		X		
VF29-3, Container 5B	05/11/23		Acidified $KMnO_4$	1		X		
VF29-3, Container 5C	05/11/23		H2O/HCl	1		X		

140-31777 Chain of Custody

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	5/15/23	16:00	Deanna Hurst ETA KNX	5/16/23	9:15
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level		Turnaround		Sample Receipt	
Level I	☐	Routine	☑	Total # Containers Received?	
Level II	☐	24 Hour	☐	COC Seals Present?	
Level III	☐	1 Week	☐	COC Seals Intact?	
Other	☐	Other		Received Containers Intact?	
				Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

Chain of Custody Record

No. 118.01290.00025_0400

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

SLR

Project Name:	FMMI	Project Number:	118.01290.00025_0400
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsulting.com		

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Full Metals List	Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
Blank, Container 12	05/11/23		Filter	1	X	X		
Blank, Container 8A	05/11/23		0.1 N HNO_3	1	X	X		
Blank, Container 8B	05/11/23		H_2O	1	X	X		
Blank, Container 9	05/11/23		H_2O_2/HNO_3	1	X	X		
Blank, Container 10	05/11/23		Acidified $KMnO_4$	1		X		
Blank, Container 11	05/11/23		H_2O/HCl	1		X		

Please provide separate front and back half metals results.

Metals List: Lead, Silver, Arsenic, Gold, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Mercury, Nickel, Antimony, Selenium, Thallium, Vanadium, Zinc.

Please provide digital results to Doug Bopray at dbopray@slrconsulting.com

If you have any questions or concerns regarding the samples or instructions please call Doug Bopray at (970) 219-1431.

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	5/15/23	16:00	Deanna Hicks ETA KUX	5/16/23	9:15
Relinquished by: (Signature)			Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level		Turnaround		Sample Receipt	
Level I	☐	Routine	☑	Total # Containers Received?	
Level II	☐	24 Hour	☐	COC Seals Present?	
Level III	☐	1 Week	☐	COC Seals Intact?	
Other	☐	Other		Received Containers Intact?	
				Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

Page 876 of 884

5/31/2023 10:32 AM

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : SC75 Correction factor: -0.4°C			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

CUSTODY SEALS INTACT
RECEIVED AMBIENT AT 21.6/CT 21.2°C
2 BOXES FEDEX # 7721 4927 2073 PD
7721 4955 4749 PD
DNM 5-16-23

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: _____ PM Instructions: _____

Sample Receiving Associate: Deana Hutton Date: 5/16/23

QA026R32.doc, 062719

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Doug Bopray
SLR International Corp
1612 Specht Point Road, Suite 119
Fort Collins CO 80525

Generated 11/27/2023 12:19 PM

JOB DESCRIPTION

FMMI - Method 29

JOB NUMBER

140-34307-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
11/27/2023 12:19 PM

Authorized for release by
Aurielle C Wright, Project Management Assistant I
Aurielle.Wright@et.eurofinsus.com
Designee for
Courtney M Adkins, Project Manager II
Courtney.Adkins@et.eurofinsus.com
865 291-3019

Table of Contents

Table of Contents

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Method	Method Description	Protocol	Laboratory
29/6010C	Metals (ICP), Stationary Source	EPA	EET KNX
29/7470A	Mercury (CVAA), Stationary Source	EPA	EET KNX
Air Train Vol.	Air Train Volume	None	EET KNX
AT Prep (BH)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (BH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (Empty)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (FH)	Preparation, Total Metals (Stationary Source)	EPA	EET KNX
AT Prep (HCl)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep (KMnO4)	Preparation, Mercury (Stationary Source)	EPA	EET KNX
AT Prep FH	Preparation, Mercury (Stationary Source) FH	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-34307-1	AP29-1 CONTAINER 1,3	Air	10/31/23 00:00	11/09/23 13:18
140-34307-2	AP29-1 CONTAINER 4	Air	10/31/23 00:00	11/09/23 13:18
140-34307-3	AP29-1 CONTAINER 5A	Air	10/31/23 00:00	11/09/23 13:18
140-34307-4	AP29-1 CONTAINER 5B	Air	10/31/23 00:00	11/09/23 13:18
140-34307-5	AP29-1 CONTAINER 5C	Air	10/31/23 00:00	11/09/23 13:18
140-34307-6	AP29-2, CONTAINER 1,3	Air	11/01/23 00:00	11/09/23 13:18
140-34307-7	AP29-2, CONTAINER 4	Air	11/01/23 00:00	11/09/23 13:18
140-34307-8	AP29-2, CONTAINER 5A	Air	11/01/23 00:00	11/09/23 13:18
140-34307-9	AP29-2, CONTAINER 5B	Air	11/01/23 00:00	11/09/23 13:18
140-34307-10	AP29-2, CONTAINER 5C	Air	11/01/23 00:00	11/09/23 13:18
140-34307-11	AP29-3, CONTAINER 1,3	Air	11/02/23 00:00	11/09/23 13:18
140-34307-12	AP29-3, CONTAINER 4	Air	11/02/23 00:00	11/09/23 13:18
140-34307-13	AP29-3, CONTAINER 5A	Air	11/02/23 00:00	11/09/23 13:18
140-34307-14	AP29-3, CONTAINER 5B	Air	11/02/23 00:00	11/09/23 13:18
140-34307-15	AP29-3, CONTAINER 5C	Air	11/02/23 00:00	11/09/23 13:18
140-34307-16	BLANK CONTAINER 12	Air	11/01/23 00:00	11/09/23 13:18
140-34307-17	BLANK CONTAINER 8A	Air	11/01/23 00:00	11/09/23 13:18
140-34307-18	BLANK CONTAINER 8B	Air	11/01/23 00:00	11/09/23 13:18
140-34307-19	BLANK CONTAINER 9	Air	11/01/23 00:00	11/09/23 13:18
140-34307-20	BLANK CONTAINER 10	Air	11/01/23 00:00	11/09/23 13:18
140-34307-21	BLANK CONTAINER 11	Air	11/01/23 00:00	11/09/23 13:18

Job Narrative
140-34307-1

Receipt

The samples were received on 11/9/2023 1:18 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 20.4º C and 20.4º C.

Receipt Exceptions

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): AP29-3, CONTAINER 5A (140-34307-13). The container labels list AP29-3,CONTAINER 5A, while the COC lists AP29-3,CONTAINER 5B. Logged using container label.

Metals

Multi-Metals Train Preparation and Analysis

These stack gas samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0006 which is based on EPA SW-846 Method 0060, “Determination of Metals in Stack Emissions” and Method 29, “Determination of Metals Emissions from Stationary Sources”. SW-846 Methods 6010C and 7470A as incorporated in Eurofins TestAmerica Knoxville standard operating procedures KNOX-MT-0007 and KNOX-MT-0009 were used to perform the final instrument analysis.

Acid digestion was performed on the front half particulate filter and the nitric acid probe rinse fractions separately using HNO3 and HF. After digestion, these two fractions were combined, and the HF was sequestered using H3BO3 followed by another heating cycle. This digestate was adjusted to final volume and analyzed by ICP. A portion of the ICP digestate was prepared for CVAA analysis in order to determine the particle-bound mercury. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume ICP Digestate, L) x (Final Volume Hg Digestate, mL / Volume ICP Digestate Used, mL)

The 5%HNO3/10%H2O2 impinger samples were reduced in volume to 100 mL. A 20 milliliter portion of the concentrated sample was removed and processed for mercury. The remaining 80 mL of concentrated sample was digested using HNO3 and H2O2, adjusted to a final volume of 80 mL, and analyzed by ICP. Results were calculated using the following equations:

ICP Analyte, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume ICP Digestate, mL / Volume Conc. Sample Digested, mL)

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Final Volume Concentrated Sample, L) x (Final Volume Hg Digestate, mL / Volume Conc. Sample Digested, mL)

For the 0.1N HNO3 rinse samples (empty impingers), a 2.5 milliliter portion of the sample as received was removed and processed for mercury.

The 4% KMnO4/10%H2SO4 impinger samples were filtered to remove MnO2, followed by removal of a 25 mL portion of filtrate for mercury processing. The filtered MnO2 residue was digested in HCl, combined with the HCl rinse sample and analyzed for mercury.

Results for the 0.1N HNO3 rinse samples and the KMnO4 filtrate were calculated using the following equation:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Results for the combined MnO2 residue HCl digestates and HCl rinse samples were calculated as follows:

Hg, µg/sample = (Raw Sample Concentration, µg/L) x (Bench DF) x (Total Sample Volume, L + MnO2 HCl Volume, L) x (Final Volume Hg Digestate, mL / Volume Sample Digested, mL)

Note: The total sample volume for the 5%HNO3/10%H2O2 impinger samples is the final volume of the concentrated sample. The total sample volume for the combined MnO2 residue HCl digestates and HCl rinse samples is equal to the total sample volume plus the MnO2 HCl volume.

Method 29/6010C: The following samples were diluted due to the presence of Silicon which interferes with Arsenic, Cobalt, Lead, Nickel, Selenium and Thallium: AP29-1 CONTAINER 1,3 (140-34307-1), AP29-2, CONTAINER 1,3 (140-34307-6), AP29-3, CONTAINER 1,3 (140-34307-11) and BLANK CONTAINER 12 (140-34307-16). Elevated reporting limits (RLs) are provided.

Method 29/7470A: The following samples were diluted to bring the concentration of target analyte, Mercury, within the calibration range:

AP29-1 CONTAINER 5C (140-34307-5), AP29-2, CONTAINER 5C (140-34307-10), AP29-2, CONTAINER 5C (140-34307-10[MS]), AP29-2, CONTAINER 5C (140-34307-10[MSD]) and AP29-3, CONTAINER 5C (140-34307-15). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Prep Batch: 80160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-1	AP29-1 CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-34307-6	AP29-2, CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-34307-11	AP29-3, CONTAINER 1,3	Total/NA	Air	AT Prep (FH)	
140-34307-16	BLANK CONTAINER 12	Total/NA	Air	AT Prep (FH)	
140-34307-17	BLANK CONTAINER 8A	Total/NA	Air	AT Prep (FH)	
MB 140-80160/7-A	Method Blank	Total/NA	Air	AT Prep (FH)	
MB 140-80160/7-B	Method Blank	Total/NA	Air	AT Prep (FH)	
LCS 140-80160/8-A	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCS 140-80160/8-B	Lab Control Sample	Total/NA	Air	AT Prep (FH)	
LCSD 140-80160/9-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	
LCSD 140-80160/9-B	Lab Control Sample Dup	Total/NA	Air	AT Prep (FH)	

Prep Batch: 80161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-2	AP29-1 CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-34307-7	AP29-2, CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-34307-12	AP29-3, CONTAINER 4	Total/NA	Air	AT Prep (BH)	
140-34307-19	BLANK CONTAINER 9	Total/NA	Air	AT Prep (BH)	
MB 140-80161/6-A	Method Blank	Total/NA	Air	AT Prep (BH)	
LCS 140-80161/7-A	Lab Control Sample	Total/NA	Air	AT Prep (BH)	
LCSD 140-80161/8-A	Lab Control Sample Dup	Total/NA	Air	AT Prep (BH)	

Pre Prep Batch: 80181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-4	AP29-1 CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-34307-9	AP29-2, CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-34307-14	AP29-3, CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-34307-18	BLANK CONTAINER 8B	Total/NA	Air	Air Train Vol.	
140-34307-20	BLANK CONTAINER 10	Total/NA	Air	Air Train Vol.	
MB 140-80181/11-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-80181/12-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-34307-9 MS	AP29-2, CONTAINER 5B	Total/NA	Air	Air Train Vol.	
140-34307-9 MSD	AP29-2, CONTAINER 5B	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 80189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-3	AP29-1 CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-34307-8	AP29-2, CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-34307-13	AP29-3, CONTAINER 5A	Total/NA	Air	Air Train Vol.	
MB 140-80189/9-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-80189/10-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-34307-8 MS	AP29-2, CONTAINER 5A	Total/NA	Air	Air Train Vol.	
140-34307-8 MSD	AP29-2, CONTAINER 5A	Total/NA	Air	Air Train Vol.	

Pre Prep Batch: 80190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-5	AP29-1 CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-34307-10	AP29-2, CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-34307-15	AP29-3, CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-34307-21	BLANK CONTAINER 11	Total/NA	Air	Air Train Vol.	
MB 140-80190/10-B	Method Blank	Total/NA	Air	Air Train Vol.	

Metals (Continued)

Pre Prep Batch: 80190 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 140-80190/11-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-34307-10 MS	AP29-2, CONTAINER 5C	Total/NA	Air	Air Train Vol.	
140-34307-10 MSD	AP29-2, CONTAINER 5C	Total/NA	Air	Air Train Vol.	

Prep Batch: 80196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-4	AP29-1 CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-9	AP29-2, CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-14	AP29-3, CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-18	BLANK CONTAINER 8B	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-20	BLANK CONTAINER 10	Total/NA	Air	AT Prep (KMnO4)	80181
MB 140-80181/11-B	Method Blank	Total/NA	Air	AT Prep (KMnO4)	80181
LCS 140-80181/12-B	Lab Control Sample	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-9 MS	AP29-2, CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	80181
140-34307-9 MSD	AP29-2, CONTAINER 5B	Total/NA	Air	AT Prep (KMnO4)	80181

Prep Batch: 80198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-3	AP29-1 CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	80189
140-34307-8	AP29-2, CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	80189
140-34307-13	AP29-3, CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	80189
MB 140-80189/9-B	Method Blank	Total/NA	Air	AT Prep (Empty)	80189
LCS 140-80189/10-B	Lab Control Sample	Total/NA	Air	AT Prep (Empty)	80189
140-34307-8 MS	AP29-2, CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	80189
140-34307-8 MSD	AP29-2, CONTAINER 5A	Total/NA	Air	AT Prep (Empty)	80189

Prep Batch: 80199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-5	AP29-1 CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	80190
140-34307-10	AP29-2, CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	80190
140-34307-15	AP29-3, CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	80190
140-34307-21	BLANK CONTAINER 11	Total/NA	Air	AT Prep (HCl)	80190
MB 140-80190/10-B	Method Blank	Total/NA	Air	AT Prep (HCl)	80190
LCS 140-80190/11-B	Lab Control Sample	Total/NA	Air	AT Prep (HCl)	80190
140-34307-10 MS	AP29-2, CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	80190
140-34307-10 MSD	AP29-2, CONTAINER 5C	Total/NA	Air	AT Prep (HCl)	80190

Analysis Batch: 80319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-3	AP29-1 CONTAINER 5A	Total/NA	Air	29/7470A	80198
140-34307-4	AP29-1 CONTAINER 5B	Total/NA	Air	29/7470A	80196
140-34307-5	AP29-1 CONTAINER 5C	Total/NA	Air	29/7470A	80199
140-34307-8	AP29-2, CONTAINER 5A	Total/NA	Air	29/7470A	80198
140-34307-9	AP29-2, CONTAINER 5B	Total/NA	Air	29/7470A	80196

Metals (Continued)

Analysis Batch: 80319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-10	AP29-2, CONTAINER 5C	Total/NA	Air	29/7470A	80199
140-34307-13	AP29-3, CONTAINER 5A	Total/NA	Air	29/7470A	80198
140-34307-14	AP29-3, CONTAINER 5B	Total/NA	Air	29/7470A	80196
140-34307-15	AP29-3, CONTAINER 5C	Total/NA	Air	29/7470A	80199
140-34307-18	BLANK CONTAINER 8B	Total/NA	Air	29/7470A	80196
140-34307-20	BLANK CONTAINER 10	Total/NA	Air	29/7470A	80196
140-34307-21	BLANK CONTAINER 11	Total/NA	Air	29/7470A	80199
MB 140-80181/11-B	Method Blank	Total/NA	Air	29/7470A	80196
MB 140-80189/9-B	Method Blank	Total/NA	Air	29/7470A	80198
MB 140-80190/10-B	Method Blank	Total/NA	Air	29/7470A	80199
LCS 140-80181/12-B	Lab Control Sample	Total/NA	Air	29/7470A	80196
LCS 140-80189/10-B	Lab Control Sample	Total/NA	Air	29/7470A	80198
LCS 140-80190/11-B	Lab Control Sample	Total/NA	Air	29/7470A	80199
140-34307-8 MS	AP29-2, CONTAINER 5A	Total/NA	Air	29/7470A	80198
140-34307-8 MSD	AP29-2, CONTAINER 5A	Total/NA	Air	29/7470A	80198
140-34307-9 MS	AP29-2, CONTAINER 5B	Total/NA	Air	29/7470A	80196
140-34307-9 MSD	AP29-2, CONTAINER 5B	Total/NA	Air	29/7470A	80196
140-34307-10 MS	AP29-2, CONTAINER 5C	Total/NA	Air	29/7470A	80199
140-34307-10 MSD	AP29-2, CONTAINER 5C	Total/NA	Air	29/7470A	80199

Cleanup Batch: 80439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-1	AP29-1 CONTAINER 1,3	Total/NA	Air	AT Prep FH	80160
140-34307-6	AP29-2, CONTAINER 1,3	Total/NA	Air	AT Prep FH	80160
140-34307-11	AP29-3, CONTAINER 1,3	Total/NA	Air	AT Prep FH	80160
140-34307-16	BLANK CONTAINER 12	Total/NA	Air	AT Prep FH	80160
140-34307-17	BLANK CONTAINER 8A	Total/NA	Air	AT Prep FH	80160
MB 140-80160/7-B	Method Blank	Total/NA	Air	AT Prep FH	80160
LCS 140-80160/8-B	Lab Control Sample	Total/NA	Air	AT Prep FH	80160
LCSD 140-80160/9-B	Lab Control Sample Dup	Total/NA	Air	AT Prep FH	80160

Pre Prep Batch: 80440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-2	AP29-1 CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-34307-7	AP29-2, CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-34307-12	AP29-3, CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-34307-19	BLANK CONTAINER 9	Total/NA	Air	Air Train Vol.	
MB 140-80440/10-B	Method Blank	Total/NA	Air	Air Train Vol.	
LCS 140-80440/11-B	Lab Control Sample	Total/NA	Air	Air Train Vol.	
140-34307-7 MS	AP29-2, CONTAINER 4	Total/NA	Air	Air Train Vol.	
140-34307-7 MSD	AP29-2, CONTAINER 4	Total/NA	Air	Air Train Vol.	

Prep Batch: 80441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-2	AP29-1 CONTAINER 4	Total/NA	Air	AT Prep (BH)	80440
140-34307-7	AP29-2, CONTAINER 4	Total/NA	Air	AT Prep (BH)	80440
140-34307-12	AP29-3, CONTAINER 4	Total/NA	Air	AT Prep (BH)	80440
140-34307-19	BLANK CONTAINER 9	Total/NA	Air	AT Prep (BH)	80440
MB 140-80440/10-B	Method Blank	Total/NA	Air	AT Prep (BH)	80440
LCS 140-80440/11-B	Lab Control Sample	Total/NA	Air	AT Prep (BH)	80440
140-34307-7 MS	AP29-2, CONTAINER 4	Total/NA	Air	AT Prep (BH)	80440

Metals (Continued)

Prep Batch: 80441 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-7 MSD	AP29-2, CONTAINER 4	Total/NA	Air	AT Prep (BH)	80440

Analysis Batch: 80449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-1	AP29-1 CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-1	AP29-1 CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-2	AP29-1 CONTAINER 4	Total/NA	Air	29/6010C	80161
140-34307-6	AP29-2, CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-6	AP29-2, CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-7	AP29-2, CONTAINER 4	Total/NA	Air	29/6010C	80161
140-34307-11	AP29-3, CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-11	AP29-3, CONTAINER 1,3	Total/NA	Air	29/6010C	80160
140-34307-12	AP29-3, CONTAINER 4	Total/NA	Air	29/6010C	80161
140-34307-16	BLANK CONTAINER 12	Total/NA	Air	29/6010C	80160
140-34307-16	BLANK CONTAINER 12	Total/NA	Air	29/6010C	80160
140-34307-17	BLANK CONTAINER 8A	Total/NA	Air	29/6010C	80160
140-34307-19	BLANK CONTAINER 9	Total/NA	Air	29/6010C	80161
MB 140-80160/7-A	Method Blank	Total/NA	Air	29/6010C	80160
MB 140-80161/6-A	Method Blank	Total/NA	Air	29/6010C	80161
LCS 140-80160/8-A	Lab Control Sample	Total/NA	Air	29/6010C	80160
LCS 140-80161/7-A	Lab Control Sample	Total/NA	Air	29/6010C	80161
LCSD 140-80160/9-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	80160
LCSD 140-80161/8-A	Lab Control Sample Dup	Total/NA	Air	29/6010C	80161

Analysis Batch: 80529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34307-1	AP29-1 CONTAINER 1,3	Total/NA	Air	29/7470A	80439
140-34307-2	AP29-1 CONTAINER 4	Total/NA	Air	29/7470A	80441
140-34307-6	AP29-2, CONTAINER 1,3	Total/NA	Air	29/7470A	80439
140-34307-7	AP29-2, CONTAINER 4	Total/NA	Air	29/7470A	80441
140-34307-11	AP29-3, CONTAINER 1,3	Total/NA	Air	29/7470A	80439
140-34307-12	AP29-3, CONTAINER 4	Total/NA	Air	29/7470A	80441
140-34307-16	BLANK CONTAINER 12	Total/NA	Air	29/7470A	80439
140-34307-17	BLANK CONTAINER 8A	Total/NA	Air	29/7470A	80439
140-34307-19	BLANK CONTAINER 9	Total/NA	Air	29/7470A	80441
MB 140-80160/7-B	Method Blank	Total/NA	Air	29/7470A	80439
MB 140-80440/10-B	Method Blank	Total/NA	Air	29/7470A	80441
LCS 140-80160/8-B	Lab Control Sample	Total/NA	Air	29/7470A	80439
LCS 140-80440/11-B	Lab Control Sample	Total/NA	Air	29/7470A	80441
LCSD 140-80160/9-B	Lab Control Sample Dup	Total/NA	Air	29/7470A	80439
140-34307-7 MS	AP29-2, CONTAINER 4	Total/NA	Air	29/7470A	80441
140-34307-7 MSD	AP29-2, CONTAINER 4	Total/NA	Air	29/7470A	80441

Client Sample ID: AP29-1 CONTAINER 1,3
Lab Sample ID: 140-34307-1

Date Collected: 10/31/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.50**	**J**	6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Arsenic	ND		2.00	1.78	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Barium	**3.40**		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Chromium	**3.07**		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Cobalt	ND		10.0	2.00	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Copper	**6.25**		2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Lead	ND		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Manganese	**3.13**		1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Nickel	**1.89**	**J**	8.00	0.500	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Selenium	ND		2.00	1.32	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Thallium	ND		2.00	0.960	ug/Sample		11/13/23 07:30	11/19/23 13:51	2
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 12:14	1
Zinc	**4.13**		2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 12:14	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.38**		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 11:53	1

Client Sample ID: AP29-1 CONTAINER 4
Lab Sample ID: 140-34307-2

Date Collected: 10/31/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Arsenic	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Barium	**0.687**	**J B**	1.00	0.150	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Cadmium	ND		0.500	0.0530	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Chromium	**0.652**	**J**	1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Cobalt	ND		5.00	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Copper	**3.62**		2.50	0.580	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Lead	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Manganese	**16.1**	**B**	1.50	0.180	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Nickel	**0.431**	**J**	4.00	0.260	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Selenium	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Silver	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Thallium	ND		1.00	0.340	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Vanadium	ND		2.50	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:16	1
Zinc	**2.78**		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 11:16	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.37**		0.400	0.120	ug/Sample		11/20/23 12:00	11/21/23 12:29	1

Client Sample ID: AP29-1 CONTAINER 5A
Lab Sample ID: 140-34307-3

Date Collected: 10/31/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.360	0.108	ug/Sample		11/14/23 08:00	11/15/23 15:24	1

Client Sample ID: AP29-1 CONTAINER 5B
Lab Sample ID: 140-34307-4

Date Collected: 10/31/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.122	J	0.156	0.0468	ug/Sample		11/14/23 08:00	11/15/23 16:35	1

Client Sample ID: AP29-1 CONTAINER 5C
Lab Sample ID: 140-34307-5

Date Collected: 10/31/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16.5		0.550	0.242	ug/Sample		11/14/23 14:35	11/15/23 17:45	2

Client Sample ID: AP29-2, CONTAINER 1,3
Lab Sample ID: 140-34307-6

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.53**	**J**	6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Arsenic	ND		2.00	1.78	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Barium	**3.11**		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Beryllium	**0.110**	**J B**	0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Chromium	**4.32**		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Cobalt	ND		10.0	2.00	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Copper	**5.44**		2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Lead	**1.23**	**J**	2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Manganese	**4.64**		1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Nickel	**2.50**	**J**	8.00	0.500	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Selenium	ND		2.00	1.32	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Thallium	ND		2.00	0.960	ug/Sample		11/13/23 07:30	11/19/23 13:56	2
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 12:29	1
Zinc	**5.28**		2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 12:29	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.40**		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 11:56	1

Client Sample ID: AP29-2, CONTAINER 4
Lab Sample ID: 140-34307-7

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Arsenic	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Barium	**1.15**	**B**	1.00	0.150	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Cadmium	ND		0.500	0.0530	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Chromium	**0.810**	**J**	1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Cobalt	ND		5.00	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Copper	**10.1**		2.50	0.580	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Lead	**0.594**	**J**	1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Manganese	**32.5**	**B**	1.50	0.180	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Nickel	**1.40**	**J**	4.00	0.260	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Selenium	**0.420**	**J**	1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Silver	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Thallium	ND		1.00	0.340	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Vanadium	ND		2.50	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:30	1
Zinc	**5.62**		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 11:30	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**9.83**		0.400	0.120	ug/Sample		11/20/23 12:00	11/21/23 12:31	1

Client Sample ID: AP29-2, CONTAINER 5A
Lab Sample ID: 140-34307-8

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/14/23 08:00	11/15/23 15:26	1

Client Sample ID: AP29-2, CONTAINER 5B
Lab Sample ID: 140-34307-9

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.296		0.158	0.0474	ug/Sample		11/14/23 08:00	11/15/23 16:43	1

Client Sample ID: AP29-2, CONTAINER 5C
Lab Sample ID: 140-34307-10

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	15.3		0.550	0.242	ug/Sample		11/14/23 14:35	11/15/23 17:47	2

Client Sample ID: AP29-3, CONTAINER 1,3
Lab Sample ID: 140-34307-11

Date Collected: 11/02/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.56**	**J**	6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Arsenic	ND		2.00	1.78	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Barium	**3.08**		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Chromium	**2.93**		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Cobalt	ND		10.0	2.00	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Copper	**4.06**		2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Lead	ND		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Manganese	**4.12**		1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Nickel	**1.65**	**J**	8.00	0.500	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Selenium	ND		2.00	1.32	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Thallium	ND		2.00	0.960	ug/Sample		11/13/23 07:30	11/19/23 14:11	2
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 12:44	1
Zinc	**3.02**		2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 12:44	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.31**		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 12:08	1

Client Sample ID: AP29-3, CONTAINER 4
Lab Sample ID: 140-34307-12

Date Collected: 11/02/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Arsenic	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Barium	**0.591**	**J B**	1.00	0.150	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Cadmium	ND		0.500	0.0530	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Chromium	**0.690**	**J**	1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Cobalt	ND		5.00	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Copper	**3.73**		2.50	0.580	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Lead	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Manganese	**3.50**	**B**	1.50	0.180	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Nickel	**0.381**	**J**	4.00	0.260	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Selenium	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Silver	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Thallium	ND		1.00	0.340	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Vanadium	ND		2.50	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:44	1
Zinc	**2.57**		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 11:44	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**16.9**		0.400	0.120	ug/Sample		11/20/23 12:00	11/21/23 12:44	1

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Client Sample ID: AP29-3, CONTAINER 5A
Date Collected: 11/02/23 00:00
Date Received: 11/09/23 13:18
Sample Container: Air Train

Lab Sample ID: 140-34307-13
Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/14/23 08:00	11/15/23 15:34	1

Client Sample ID: AP29-3, CONTAINER 5B
Lab Sample ID: 140-34307-14

Date Collected: 11/02/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.274		0.154	0.0462	ug/Sample		11/14/23 08:00	11/15/23 16:50	1

Client Sample ID: AP29-3, CONTAINER 5C

Lab Sample ID: 140-34307-15

Date Collected: 11/02/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	15.5		0.550	0.242	ug/Sample		11/14/23 14:35	11/15/23 17:55	2

Client Sample ID: BLANK CONTAINER 12
Lab Sample ID: 140-34307-16

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.29**	**J**	6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Arsenic	ND		2.00	1.78	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Barium	**2.68**		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Chromium	**1.38**		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Cobalt	ND		10.0	2.00	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Copper	**0.277**	**J**	2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Lead	ND		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Manganese	**0.519**	**J**	1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Nickel	ND		8.00	0.500	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Selenium	ND		2.00	1.32	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Thallium	ND		2.00	0.960	ug/Sample		11/13/23 07:30	11/19/23 14:30	2
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 12:50	1
Zinc	**1.76**	**J**	2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 12:50	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 12:11	1

Client Sample ID: BLANK CONTAINER 8A
Lab Sample ID: 140-34307-17

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Arsenic	ND		1.00	0.890	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Barium	ND		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Beryllium	ND		0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Chromium	ND		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Cobalt	ND		5.00	1.00	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Copper	**0.332**	**J**	2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Lead	ND		1.00	0.470	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Manganese	ND		1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Nickel	ND		4.00	0.250	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Selenium	ND		1.00	0.660	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Thallium	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 12:55	1
Zinc	ND		2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 12:55	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 12:14	1

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Client Sample ID: BLANK CONTAINER 8B
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18
Sample Container: Air Train

Lab Sample ID: 140-34307-18
Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		11/14/23 08:00	11/15/23 16:53	1

Client Sample ID: BLANK CONTAINER 9
Lab Sample ID: 140-34307-19

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/6010C - Metals (ICP), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Arsenic	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Barium	**0.208**	**J B**	1.00	0.150	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Cadmium	ND		0.500	0.0530	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Chromium	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Cobalt	ND		5.00	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Copper	**1.50**	**J**	2.50	0.580	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Lead	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Manganese	ND		1.50	0.180	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Nickel	ND		4.00	0.260	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Selenium	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Silver	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Thallium	ND		1.00	0.340	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Vanadium	ND		2.50	0.100	ug/Sample		11/13/23 07:30	11/19/23 11:49	1
Zinc	ND		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 11:49	1

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/20/23 12:00	11/21/23 12:47	1

Client Sample ID: BLANK CONTAINER 10
Lab Sample ID: 140-34307-20

Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18
Sample Container: Air Train

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0400	0.0120	ug/Sample		11/14/23 08:00	11/15/23 16:55	1

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Client Sample ID: BLANK CONTAINER 11
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18
Sample Container: Air Train

Lab Sample ID: 140-34307-21
Matrix: Air

Method: EPA 29/7470A - Mercury (CVAA), Stationary Source

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.150	0.0660	ug/Sample		11/14/23 14:35	11/15/23 17:28	1

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Antimony	6.00	0.840	ug/Sample
Arsenic	1.00	0.390	ug/Sample
Barium	1.00	0.150	ug/Sample
Beryllium	0.500	0.0470	ug/Sample
Cadmium	0.500	0.0530	ug/Sample
Chromium	1.00	0.350	ug/Sample
Cobalt	5.00	0.100	ug/Sample
Copper	2.50	0.580	ug/Sample
Lead	1.00	0.480	ug/Sample
Manganese	1.50	0.180	ug/Sample
Nickel	4.00	0.260	ug/Sample
Selenium	1.00	0.390	ug/Sample
Silver	1.00	0.350	ug/Sample
Thallium	1.00	0.340	ug/Sample
Vanadium	2.50	0.100	ug/Sample
Zinc	2.00	0.940	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Antimony	6.00	1.10	ug/Sample
Arsenic	1.00	0.890	ug/Sample
Barium	1.00	0.860	ug/Sample
Beryllium	0.500	0.0160	ug/Sample
Cadmium	0.500	0.280	ug/Sample
Chromium	1.00	0.360	ug/Sample
Cobalt	5.00	1.00	ug/Sample
Copper	2.50	0.210	ug/Sample
Lead	1.00	0.470	ug/Sample
Manganese	1.50	0.120	ug/Sample
Nickel	4.00	0.250	ug/Sample
Selenium	1.00	0.660	ug/Sample
Silver	1.00	0.0810	ug/Sample
Thallium	1.00	0.480	ug/Sample
Vanadium	2.50	0.0730	ug/Sample
Zinc	2.00	0.900	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (BH)

Analyte	RL	MDL	Units
Mercury	0.400	0.120	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (Empty)

Analyte	RL	MDL	Units
Mercury	0.200	0.0600	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source
Prep: AT Prep (FH)

Analyte	RL	MDL	Units
Mercury	0.200	0.0840	ug/Sample

Default Detection Limits

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (HCl)

Analyte	RL	MDL	Units
Mercury	0.0500	0.0220	ug/Sample

Method: 29/7470A - Mercury (CVAA), Stationary Source

Prep: AT Prep (KMnO4)

Analyte	RL	MDL	Units
Mercury	0.0200	0.00600	ug/Sample

Method: 29/6010C - Metals (ICP), Stationary Source

Lab Sample ID: MB 140-80160/7-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	1.10	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Arsenic	ND		1.00	0.890	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Barium	ND		1.00	0.860	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Beryllium	0.05100	J	0.500	0.0160	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Cadmium	ND		0.500	0.280	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Chromium	ND		1.00	0.360	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Cobalt	ND		5.00	1.00	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Copper	ND		2.50	0.210	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Lead	ND		1.00	0.470	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Manganese	ND		1.50	0.120	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Nickel	ND		4.00	0.250	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Selenium	ND		1.00	0.660	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Silver	ND		1.00	0.0810	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Thallium	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Vanadium	ND		2.50	0.0730	ug/Sample		11/13/23 07:30	11/19/23 10:47	1
Zinc	ND		2.00	0.900	ug/Sample		11/13/23 07:30	11/19/23 10:47	1

Lab Sample ID: LCS 140-80160/8-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	51.60		ug/Sample		103	80 - 120
Arsenic	10.0	10.29		ug/Sample		103	80 - 120
Barium	10.0	10.14		ug/Sample		101	80 - 120
Beryllium	5.00	5.236		ug/Sample		105	80 - 120
Cadmium	5.00	5.159		ug/Sample		103	80 - 120
Chromium	20.0	20.93		ug/Sample		105	80 - 120
Cobalt	10.0	10.41		ug/Sample		104	80 - 120
Copper	25.0	25.68		ug/Sample		103	80 - 120
Lead	10.0	10.42		ug/Sample		104	80 - 120
Manganese	10.0	10.51		ug/Sample		105	80 - 120
Nickel	50.0	52.29		ug/Sample		105	80 - 120
Selenium	15.0	15.22		ug/Sample		101	80 - 120
Silver	5.00	5.052		ug/Sample		101	80 - 120
Thallium	40.0	41.57		ug/Sample		104	80 - 120
Vanadium	20.0	20.24		ug/Sample		101	80 - 120
Zinc	50.0	51.04		ug/Sample		102	80 - 120

Lab Sample ID: LCSD 140-80160/9-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80160

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	50.96		ug/Sample		102	80 - 120	1	20
Arsenic	10.0	10.14		ug/Sample		101	80 - 120	1	20
Barium	10.0	10.05		ug/Sample		101	80 - 120	1	20
Beryllium	5.00	5.146		ug/Sample		103	80 - 120	2	20
Cadmium	5.00	5.103		ug/Sample		102	80 - 120	1	20

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCSD 140-80160/9-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80160

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	20.0	20.70		ug/Sample		104	80 - 120	1	20
Cobalt	10.0	10.34		ug/Sample		103	80 - 120	1	20
Copper	25.0	25.52		ug/Sample		102	80 - 120	1	20
Lead	10.0	10.46		ug/Sample		105	80 - 120	0	20
Manganese	10.0	10.34		ug/Sample		103	80 - 120	2	20
Nickel	50.0	51.62		ug/Sample		103	80 - 120	1	20
Selenium	15.0	14.86		ug/Sample		99	80 - 120	2	20
Silver	5.00	4.990		ug/Sample		100	80 - 120	1	20
Thallium	40.0	40.97		ug/Sample		102	80 - 120	1	20
Vanadium	20.0	20.10		ug/Sample		101	80 - 120	1	20
Zinc	50.0	50.47		ug/Sample		101	80 - 120	1	20

Lab Sample ID: MB 140-80161/6-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		6.00	0.840	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Arsenic	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Barium	0.2770	J	1.00	0.150	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Beryllium	ND		0.500	0.0470	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Cadmium	ND		0.500	0.0530	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Chromium	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Cobalt	ND		5.00	0.100	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Copper	ND		2.50	0.580	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Lead	ND		1.00	0.480	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Manganese	0.4170	J	1.50	0.180	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Nickel	ND		4.00	0.260	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Selenium	ND		1.00	0.390	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Silver	ND		1.00	0.350	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Thallium	ND		1.00	0.340	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Vanadium	ND		2.50	0.100	ug/Sample		11/13/23 07:30	11/19/23 10:32	1
Zinc	ND		2.00	0.940	ug/Sample		11/13/23 07:30	11/19/23 10:32	1

Lab Sample ID: LCS 140-80161/7-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	48.33		ug/Sample		97	80 - 120
Arsenic	10.0	9.276		ug/Sample		93	80 - 120
Barium	10.0	9.715		ug/Sample		97	80 - 120
Beryllium	5.00	5.144		ug/Sample		103	80 - 120
Cadmium	5.00	4.922		ug/Sample		98	80 - 120
Chromium	20.0	20.04		ug/Sample		100	80 - 120
Cobalt	10.0	9.934		ug/Sample		99	80 - 120
Copper	25.0	24.67		ug/Sample		99	80 - 120
Lead	10.0	9.769		ug/Sample		98	80 - 120
Manganese	10.0	9.998		ug/Sample		100	80 - 120

Method: 29/6010C - Metals (ICP), Stationary Source (Continued)

Lab Sample ID: LCS 140-80161/7-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	50.0	49.74		ug/Sample		99	80 - 120
Selenium	15.0	14.22		ug/Sample		95	80 - 120
Silver	5.00	4.824		ug/Sample		96	80 - 120
Thallium	40.0	39.38		ug/Sample		98	80 - 120
Vanadium	20.0	19.73		ug/Sample		99	80 - 120
Zinc	50.0	48.21		ug/Sample		96	80 - 120

Lab Sample ID: LCSD 140-80161/8-A
Matrix: Air
Analysis Batch: 80449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80161

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	48.09		ug/Sample		96	80 - 120	0	20
Arsenic	10.0	9.184		ug/Sample		92	80 - 120	1	20
Barium	10.0	9.653		ug/Sample		97	80 - 120	1	20
Beryllium	5.00	5.128		ug/Sample		103	80 - 120	0	20
Cadmium	5.00	4.888		ug/Sample		98	80 - 120	1	20
Chromium	20.0	19.98		ug/Sample		100	80 - 120	0	20
Cobalt	10.0	9.862		ug/Sample		99	80 - 120	1	20
Copper	25.0	24.46		ug/Sample		98	80 - 120	1	20
Lead	10.0	9.819		ug/Sample		98	80 - 120	1	20
Manganese	10.0	9.948		ug/Sample		99	80 - 120	1	20
Nickel	50.0	49.42		ug/Sample		99	80 - 120	1	20
Selenium	15.0	14.28		ug/Sample		95	80 - 120	0	20
Silver	5.00	4.815		ug/Sample		96	80 - 120	0	20
Thallium	40.0	39.13		ug/Sample		98	80 - 120	1	20
Vanadium	20.0	19.50		ug/Sample		98	80 - 120	1	20
Zinc	50.0	47.79		ug/Sample		96	80 - 120	1	20

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: MB 140-80160/7-B
Matrix: Air
Analysis Batch: 80529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0840	ug/Sample		11/13/23 07:30	11/21/23 11:38	1

Lab Sample ID: LCS 140-80160/8-B
Matrix: Air
Analysis Batch: 80529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.653		ug/Sample		93	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source (Continued)

Lab Sample ID: LCSD 140-80160/9-B
Matrix: Air
Analysis Batch: 80529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80160

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			5.00	5.306		ug/Sample		106	80 - 120	13	20

Lab Sample ID: MB 140-80181/11-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0200	0.00600	ug/Sample		11/14/23 08:00	11/15/23 16:22	1

Lab Sample ID: LCS 140-80181/12-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80196

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.500	0.4875		ug/Sample		98	80 - 120		

Lab Sample ID: 140-34307-9 MS
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 80196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.296		0.790	1.045		ug/Sample		95	80 - 120		

Lab Sample ID: 140-34307-9 MSD
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5B
Prep Type: Total/NA
Prep Batch: 80196

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.296		0.790	1.032		ug/Sample		93	80 - 120	1	20

Lab Sample ID: MB 140-80189/9-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.200	0.0600	ug/Sample		11/14/23 08:00	11/15/23 15:11	1

Lab Sample ID: LCS 140-80189/10-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80198

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	4.832		ug/Sample		97	80 - 120		

Lab Sample ID: 140-34307-8 MS
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 80198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		2.00	1.973		ug/Sample		99	80 - 120		

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-34307-8 MSD
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5A
Prep Type: Total/NA
Prep Batch: 80198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		2.00	2.040		ug/Sample		102	80 - 120	3	20

Lab Sample ID: MB 140-80190/10-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0500	0.0220	ug/Sample		11/14/23 14:35	11/15/23 16:58	1

Lab Sample ID: LCS 140-80190/11-B
Matrix: Air
Analysis Batch: 80319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.25	1.245		ug/Sample		100	80 - 120

Lab Sample ID: 140-34307-10 MS
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 80199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	15.3		1.38	16.67	4	ug/Sample		100	80 - 120

Lab Sample ID: 140-34307-10 MSD
Matrix: Air
Analysis Batch: 80319

Client Sample ID: AP29-2, CONTAINER 5C
Prep Type: Total/NA
Prep Batch: 80199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	15.3		1.38	16.63	4	ug/Sample		97	80 - 120	0	20

Lab Sample ID: MB 140-80440/10-B
Matrix: Air
Analysis Batch: 80529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.400	0.120	ug/Sample		11/20/23 12:00	11/21/23 12:16	1

Lab Sample ID: LCS 140-80440/11-B
Matrix: Air
Analysis Batch: 80529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	10.0	9.322		ug/Sample		93	80 - 120

Lab Sample ID: 140-34307-7 MS
Matrix: Air
Analysis Batch: 80529

Client Sample ID: AP29-2, CONTAINER 4
Prep Type: Total/NA
Prep Batch: 80441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	9.83		2.00	11.02	4	ug/Sample		59	80 - 120

Method: 29/7470A - Mercury (CVAA), Stationary Source

Lab Sample ID: 140-34307-7 MSD
Matrix: Air
Analysis Batch: 80529

Client Sample ID: AP29-2, CONTAINER 4
Prep Type: Total/NA
Prep Batch: 80441

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	9.83		2.00	11.75	4	ug/Sample		96	80 - 120	6	20

Client Sample ID: AP29-1 CONTAINER 1,3

Lab Sample ID: 140-34307-1

Date Collected: 10/31/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 12:14	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		2			80449	11/19/23 13:51	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 11:53	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-1 CONTAINER 4

Lab Sample ID: 140-34307-2

Date Collected: 10/31/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 11:16	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:29	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-1 CONTAINER 5A

Lab Sample ID: 140-34307-3

Date Collected: 10/31/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	90 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:24	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-1 CONTAINER 5B

Lab Sample ID: 140-34307-4

Date Collected: 10/31/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	390 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:35	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-1 CONTAINER 5C

Lab Sample ID: 140-34307-5

Date Collected: 10/31/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		2			80319	11/15/23 17:45	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 1,3

Lab Sample ID: 140-34307-6

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 12:29	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		2			80449	11/19/23 13:56	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 11:56	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 4

Lab Sample ID: 140-34307-7

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 11:30	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:31	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5A

Lab Sample ID: 140-34307-8

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:26	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5B

Lab Sample ID: 140-34307-9

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:43	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5C

Lab Sample ID: 140-34307-10

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		2			80319	11/15/23 17:47	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-3, CONTAINER 1,3

Lab Sample ID: 140-34307-11

Date Collected: 11/02/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 12:44	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		2			80449	11/19/23 14:11	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:08	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-3, CONTAINER 4

Lab Sample ID: 140-34307-12

Date Collected: 11/02/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 11:44	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:44	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-3, CONTAINER 5A — Lab Sample ID: 140-34307-13

Date Collected: 11/02/23 00:00 — **Matrix: Air**
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:34	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-3, CONTAINER 5B — Lab Sample ID: 140-34307-14

Date Collected: 11/02/23 00:00 — **Matrix: Air**
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	385 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:50	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-3, CONTAINER 5C — Lab Sample ID: 140-34307-15

Date Collected: 11/02/23 00:00 — **Matrix: Air**
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		2			80319	11/15/23 17:55	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 12 — Lab Sample ID: 140-34307-16

Date Collected: 11/01/23 00:00 — **Matrix: Air**
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 12:50	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		2			80449	11/19/23 14:30	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:11	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 8A

Lab Sample ID: 140-34307-17

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 12:55	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:14	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 8B

Lab Sample ID: 140-34307-18

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:53	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 9

Lab Sample ID: 140-34307-19

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 11:49	KNC	EET KNX
	Instrument ID: DUO									
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:47	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 10

Lab Sample ID: 140-34307-20

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:55	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: BLANK CONTAINER 11

Lab Sample ID: 140-34307-21

Date Collected: 11/01/23 00:00

Matrix: Air

Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	150 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 17:28	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-80160/7-A

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:47	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-80160/7-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 11:38	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-80161/6-A

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:32	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Method Blank

Lab Sample ID: MB 140-80181/11-B

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:22	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-80189/9-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:11	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-80190/10-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:58	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-80440/10-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:16	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80160/8-A

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:52	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80160/8-B

Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 11:40	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80161/7-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:37	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80181/12-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:25	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80189/10-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:14	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80190/11-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	50 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 17:00	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-80440/11-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:03	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:19	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-80160/9-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:56	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-80160/9-B
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (FH)			1 Sample	100 mL	80160	11/13/23 07:30	JDM	EET KNX
Total/NA	Cleanup	AT Prep FH			5 mL	50 mL	80439	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 11:43	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 140-80161/8-A
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	AT Prep (BH)			1 Sample	100 mL	80161	11/13/23 07:30	JDM	EET KNX
Total/NA	Analysis	29/6010C		1			80449	11/19/23 10:42	KNC	EET KNX
	Instrument ID: DUO									

Client Sample ID: AP29-2, CONTAINER 4
Lab Sample ID: 140-34307-7 MS
Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:39	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 4
Lab Sample ID: 140-34307-7 MSD
Date Collected: 11/01/23 00:00
Matrix: Air
Date Received: 11/09/23 13:18

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80440	11/19/23 12:02	KNC	EET KNX
Total/NA	Prep	AT Prep (BH)			2.5 mL	50 mL	80441	11/20/23 12:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80529	11/21/23 12:42	WSK	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5A
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-8 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:29	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5A
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-8 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	100 mL	80189	11/13/23 15:09	KNC	EET KNX
Total/NA	Prep	AT Prep (Empty)			2.5 mL	50 mL	80198	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 15:31	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5B
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-9 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:45	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5B
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-9 MSD
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	395 mL	80181	11/13/23 11:58	KNC	EET KNX
Total/NA	Prep	AT Prep (KMnO4)			25 mL	50 mL	80196	11/14/23 08:00	KNC	EET KNX
Total/NA	Analysis	29/7470A		1			80319	11/15/23 16:48	KNC	EET KNX
	Instrument ID: ADT									

Client Sample ID: AP29-2, CONTAINER 5C
Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-10 MS
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		2			80319	11/15/23 17:50	KNC	EET KNX
	Instrument ID: ADT									

Lab Chronicle

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Client Sample ID: AP29-2, CONTAINER 5C

Date Collected: 11/01/23 00:00
Date Received: 11/09/23 13:18

Lab Sample ID: 140-34307-10 MSD

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Air Train Vol.			1 Sample	275 mL	80190	11/14/23 11:00	KNC	EET KNX
Total/NA	Prep	AT Prep (HCl)			10 mL	50 mL	80199	11/14/23 14:35	KNC	EET KNX
Total/NA	Analysis	29/7470A		2			80319	11/15/23 17:52	KNC	EET KNX
	Instrument ID: ADT									

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: SLR International Corp
Project/Site: FMMI - Method 29

Job ID: 140-34307-1

Laboratory: Eurofins Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-25
ANAB	Dept. of Energy	L2311.01	02-13-25
ANAB	ISO/IEC 17025	L2311	02-13-25
Arkansas DEQ	State	88-0688	06-16-24
Colorado	State	TN00009	02-29-24
Connecticut	State	PH-0223	09-30-25
Florida	NELAP	E87177	06-30-24
Georgia (DW)	State	906	07-27-25
Hawaii	State	NA	07-27-24
Kansas	NELAP	E-10349	10-31-24
Kentucky (DW)	State	90101	12-31-23
Louisiana (All)	NELAP	83979	06-30-24
Louisiana (DW)	State	LA019	12-31-23
Maryland	State	277	03-31-24
Michigan	State	9933	07-27-25
Nevada	State	TN00009	07-31-24
New Hampshire	NELAP	2999	01-17-24
New Jersey	NELAP	TN001	07-01-24
New York	NELAP	10781	03-31-24
North Carolina (DW)	State	21705	07-31-24
North Carolina (WW/SW)	State	64	12-31-23
Oklahoma	State	9415	12-31-23
Oregon	NELAP	TNI0189	01-01-24
Pennsylvania	NELAP	68-00576	12-01-23
Tennessee	State	02014	07-27-25
Texas	NELAP	T104704380-23-18	08-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	525-22-279-18762	10-06-25
Utah	NELAP	TN00009	07-31-24
Virginia	NELAP	460176	09-14-24
Washington	State	C593	01-19-24
West Virginia (DW)	State	9955C	12-31-23
West Virginia DEP	State	345	04-30-24
Wisconsin	State	998044300	08-31-24

METALS

COVER PAGE
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG No.:

Project: FMMI - Method 29

Client Sample ID	Lab Sample ID
AP29-1 CONTAINER 1,3	140-34307-1
AP29-1 CONTAINER 4	140-34307-2
AP29-1 CONTAINER 5A	140-34307-3
AP29-1 CONTAINER 5B	140-34307-4
AP29-1 CONTAINER 5C	140-34307-5
AP29-2, CONTAINER 1,3	140-34307-6
AP29-2, CONTAINER 4	140-34307-7
AP29-2, CONTAINER 5A	140-34307-8
AP29-2, CONTAINER 5B	140-34307-9
AP29-2, CONTAINER 5C	140-34307-10
AP29-3, CONTAINER 1,3	140-34307-11
AP29-3, CONTAINER 4	140-34307-12
AP29-3, CONTAINER 5A	140-34307-13
AP29-3, CONTAINER 5B	140-34307-14
AP29-3, CONTAINER 5C	140-34307-15
BLANK CONTAINER 12	140-34307-16
BLANK CONTAINER 8A	140-34307-17
BLANK CONTAINER 8B	140-34307-18
BLANK CONTAINER 9	140-34307-19
BLANK CONTAINER 10	140-34307-20
BLANK CONTAINER 11	140-34307-21

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-1 CONTAINER 1,3 Lab Sample ID: 140-34307-1

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 10/31/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.50	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	3.40	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	3.07	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	6.25	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	3.13	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	1.89	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	ND	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	4.13	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	2.38	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-1 CONTAINER 4 Lab Sample ID: 140-34307-2

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 10/31/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	0.687	1.00	0.150	ug/Sample	J	B	1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.652	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	3.62	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	16.1	1.50	0.180	ug/Sample		B	1	29/6010C
7440-02-0	Nickel	0.431	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	2.78	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	1.37	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-1 CONTAINER 5A
Lab Sample ID: 140-34307-3
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 10/31/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.360	0.108	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-1 CONTAINER 5B
Lab Sample ID: 140-34307-4
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 10/31/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.122	0.156	0.0468	ug/Sample	J		1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-1 CONTAINER 5C
Lab Sample ID: 140-34307-5
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 10/31/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	16.5	0.550	0.242	ug/Sample			2	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-2, CONTAINER 1,3 | Lab Sample ID: 140-34307-6

Lab Name: Eurofins Knoxville | Job No.: 140-34307-1

SDG ID.:

Matrix: Air | Date Sampled: 11/01/2023 00:00

Reporting Basis: WET | Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.53	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	3.11	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	0.110	0.500	0.0160	ug/Sample	J	B	1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	4.32	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	5.44	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	1.23	2.00	0.940	ug/Sample	J		2	29/6010C
7439-96-5	Manganese	4.64	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	2.50	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	ND	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	5.28	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	1.40	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-2, CONTAINER 4 | Lab Sample ID: 140-34307-7

Lab Name: Eurofins Knoxville | Job No.: 140-34307-1

SDG ID.:

Matrix: Air | Date Sampled: 11/01/2023 00:00

Reporting Basis: WET | Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	1.15	1.00	0.150	ug/Sample		B	1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.810	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	10.1	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	0.594	1.00	0.480	ug/Sample	J		1	29/6010C
7439-96-5	Manganese	32.5	1.50	0.180	ug/Sample		B	1	29/6010C
7440-02-0	Nickel	1.40	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	0.420	1.00	0.390	ug/Sample	J		1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	5.62	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	9.83	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-2, CONTAINER 5A
Lab Sample ID: 140-34307-8
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/01/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-2, CONTAINER 5B
Lab Sample ID: 140-34307-9
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/01/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.296	0.158	0.0474	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-2, CONTAINER 5C
Lab Sample ID: 140-34307-10
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/01/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	15.3	0.550	0.242	ug/Sample			2	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-3, CONTAINER 1,3 | Lab Sample ID: 140-34307-11

Lab Name: Eurofins Knoxville | Job No.: 140-34307-1

SDG ID.:

Matrix: Air | Date Sampled: 11/02/2023 00:00

Reporting Basis: WET | Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.56	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	3.08	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	2.93	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	4.06	2.50	0.210	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	4.12	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	1.65	8.00	0.500	ug/Sample	J		2	29/6010C
7782-49-2	Selenium	ND	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	3.02	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	1.31	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-3, CONTAINER 4 | Lab Sample ID: 140-34307-12

Lab Name: Eurofins Knoxville | Job No.: 140-34307-1

SDG ID.:

Matrix: Air | Date Sampled: 11/02/2023 00:00

Reporting Basis: WET | Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	0.591	1.00	0.150	ug/Sample	J	B	1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	0.690	1.00	0.350	ug/Sample	J		1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	3.73	2.50	0.580	ug/Sample			1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	3.50	1.50	0.180	ug/Sample		B	1	29/6010C
7440-02-0	Nickel	0.381	4.00	0.260	ug/Sample	J		1	29/6010C
7782-49-2	Selenium	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	2.57	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	16.9	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-3, CONTAINER 5A
Lab Sample ID: 140-34307-13
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/02/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-3, CONTAINER 5B
Lab Sample ID: 140-34307-14
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/02/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.274	0.154	0.0462	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: AP29-3, CONTAINER 5C
Lab Sample ID: 140-34307-15
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/02/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	15.5	0.550	0.242	ug/Sample			2	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 12 Lab Sample ID: 140-34307-16

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 11/01/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.29	6.00	1.10	ug/Sample	J		1	29/6010C
7440-38-2	Arsenic	ND	2.00	1.78	ug/Sample			2	29/6010C
7440-39-3	Barium	2.68	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	1.38	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	10.0	2.00	ug/Sample			2	29/6010C
7440-50-8	Copper	0.277	2.50	0.210	ug/Sample	J		1	29/6010C
7439-92-1	Lead	ND	2.00	0.940	ug/Sample			2	29/6010C
7439-96-5	Manganese	0.519	1.50	0.120	ug/Sample	J		1	29/6010C
7440-02-0	Nickel	ND	8.00	0.500	ug/Sample			2	29/6010C
7782-49-2	Selenium	ND	2.00	1.32	ug/Sample			2	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	2.00	0.960	ug/Sample			2	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	1.76	2.00	0.900	ug/Sample	J		1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 8A
Lab Sample ID: 140-34307-17
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/01/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	1.10	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.890	ug/Sample			1	29/6010C
7440-39-3	Barium	ND	1.00	0.860	ug/Sample			1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0160	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.280	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.360	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	1.00	ug/Sample			1	29/6010C
7440-50-8	Copper	0.332	2.50	0.210	ug/Sample	J		1	29/6010C
7439-92-1	Lead	ND	1.00	0.470	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.120	ug/Sample			1	29/6010C
7440-02-0	Nickel	ND	4.00	0.250	ug/Sample			1	29/6010C
7782-49-2	Selenium	ND	1.00	0.660	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.0810	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.480	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.0730	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.900	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.200	0.0840	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 8B
Lab Sample ID: 140-34307-18
Lab Name: Eurofins Knoxville
Job No.: 140-34307-1
SDG ID.:
Matrix: Air
Date Sampled: 11/01/2023 00:00
Reporting Basis: WET
Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.0400	0.0120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 9 Lab Sample ID: 140-34307-19

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 11/01/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	ND	6.00	0.840	ug/Sample			1	29/6010C
7440-38-2	Arsenic	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-39-3	Barium	0.208	1.00	0.150	ug/Sample	J	B	1	29/6010C
7440-41-7	Beryllium	ND	0.500	0.0470	ug/Sample			1	29/6010C
7440-43-9	Cadmium	ND	0.500	0.0530	ug/Sample			1	29/6010C
7440-47-3	Chromium	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-48-4	Cobalt	ND	5.00	0.100	ug/Sample			1	29/6010C
7440-50-8	Copper	1.50	2.50	0.580	ug/Sample	J		1	29/6010C
7439-92-1	Lead	ND	1.00	0.480	ug/Sample			1	29/6010C
7439-96-5	Manganese	ND	1.50	0.180	ug/Sample			1	29/6010C
7440-02-0	Nickel	ND	4.00	0.260	ug/Sample			1	29/6010C
7782-49-2	Selenium	ND	1.00	0.390	ug/Sample			1	29/6010C
7440-22-4	Silver	ND	1.00	0.350	ug/Sample			1	29/6010C
7440-28-0	Thallium	ND	1.00	0.340	ug/Sample			1	29/6010C
7440-62-2	Vanadium	ND	2.50	0.100	ug/Sample			1	29/6010C
7440-66-6	Zinc	ND	2.00	0.940	ug/Sample			1	29/6010C
7439-97-6	Mercury	ND	0.400	0.120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 10 Lab Sample ID: 140-34307-20

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 11/01/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.0400	0.0120	ug/Sample			1	29/7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLANK CONTAINER 11 Lab Sample ID: 140-34307-21

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG ID.:

Matrix: Air Date Sampled: 11/01/2023 00:00

Reporting Basis: WET Date Received: 11/09/2023 13:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	ND	0.150	0.0660	ug/Sample			1	29/7470A

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90XXICVS_00250 Concentration Units: ug/L

CCV Source: 90CVCCVP_01255

Analyte	ICV 140-80449/4 11/19/2023 09:58				CCV 140-80449/9 11/19/2023 10:22				CCV 140-80449/21 11/19/2023 11:20			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	239.8		250	96	496.1		500	99	494.7		500	99
Arsenic	240.1		250	96	492.7		500	99	495.2		500	99
Barium	988.2		1000	99	1986		2000	99	2017		2000	101
Beryllium	1039		1000	104	2044		2000	102	2096		2000	105
Cadmium	251.7		250	101	500.4		500	100	512.4		500	102
Chromium	1005		1000	101	2014		2000	101	2067		2000	103
Cobalt	993.7		1000	99	1993		2000	100	2028		2000	101
Copper	971.5		1000	97	2001		2000	100	2007		2000	100
Lead	259.6		250	104	510.9		500	102	529.8		500	106
Manganese	1009		1000	101	2017		2000	101	2070		2000	103
Nickel	1003		1000	100	2001		2000	100	2040		2000	102
Selenium	243.5		250	97	496.9		500	99	501.8		500	100
Silver	486.6		500	97	992.1		1000	99	1007		1000	101
Thallium	522.0		500	104	1012		1000	101	1030		1000	103
Vanadium	998.1		1000	100	1993		2000	100	2024		2000	101
Zinc	977.1		1000	98	1977		2000	99	2004		2000	100
Phosphorus	977.7		1000	98	1971		2000	99	1995		2000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90XXICVS_00250 Concentration Units: ug/L

CCV Source: 90CVCCVP_01255

Analyte	CCV 140-80449/33 11/19/2023 12:20				CCV 140-80449/43 11/19/2023 13:10				CCV 140-80449/55 11/19/2023 14:21			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	493.8		500	99	491.2		500	98	489.8		500	98
Arsenic	492.6		500	99	491.7		500	98	491.5		500	98
Barium	2013		2000	101	2014		2000	101	2003		2000	100
Beryllium	2110		2000	106	2053		2000	103	2079		2000	104
Cadmium	510.3		500	102	503.6		500	101	506.8		500	101
Chromium	2062		2000	103	2030		2000	101	2036		2000	102
Cobalt	2017		2000	101	1997		2000	100	2005		2000	100
Copper	1982		2000	99	1972		2000	99	1954		2000	98
Lead	532.2		500	106	520.2		500	104	526.1		500	105
Manganese	2071		2000	104	2030		2000	101	2047		2000	102
Nickel	2029		2000	101	2008		2000	100	2018		2000	101
Selenium	498.1		500	100	493.9		500	99	494.6		500	99
Silver	999.8		1000	100	987.2		1000	99	988.0		1000	99
Thallium	1021		1000	102	1017		1000	102	1018		1000	102
Vanadium	2013		2000	101	1991		2000	100	1991		2000	100
Zinc	1988		2000	99	1971		2000	99	1976		2000	99
Phosphorus	1980		2000	99	1966		2000	98	1972		2000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90XXICVS_00250 Concentration Units: ug/L

CCV Source: 90CVCCVP_01255

Analyte	CCV 140-80449/59 11/19/2023 14:40											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	488.8		500	98								
Arsenic	488.7		500	98								
Barium	2003		2000	100								
Beryllium	2074		2000	104								
Cadmium	507.6		500	102								
Chromium	2035		2000	102								
Cobalt	2005		2000	100								
Copper	1952		2000	98								
Lead	526.2		500	105								
Manganese	2054		2000	103								
Nickel	2017		2000	101								
Selenium	495.0		500	99								
Silver	989.8		1000	99								
Thallium	1014		1000	101								
Vanadium	1989		2000	99								
Zinc	1976		2000	99								
Phosphorus	1976		2000	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90XXICVS_00250 Concentration Units: ug/L

CCV Source: 90XXCCVLP_01228

Analyte	CCVL 140-80449/3 11/19/2023 09:53				ICV 140-80449/4 11/19/2023 09:58							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	243.8		250	98	239.8		250	96				
Arsenic	245.1		250	98	240.1		250	96				
Barium	995.8		1000	100	988.2		1000	99				
Beryllium	1030		1000	103	1039		1000	104				
Cadmium	254.1		250	102	251.7		250	101				
Chromium	1020		1000	102	1005		1000	101				
Cobalt	1008		1000	101	993.7		1000	99				
Copper	986.1		1000	99	971.5		1000	97				
Lead	257.7		250	103	259.6		250	104				
Manganese	1019		1000	102	1009		1000	101				
Nickel	1015		1000	102	1003		1000	100				
Selenium	246.5		250	99	243.5		250	97				
Silver	489.9		500	98	486.6		500	97				
Thallium	511.5		500	102	522.0		500	104				
Vanadium	1008		1000	101	998.1		1000	100				
Zinc	986.5		1000	99	977.1		1000	98				
Phosphorus	983.1		1000	98	977.7		1000	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90L1HGDayVER_00927 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_01053

Analyte	ICV 140-80198/18-A 11/15/2023 14:00				CCV 140-80198/21-A 11/15/2023 15:06				CCV 140-80198/21-A 11/15/2023 15:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.486		2.50	99	4.912		5.00	98	4.951		5.00	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90L1HGDayVER_00927 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_01053

Analyte	CCV 140-80198/21-A 11/15/2023 16:07				CCV 140-80198/21-A 11/15/2023 16:37				CCV 140-80198/21-A 11/15/2023 17:08			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.904		5.00	98	4.920		5.00	98	4.901		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90L1HGDayVER_00927 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_01053

Analyte	CCV 140-80198/21-A 11/15/2023 17:31				CCV 140-80198/21-A 11/15/2023 17:58							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.866		5.00	97	4.871		5.00	97				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90L1HGDayVER_00929 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_01055

Analyte	ICV 140-80441/19-A 11/21/2023 11:25				CCV 140-80441/22-A 11/21/2023 11:33				CCV 140-80441/22-A 11/21/2023 12:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.653		2.50	106	5.234		5.00	105	5.225		5.00	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

ICV Source: 90L1HGDayVER_00929 Concentration Units: ug/L

CCV Source: 90L1HGDayCAL_01055

Analyte	CCV 140-80441/22-A 11/21/2023 12:34				CCV 140-80441/22-A 11/21/2023 12:49							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.019		5.00	100	5.227		5.00	105				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-80449/8 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01256

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	60.53		101	50-150
Arsenic	10.0	9.160	J	92	50-150
Barium	10.0	9.650	J	97	50-150
Beryllium	5.00	5.710		114	50-150
Cadmium	5.00	5.100		102	50-150
Chromium	10.0	10.39		104	50-150
Cobalt	50.0	50.86		102	50-150
Copper	25.0	27.64		111	50-150
Lead	10.0	8.140	J	81	50-150
Manganese	15.0	15.32		102	50-150
Nickel	40.0	40.91		102	50-150
Selenium	10.0	11.27		113	50-150
Silver	10.0	9.830	J	98	50-150
Thallium	10.0	11.41		114	50-150
Vanadium	25.0	24.91	J	100	50-150
Zinc	20.0	20.45		102	50-150

Lab Sample ID: CRI 140-80449/42 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01256

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	57.39	J	96	50-150
Arsenic	10.0	9.180	J	92	50-150
Barium	10.0	10.13		101	50-150
Beryllium	5.00	5.350		107	50-150
Cadmium	5.00	5.070		101	50-150
Chromium	10.0	9.890	J	99	50-150
Cobalt	50.0	50.65		101	50-150
Copper	25.0	26.71		107	50-150
Lead	10.0	9.220	J	92	50-150
Manganese	15.0	15.11		101	50-150
Nickel	40.0	40.90		102	50-150
Selenium	10.0	11.06		111	50-150
Silver	10.0	10.58		106	50-150
Thallium	10.0	10.99		110	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Method: 29/6010C Instrument ID: DUO

Lab Sample ID: CRI 140-80449/42 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01256

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	25.0	24.76	J	99	50-150
Zinc	20.0	20.38		102	50-150

Lab Sample ID: CRI 140-80449/58 Concentration Units: ug/L

CRQL Check Standard Source: 90XXCRDL100P_01256

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	60.0	57.40	J	96	50-150
Arsenic	10.0	9.370	J	94	50-150
Barium	10.0	10.20		102	50-150
Beryllium	5.00	5.340		107	50-150
Cadmium	5.00	5.160		103	50-150
Chromium	10.0	9.730	J	97	50-150
Cobalt	50.0	50.64		101	50-150
Copper	25.0	26.09		104	50-150
Lead	10.0	9.590	J	96	50-150
Manganese	15.0	15.19		101	50-150
Nickel	40.0	41.05		103	50-150
Selenium	10.0	10.12		101	50-150
Silver	10.0	9.700	J	97	50-150
Thallium	10.0	11.76		118	50-150
Vanadium	25.0	24.77	J	99	50-150
Zinc	20.0	20.27		101	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Method: 29/7470A Instrument ID: ADT

Lab Sample ID: CRA 140-80198/20-A Concentration Units: ug/L

CRQL Check Standard Source: 90L1HGDayCAL_01053

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.1882	J	94	70-130

Lab Sample ID: CRA 140-80441/21-A Concentration Units: ug/L

CRQL Check Standard Source: 90L1HGDayCAL_01055

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.1828	J	91	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-80449/5 11/19/2023 10:03		CCB 140-80449/10 11/19/2023 10:27		CCB 140-80449/22 11/19/2023 11:25		CCB 140-80449/34 11/19/2023 12:24	
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND		ND	
Arsenic	10.0	ND		ND		ND		ND	
Barium	10.0	ND		ND		ND		ND	
Beryllium	5.00	ND		ND		ND		ND	
Cadmium	5.00	ND		ND		ND		ND	
Chromium	10.0	ND		ND		ND		ND	
Cobalt	50.0	ND		ND		ND		ND	
Copper	25.0	ND		ND		ND		ND	
Lead	10.0	ND		ND		ND		ND	
Manganese	15.0	ND		ND		ND		ND	
Nickel	40.0	ND		ND		ND		ND	
Selenium	10.0	ND		ND		ND		ND	
Silver	10.0	ND		ND		ND		ND	
Thallium	10.0	ND		ND		ND		ND	
Vanadium	25.0	ND		ND		ND		ND	
Zinc	20.0	ND		ND		ND		ND	
Phosphorus	300	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-80449/44 11/19/2023 13:14		CCB 140-80449/56 11/19/2023 14:25		CCB 140-80449/60 11/19/2023 14:45			
		Found	C	Found	C	Found	C	Found	C
Antimony	60.0	ND		ND		ND			
Arsenic	10.0	ND		ND		ND			
Barium	10.0	ND		ND		ND			
Beryllium	5.00	ND		ND		ND			
Cadmium	5.00	ND		ND		ND			
Chromium	10.0	ND		ND		ND			
Cobalt	50.0	ND		ND		ND			
Copper	25.0	ND		ND		ND			
Lead	10.0	ND		ND		ND			
Manganese	15.0	ND		ND		ND			
Nickel	40.0	ND		ND		ND			
Selenium	10.0	ND		ND		ND			
Silver	10.0	ND		ND		ND			
Thallium	10.0	ND		ND		ND			
Vanadium	25.0	ND		ND		ND			
Zinc	20.0	ND		ND		ND			
Phosphorus	300	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-80198/19-A 11/15/2023 14:02		CCB 140-80198/22-A 11/15/2023 15:08		CCB 140-80198/22-A 11/15/2023 15:39		CCB 140-80198/22-A 11/15/2023 16:09	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-80198/22-A 11/15/2023 16:40		CCB 140-80198/22-A 11/15/2023 17:11		CCB 140-80198/22-A 11/15/2023 17:33		CCB 140-80198/22-A 11/15/2023 18:00	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 140-80441/20-A 11/21/2023 11:28		CCB 140-80441/23-A 11/21/2023 11:35		CCB 140-80441/23-A 11/21/2023 12:06		CCB 140-80441/23-A 11/21/2023 12:36	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 140-80441/23-A 11/21/2023 12:52							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.200	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80160/7-A

Instrument Code: DUO Batch No.: 80449

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	ND			29_6010C
7440-41-7	Beryllium	0.05100	J		29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	ND			29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	ND			29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80161/6-A

Instrument Code: DUO Batch No.: 80449

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	ND			29_6010C
7440-38-2	Arsenic	ND			29_6010C
7440-39-3	Barium	0.2770	J		29_6010C
7440-41-7	Beryllium	ND			29_6010C
7440-43-9	Cadmium	ND			29_6010C
7440-47-3	Chromium	ND			29_6010C
7440-48-4	Cobalt	ND			29_6010C
7440-50-8	Copper	ND			29_6010C
7439-92-1	Lead	ND			29_6010C
7439-96-5	Manganese	0.4170	J		29_6010C
7440-02-0	Nickel	ND			29_6010C
7782-49-2	Selenium	ND			29_6010C
7440-22-4	Silver	ND			29_6010C
7440-28-0	Thallium	ND			29_6010C
7440-62-2	Vanadium	ND			29_6010C
7440-66-6	Zinc	ND			29_6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80181/11-B

Instrument Code: ADT Batch No.: 80319

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80189/9-B

Instrument Code: ADT Batch No.: 80319

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80190/10-B

Instrument Code: ADT Batch No.: 80319

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80160/7-B

Instrument Code: ADT Batch No.: 80529

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Concentration Units: ug/Sample Lab Sample ID: MB 140-80440/10-B

Instrument Code: ADT Batch No.: 80529

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			29_7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Lab Sample ID: ICSA 140-80449/6 Instrument ID: DUO

Lab File ID: F111923.asc ICS Source: 90XXICSASiP_00079

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**5.68**	
Arsenic		**3.68**	
Barium		**2.16**	
Beryllium		**-0.410**	
Cadmium		**0.530**	
Chromium		**5.84**	
Cobalt		**-1.68**	
Copper		**0.670**	
Lead		**9.83**	
Manganese		**0.110**	
Nickel		**-14.5**	
Selenium		**-2.33**	
Silver		**-1.54**	
Thallium		**1.62**	
Vanadium		**0.570**	
Zinc		**4.89**	
Aluminum	*500000*	*498480*	*100*
Boron		*-20.6*	
Calcium	*500000*	*474560*	*95*
Iron	*200000*	*187510*	*94*
Lithium		*13.0*	
Magnesium	*500000*	*499510*	*100*
Molybdenum		*-0.280*	
Phosphorus		*-22.1*	
Potassium		*33.3*	
Silicon	*900000*	*873770*	*97*
Sodium		*99.5*	
Strontium		*4.33*	
Tin		*2.83*	
Titanium		*14.2*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Lab Sample ID: ICSAB 140-80449/7 Instrument ID: DUO

Lab File ID: F111923.asc ICS Source: 90XXICSABP_00131

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**600**	**585**	**98**
Arsenic	**100**	**97.0**	**97**
Barium	**500**	**487**	**97**
Beryllium	**500**	**501**	**100**
Cadmium	**1000**	**930**	**93**
Chromium	**500**	**481**	**96**
Cobalt	**500**	**465**	**93**
Copper	**500**	**503**	**101**
Lead	**50.0**	**50.8**	**102**
Manganese	**500**	**483**	**97**
Nickel	**1000**	**926**	**93**
Selenium	**50.0**	**45.7**	**91**
Silver	**200**	**200**	**100**
Thallium	**100**	**94.1**	**94**
Vanadium	**500**	**476**	**95**
Zinc	**1000**	**966**	**97**
Aluminum	*250000*	*245830*	*98*
Boron	*1000*	*961*	*96*
Calcium	*250000*	*239640*	*96*
Iron	*100000*	*95396*	*95*
Lithium	*1000*	*994*	*99*
Magnesium	*250000*	*244770*	*98*
Molybdenum	*1000*	*966*	*97*
Phosphorus	*1000*	*938*	*94*
Potassium	*10000*	*9836*	*98*
Sodium	*10000*	*9887*	*99*
Strontium	*1000*	*971*	*97*
Tin	*1000*	*930*	*93*
Titanium	*1000*	*979*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 4 MS Lab ID: 140-34307-7 MS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	11.02		9.83		2.00	59	80-120	4	29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5A MS Lab ID: 140-34307-8 MS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.973		ND		2.00	99	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5B MS Lab ID: 140-34307-9 MS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.045		0.296		0.790	95	80-120		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5C MS Lab ID: 140-34307-10 MS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	16.67		15.3		1.38	100	80-120	4	29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 4 MSD Lab ID: 140-34307-7 MSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	11.75		2.00	96	80-120	6	20	4	29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5A MSD Lab ID: 140-34307-8 MSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.040		2.00	102	80-120	3	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5B MSD Lab ID: 140-34307-9 MSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.032		0.790	93	80-120	1	20		29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 5C MSD Lab ID: 140-34307-10 MSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	16.63		1.38	97	80-120	0	20	4	29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 1,3 PDS Lab ID: 140-34307-6 PDS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

Analyte	SSR	C		Sample Result (SR)	C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	50.11			1.53	J		50.0	97	75-125		29/6010C
Arsenic	19.35			ND			20.0	97	75-125		29/6010C
Barium	12.96			3.11			10.0	99	75-125		29/6010C
Beryllium	5.139			0.110	J		5.00	101	75-125		29/6010C
Cadmium	5.048			ND			5.00	101	75-125		29/6010C
Chromium	24.78			4.32			20.0	102	75-125		29/6010C
Cobalt	19.84			ND			20.0	99	75-125		29/6010C
Copper	30.17			5.44			25.0	99	75-125		29/6010C
Lead	20.04			1.23	J		20.0	94	75-125		29/6010C
Manganese	14.87			4.64			10.0	102	75-125		29/6010C
Nickel	101.4			2.50	J		100	99	75-125		29/6010C
Selenium	28.59			ND			30.0	95	75-125		29/6010C
Silver	4.910			ND			5.00	98	75-125		29/6010C
Thallium	76.48			ND			80.0	96	75-125		29/6010C
Vanadium	20.13			ND			20.0	101	75-125		29/6010C
Zinc	54.14			5.28			50.0	98	75-125		29/6010C
Mercury	2.309			1.40			1.00	91	75-125		29/7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 4 PDS Lab ID: 140-34307-7 PDS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	46.23		ND		50.0	92	75-125		29/6010C
Arsenic	9.174		ND		10.0	92	75-125		29/6010C
Barium	10.50		1.15		10.0	93	75-125		29/6010C
Beryllium	4.987		ND		5.00	100	75-125		29/6010C
Cadmium	4.822		ND		5.00	96	75-125		29/6010C
Chromium	20.05		0.810	J	20.0	96	75-125		29/6010C
Cobalt	9.790		ND		10.0	98	75-125		29/6010C
Copper	33.40		10.1		25.0	93	75-125		29/6010C
Lead	10.20		0.594	J	10.0	96	75-125		29/6010C
Manganese	40.73		32.5		10.0	82	75-125		29/6010C
Nickel	50.32		1.40	J	50.0	98	75-125		29/6010C
Selenium	13.94		0.420	J	15.0	90	75-125		29/6010C
Silver	4.562		ND		5.00	91	75-125		29/6010C
Thallium	38.03		ND		40.0	95	75-125		29/6010C
Vanadium	19.14		ND		20.0	96	75-125		29/6010C
Zinc	52.02		5.62		50.0	93	75-125		29/6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 1,3 PDSD Lab ID: 140-34307-6 PDSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	49.85		50.0	97	75-125	0.5			29/6010C
Arsenic	20.54		20.0	103	75-125	6			29/6010C
Barium	13.03		10.0	99	75-125	0.5			29/6010C
Beryllium	5.015		5.00	98	75-125	2			29/6010C
Cadmium	4.927		5.00	99	75-125	2			29/6010C
Chromium	24.39		20.0	100	75-125	2			29/6010C
Cobalt	20.67		20.0	103	75-125	4			29/6010C
Copper	30.37		25.0	100	75-125	0.6			29/6010C
Lead	20.58		20.0	97	75-125	3			29/6010C
Manganese	14.57		10.0	99	75-125	2			29/6010C
Nickel	105.4		100	103	75-125	4			29/6010C
Selenium	29.69		30.0	99	75-125	4			29/6010C
Silver	4.914		5.00	98	75-125	0.08			29/6010C
Thallium	79.89		80.0	100	75-125	4			29/6010C
Vanadium	19.81		20.0	99	75-125	2			29/6010C
Zinc	53.26		50.0	96	75-125	2			29/6010C
Mercury	2.147		1.00	75	75-125	7			29/7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
POST DIGESTION SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: AP29-2, CONTAINER 4 PDSD Lab ID: 140-34307-7 PDSD

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Matrix: Air Concentration Units: ug/Sample

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	47.82		50.0	96	75-125	3			29/6010C
Arsenic	9.320		10.0	93	75-125	2			29/6010C
Barium	10.80		10.0	97	75-125	3			29/6010C
Beryllium	5.078		5.00	102	75-125	2			29/6010C
Cadmium	4.963		5.00	99	75-125	3			29/6010C
Chromium	20.62		20.0	99	75-125	3			29/6010C
Cobalt	10.06		10.0	101	75-125	3			29/6010C
Copper	34.11		25.0	96	75-125	2			29/6010C
Lead	10.83		10.0	102	75-125	6			29/6010C
Manganese	40.79		10.0	83	75-125	0.1			29/6010C
Nickel	51.71		50.0	101	75-125	3			29/6010C
Selenium	14.33		15.0	93	75-125	3			29/6010C
Silver	4.638		5.00	93	75-125	2			29/6010C
Thallium	39.01		40.0	98	75-125	3			29/6010C
Vanadium	19.68		20.0	98	75-125	3			29/6010C
Zinc	53.36		50.0	95	75-125	3			29/6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80161/7-A

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00025

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	48.33		97	80	120		29/6010C
Arsenic	10.0	9.276		93	80	120		29/6010C
Barium	10.0	9.715		97	80	120		29/6010C
Beryllium	5.00	5.144		103	80	120		29/6010C
Cadmium	5.00	4.922		98	80	120		29/6010C
Chromium	20.0	20.04		100	80	120		29/6010C
Cobalt	10.0	9.934		99	80	120		29/6010C
Copper	25.0	24.67		99	80	120		29/6010C
Lead	10.0	9.769		98	80	120		29/6010C
Manganese	10.0	9.998		100	80	120		29/6010C
Nickel	50.0	49.74		99	80	120		29/6010C
Selenium	15.0	14.22		95	80	120		29/6010C
Silver	5.00	4.824		96	80	120		29/6010C
Thallium	40.0	39.38		98	80	120		29/6010C
Vanadium	20.0	19.73		99	80	120		29/6010C
Zinc	50.0	48.21		96	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-80161/8-A

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00025

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	48.09		50.0	96	80-120	0	20		29/6010C
Arsenic	9.184		10.0	92	80-120	1	20		29/6010C
Barium	9.653		10.0	97	80-120	1	20		29/6010C
Beryllium	5.128		5.00	103	80-120	0	20		29/6010C
Cadmium	4.888		5.00	98	80-120	1	20		29/6010C
Chromium	19.98		20.0	100	80-120	0	20		29/6010C
Cobalt	9.862		10.0	99	80-120	1	20		29/6010C
Copper	24.46		25.0	98	80-120	1	20		29/6010C
Lead	9.819		10.0	98	80-120	1	20		29/6010C
Manganese	9.948		10.0	99	80-120	1	20		29/6010C
Nickel	49.42		50.0	99	80-120	1	20		29/6010C
Selenium	14.28		15.0	95	80-120	0	20		29/6010C
Silver	4.815		5.00	96	80-120	0	20		29/6010C
Thallium	39.13		40.0	98	80-120	1	20		29/6010C
Vanadium	19.50		20.0	98	80-120	1	20		29/6010C
Zinc	47.79		50.0	96	80-120	1	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80160/8-A

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00025

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	51.60		103	80	120		29/6010C
Arsenic	10.0	10.29		103	80	120		29/6010C
Barium	10.0	10.14		101	80	120		29/6010C
Beryllium	5.00	5.236		105	80	120		29/6010C
Cadmium	5.00	5.159		103	80	120		29/6010C
Chromium	20.0	20.93		105	80	120		29/6010C
Cobalt	10.0	10.41		104	80	120		29/6010C
Copper	25.0	25.68		103	80	120		29/6010C
Lead	10.0	10.42		104	80	120		29/6010C
Manganese	10.0	10.51		105	80	120		29/6010C
Nickel	50.0	52.29		105	80	120		29/6010C
Selenium	15.0	15.22		101	80	120		29/6010C
Silver	5.00	5.052		101	80	120		29/6010C
Thallium	40.0	41.57		104	80	120		29/6010C
Vanadium	20.0	20.24		101	80	120		29/6010C
Zinc	50.0	51.04		102	80	120		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-80160/9-A

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90SPKNX9P_00025

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	50.96		50.0	102	80-120	1	20		29/6010C
Arsenic	10.14		10.0	101	80-120	1	20		29/6010C
Barium	10.05		10.0	101	80-120	1	20		29/6010C
Beryllium	5.146		5.00	103	80-120	2	20		29/6010C
Cadmium	5.103		5.00	102	80-120	1	20		29/6010C
Chromium	20.70		20.0	104	80-120	1	20		29/6010C
Cobalt	10.34		10.0	103	80-120	1	20		29/6010C
Copper	25.52		25.0	102	80-120	1	20		29/6010C
Lead	10.46		10.0	105	80-120	0	20		29/6010C
Manganese	10.34		10.0	103	80-120	2	20		29/6010C
Nickel	51.62		50.0	103	80-120	1	20		29/6010C
Selenium	14.86		15.0	99	80-120	2	20		29/6010C
Silver	4.990		5.00	100	80-120	1	20		29/6010C
Thallium	40.97		40.0	102	80-120	1	20		29/6010C
Vanadium	20.10		20.0	101	80-120	1	20		29/6010C
Zinc	50.47		50.0	101	80-120	1	20		29/6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80189/10-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_01053

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.832		97	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80181/12-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_01053

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.500	0.4875		98	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80190/11-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_01053

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.25	1.245		100	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80160/8-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00096

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.653		93	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS

Lab ID: LCSD 140-80160/9-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HgCA1000P_00096

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	5.306		5.00	106	80-120	13	20		29/7470A

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 140-80440/11-B

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

Sample Matrix: Air LCS Source: 90L1HGDayCAL_01055

Analyte	Air(ug/Sample)							
	True	Found	C	%R	Limits		Q	Method
Mercury	10.0	9.322		93	80	120		29/7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-34307-6

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-34307-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.53	J	ND		NC		29/6010C
Arsenic	ND		ND		NC		29/6010C
Barium	3.11		ND		NC		29/6010C
Beryllium	0.110	J	ND		NC		29/6010C
Cadmium	ND		ND		NC		29/6010C
Chromium	4.32		4.170	J	NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	5.44		5.360	J	NC		29/6010C
Lead	1.23	J	ND		NC		29/6010C
Manganese	4.64		4.635	J	NC		29/6010C
Nickel	2.50	J	2.580	J	NC		29/6010C
Selenium	ND		ND		NC		29/6010C
Silver	ND		ND		NC		29/6010C
Thallium	ND		ND		NC		29/6010C
Vanadium	ND		ND		NC		29/6010C
Zinc	5.28		5.520	J	NC		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 140-34307-7

SDG No:

Lab Name: Eurofins Knoxville Job No: 140-34307-1

Matrix: Air Concentration Units: ug/Sample

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	ND		ND		NC		29/6010C
Arsenic	ND		ND		NC		29/6010C
Barium	1.15		1.310	J	NC		29/6010C
Beryllium	ND		ND		NC		29/6010C
Cadmium	ND		ND		NC		29/6010C
Chromium	0.810	J	ND		NC		29/6010C
Cobalt	ND		ND		NC		29/6010C
Copper	10.1		10.77	J	NC		29/6010C
Lead	0.594	J	ND		NC		29/6010C
Manganese	32.5		33.53		3.2		29/6010C
Nickel	1.40	J	1.420	J	NC		29/6010C
Selenium	0.420	J	ND		NC		29/6010C
Silver	ND		ND		NC		29/6010C
Thallium	ND		ND		NC		29/6010C
Vanadium	ND		ND		NC		29/6010C
Zinc	5.62		5.750	J	NC		29/6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:04

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	0.84
Arsenic	189.042	1	0.39
Barium	455.403	1	0.15
Beryllium	313.042	0.5	0.047
Cadmium	226.502	0.5	0.053
Chromium	267.716	1	0.35
Cobalt	228.616	5	0.1
Copper	324.754	2.5	0.58
Lead	220.353	1	0.48
Manganese	257.610	1.5	0.18
Nickel	231.604	4	0.26
Selenium	196.090	1	0.39
Silver	328.068	1	0.35
Thallium	190.856	1	0.34
Vanadium	292.402	2.5	0.1
Zinc	213.856	2	0.94

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C XMDL Date: 01/01/2015 10:57

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony		60	3.8
Arsenic		10	3.3
Barium		10	2.4
Beryllium		5	1
Cadmium		5	0.51
Chromium		10	1.4
Cobalt		50	1.5
Copper		25	3.3
Lead		10	2.6
Manganese		15	1.3
Nickel		40	2.7
Selenium		10	4.3
Silver		10	2.8
Thallium		10	6.4
Vanadium		25	1.6
Zinc		20	2

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: DUO

Method: 29/6010C MDL Date: 04/06/2023 15:11

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Antimony	206.833	6	1.1
Arsenic	189.042	1	0.89
Barium	455.403	1	0.86
Beryllium	313.042	0.5	0.016
Cadmium	226.502	0.5	0.28
Chromium	267.716	1	0.36
Cobalt	228.616	5	1
Copper	324.754	2.5	0.21
Lead	220.353	1	0.47
Manganese	257.61	1.5	0.12
Nickel	231.604	4	0.25
Selenium	196.09	1	0.66
Silver	328.068	1	0.081
Thallium	190.856	1	0.48
Vanadium	292.402	2.5	0.073
Zinc	213.856	2	0.9

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:47

Prep Method: AT Prep (BH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.4	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:48

Prep Method: AT Prep (Empty)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.06

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:36

Prep Method: AT Prep (FH)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.2	0.084

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 04/30/2020 09:37

Prep Method: AT Prep (HCl)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.05	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A XMDL Date: 01/01/2015 16:54

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG Number:

Matrix: Air Instrument ID: ADT

Method: 29/7470A MDL Date: 01/01/2015 16:51

Prep Method: AT Prep (KMnO4)

Analyte	Wavelength/ Mass	RL (ug/Sample)	MDL (ug/Sample)
Mercury		0.02	0.006

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 10/31/2023

Analyte	Wave Length	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li	Mg
Aluminum	308.215														
Antimony	206.833									0.015398					
Arsenic	189.042									0		-0.000087			
Barium	455.403														
Beryllium	313.042														
Boron	249.678								0			0			
Cadmium	226.502											0.000067			
Chromium	267.716	0													
Cobalt	228.616														
Copper	324.754											-0.000090			
Lead	220.353	-0.000025							-0.000355		0	0.000018			
Manganese	257.610											0			0
Nickel	231.604											0			
Selenium	196.090											-0.000087			
Silicon	250.690								0.008729						
Silver	328.068														
Sodium	589.592														
Strontium	421.552						0								
Thallium	190.856								0.004786	0.000254		0			
Titanium	334.941						0								
Tungsten	207.911														
Vanadium	292.402									-0.001233		-0.000121			
Zinc	213.856										0.000795	0.000095			

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 10/31/2023

Analyte	Wave Length	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V
Aluminum	308.215		0.022890												0.045819
Antimony	206.833										-0.002044		0		-0.002257
Arsenic	189.042		0							-0.000025					
Barium	455.403														
Beryllium	313.042														0.000486
Boron	249.678														
Cadmium	226.502				-0.000079										
Chromium	267.716	0													
Cobalt	228.616		-0.001738							-0.000008			0.001991		
Copper	324.754														
Lead	220.353		-0.001635							0.000081			-0.000599		
Manganese	257.610														
Nickel	231.604		0							-0.000001				0	
Selenium	196.090	0.000673								0.000009					
Silicon	250.690										0				
Silver	328.068														-0.000322
Sodium	589.592														
Strontium	421.552														
Thallium	190.856	0								-0.000009			-0.000774		0.002146
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402		-0.002778												
Zinc	213.856				0.006290										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Knoxville Job Number: 140-34307-1

SDG No.:

ICP-AES Instrument ID: DUO Date: 10/31/2023

Analyte	Wave Length	W	Zn												
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Boron	249.678														
Cadmium	226.502														
Chromium	267.716														
Cobalt	228.616														
Copper	324.754														
Lead	220.353														
Manganese	257.610														
Nickel	231.604														
Selenium	196.090														
Silicon	250.690														
Silver	328.068														
Sodium	589.592														
Strontium	421.552														
Thallium	190.856														
Titanium	334.941														
Tungsten	207.911														
Vanadium	292.402														
Zinc	213.856														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Knoxville Job No: 140-34307-1

SDG No.:

Instrument ID: DUO Date: 03/21/2022 14:56

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony		40000	29/6010C
Arsenic		30000	29/6010C
Barium		30000	29/6010C
Beryllium		4000	29/6010C
Cadmium		40000	29/6010C
Chromium		40000	29/6010C
Cobalt		40000	29/6010C
Copper		40000	29/6010C
Lead		90000	29/6010C
Manganese		20000	29/6010C
Nickel		80000	29/6010C
Selenium		30000	29/6010C
Silver		3000	29/6010C
Thallium		80000	29/6010C
Vanadium		20000	29/6010C
Zinc		10000	29/6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-34307-1	11/13/2023 07:30	80160	1		100
140-34307-6	11/13/2023 07:30	80160	1		100
140-34307-11	11/13/2023 07:30	80160	1		100
140-34307-16	11/13/2023 07:30	80160	1		100
140-34307-17	11/13/2023 07:30	80160	1		100
MB 140-80160/7-A	11/13/2023 07:30	80160	1		100
LCS 140-80160/8-A	11/13/2023 07:30	80160	1		100
LCSD 140-80160/9-A	11/13/2023 07:30	80160	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-34307-2	11/13/2023 07:30	80161	1		100
140-34307-7	11/13/2023 07:30	80161	1		100
140-34307-12	11/13/2023 07:30	80161	1		100
140-34307-19	11/13/2023 07:30	80161	1		100
MB 140-80161/6-A	11/13/2023 07:30	80161	1		100
LCS 140-80161/7-A	11/13/2023 07:30	80161	1		100
LCSD 140-80161/8-A	11/13/2023 07:30	80161	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (FH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (Sample)	Initial Volume	Final Volume (mL)
140-34307-1	11/13/2023 07:30	80160	1		100
140-34307-6	11/13/2023 07:30	80160	1		100
140-34307-11	11/13/2023 07:30	80160	1		100
140-34307-16	11/13/2023 07:30	80160	1		100
140-34307-17	11/13/2023 07:30	80160	1		100
MB 140-80160/7-B	11/13/2023 07:30	80160	1		100
LCS 140-80160/8-B	11/13/2023 07:30	80160	1		100
LCSD 140-80160/9-B	11/13/2023 07:30	80160	1		100

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (KMnO4)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
140-34307-4	11/14/2023 08:00	80196		25	50
140-34307-9	11/14/2023 08:00	80196		25	50
140-34307-9 MS	11/14/2023 08:00	80196		25	50
140-34307-9 MSD	11/14/2023 08:00	80196		25	50
140-34307-14	11/14/2023 08:00	80196		25	50
140-34307-18	11/14/2023 08:00	80196		25	50
140-34307-20	11/14/2023 08:00	80196		25	50
MB 140-80181/11-B	11/14/2023 08:00	80196		25	50
LCS 140-80181/12-B	11/14/2023 08:00	80196		25	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (Empty)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
140-34307-3	11/14/2023 08:00	80198		2.5	50
140-34307-8	11/14/2023 08:00	80198		2.5	50
140-34307-8 MS	11/14/2023 08:00	80198		2.5	50
140-34307-8 MSD	11/14/2023 08:00	80198		2.5	50
140-34307-13	11/14/2023 08:00	80198		2.5	50
MB 140-80189/9-B	11/14/2023 08:00	80198		2.5	50
LCS 140-80189/10-B	11/14/2023 08:00	80198		2.5	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (HCl)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
140-34307-5	11/14/2023 14:35	80199		10	50
140-34307-10	11/14/2023 14:35	80199		10	50
140-34307-10 MS	11/14/2023 14:35	80199		10	50
140-34307-10 MSD	11/14/2023 14:35	80199		10	50
140-34307-15	11/14/2023 14:35	80199		10	50
140-34307-21	11/14/2023 14:35	80199		10	50
MB 140-80190/10-B	11/14/2023 14:35	80199		10	50
LCS 140-80190/11-B	11/14/2023 14:35	80199		10	50

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Prep Method: AT Prep (BH)

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
140-34307-2	11/20/2023 12:00	80441		2.5	50
140-34307-7	11/20/2023 12:00	80441		2.5	50
140-34307-7 MS	11/20/2023 12:00	80441		2.5	50
140-34307-7 MSD	11/20/2023 12:00	80441		2.5	50
140-34307-12	11/20/2023 12:00	80441		2.5	50
140-34307-19	11/20/2023 12:00	80441		2.5	50
MB 140-80440/10-B	11/20/2023 12:00	80441		2.5	50
LCS 140-80440/11-B	11/20/2023 12:00	80441		2.5	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 11/19/2023 09:43 End Date: 11/19/2023 14:45

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn												
ICIS 140-80449/1	1		09:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ZZZZZZ			09:48																												
CCVL 140-80449/3	1		09:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICV 140-80449/4	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICB 140-80449/5	1		10:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICSA 140-80449/6	1		10:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ICSAB 140-80449/7	1		10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CRI 140-80449/8	1		10:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCV 140-80449/9	1		10:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/10	1		10:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
MB 140-80161/6-A	1	T	10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
LCS 140-80161/7-A	1	T	10:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
LCSD 140-80161/8-A	1	T	10:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
MB 140-80160/7-A	1	T	10:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
LCS 140-80160/8-A	1	T	10:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
LCSD 140-80160/9-A	1	T	10:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ZZZZZZ			11:01																												
ZZZZZZ			11:06																												
ZZZZZZ			11:11																												
140-34307-2	1	T	11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCV 140-80449/21	1		11:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/22	1		11:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-7	1	T	11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-7 PDS	1	T	11:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-7 PDSD	1	T	11:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-12	1	T	11:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-19	1	T	11:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-7 SD	5	T	11:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ZZZZZZ			11:59																												
ZZZZZZ			12:04																												
ZZZZZZ			12:09																												
140-34307-1	1	T	12:14	X		X	X	X		X	X	X			X			X	X												
CCV 140-80449/33	1		12:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/34	1		12:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-6	1	T	12:29	X		X	X	X		X	X	X			X			X	X												
140-34307-6 PDS	1	T	12:34	X		X	X	X		X	X	X			X			X	X												
140-34307-6 PDSD	1	T	12:39	X		X	X	X		X	X	X			X			X	X												
140-34307-11	1	T	12:44	X		X	X	X		X	X	X			X			X	X												
140-34307-16	1	T	12:50	X		X	X	X		X	X	X			X			X	X												
140-34307-17	1	T	12:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-6 SD	5	T	13:00	X		X	X	X		X	X	X			X			X	X												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: DUO Analysis Method: 29/6010C

Start Date: 11/19/2023 09:43 End Date: 11/19/2023 14:45

Lab Sample Id	D/F	Type	Time	Analytes																											
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Ni	Pb	Sb	Se	Tl	V	Zn												
CRI 140-80449/42	1		13:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCV 140-80449/43	1		13:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/44	1		13:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
ZZZZZZ			13:31																												
ZZZZZZ			13:36																												
ZZZZZZ			13:41																												
ZZZZZZ			13:46																												
140-34307-1	2	T	13:51		X				X				X	X		X	X														
140-34307-6	2	T	13:56		X				X				X	X		X	X														
140-34307-6 PDS	2	T	14:01		X				X				X	X		X	X														
140-34307-6 PDSD	2	T	14:06		X				X				X	X		X	X														
140-34307-11	2	T	14:11		X				X				X	X		X	X														
140-34307-6 SD	10	T	14:16		X				X				X	X		X	X														
CCV 140-80449/55	1		14:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/56	1		14:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
140-34307-16	2	T	14:30		X				X				X	X		X	X														
CRI 140-80449/58	1		14:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCV 140-80449/59	1		14:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
CCB 140-80449/60	1		14:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 11/15/2023 13:42 End Date: 11/15/2023 18:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			13:42																									
ZZZZZZ			13:45																									
ZZZZZZ			13:47																									
ZZZZZZ			13:50																									
ZZZZZZ			13:52																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
ICV 140-80198/18-A	1		14:00	X																								
ICB 140-80198/19-A	1		14:02	X																								
CRA 140-80198/20-A	1		14:05	X																								
CCV 140-80198/21-A			14:07																									
CCB 140-80198/22-A			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:15																									
ZZZZZZ			14:18																									
ZZZZZZ			14:20																									
ZZZZZZ			14:23																									
ZZZZZZ			14:25																									
ZZZZZZ			14:28																									
ZZZZZZ			14:30																									
ZZZZZZ			14:33																									
ZZZZZZ			14:35																									
CCV 140-80198/21-A			14:38																									
CCB 140-80198/22-A			14:40																									
ZZZZZZ			14:43																									
ZZZZZZ			14:46																									
ZZZZZZ			14:48																									
ZZZZZZ			14:51																									
ZZZZZZ			14:53																									
ZZZZZZ			14:56																									
ZZZZZZ			14:58																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
CCV 140-80198/21-A	1		15:06	X																								
CCB 140-80198/22-A	1		15:08	X																								
MB 140-80189/9-B	1	T	15:11	X																								
LCS 140-80189/10-B	1	T	15:14	X																								
ZZZZZZ			15:16																									
ZZZZZZ			15:19																									
ZZZZZZ			15:21																									
140-34307-3	1	T	15:24	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 11/15/2023 13:42 End Date: 11/15/2023 18:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
140-34307-8	1	T	15:26	X																								
140-34307-8 MS	1	T	15:29	X																								
140-34307-8 MSD	1	T	15:31	X																								
140-34307-13	1	T	15:34	X																								
CCV 140-80198/21-A	1		15:36	X																								
CCB 140-80198/22-A	1		15:39	X																								
ZZZZZZ			15:41																									
ZZZZZZ			15:44																									
ZZZZZZ			15:47																									
ZZZZZZ			15:49																									
ZZZZZZ			15:52																									
ZZZZZZ			15:54																									
ZZZZZZ			15:57																									
ZZZZZZ			15:59																									
ZZZZZZ			16:02																									
ZZZZZZ			16:04																									
CCV 140-80198/21-A	1		16:07	X																								
CCB 140-80198/22-A	1		16:09	X																								
ZZZZZZ			16:12																									
ZZZZZZ			16:15																									
ZZZZZZ			16:17																									
ZZZZZZ			16:20																									
MB 140-80181/11-B	1	T	16:22	X																								
LCS 140-80181/12-B	1	T	16:25	X																								
ZZZZZZ			16:27																									
ZZZZZZ			16:30																									
ZZZZZZ			16:32																									
140-34307-4	1	T	16:35	X																								
CCV 140-80198/21-A	1		16:37	X																								
CCB 140-80198/22-A	1		16:40	X																								
140-34307-9	1	T	16:43	X																								
140-34307-9 MS	1	T	16:45	X																								
140-34307-9 MSD	1	T	16:48	X																								
140-34307-14	1	T	16:50	X																								
140-34307-18	1	T	16:53	X																								
140-34307-20	1	T	16:55	X																								
MB 140-80190/10-B	1	T	16:58	X																								
LCS 140-80190/11-B	1	T	17:00	X																								
ZZZZZZ			17:03																									
ZZZZZZ			17:05																									
CCV 140-80198/21-A	1		17:08	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 11/15/2023 13:42 End Date: 11/15/2023 18:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
CCB 140-80198/22-A	1		17:11	X																								
ZZZZZZ			17:13																									
ZZZZZZ			17:16																									
ZZZZZZ			17:18																									
ZZZZZZ			17:21																									
ZZZZZZ			17:23																									
ZZZZZZ			17:26																									
140-34307-21	1	T	17:28	X																								
CCV 140-80198/21-A	1		17:31	X																								
CCB 140-80198/22-A	1		17:33	X																								
140-34307-5	2	T	17:45	X																								
140-34307-10	2	T	17:47	X																								
140-34307-10 MS	2	T	17:50	X																								
140-34307-10 MSD	2	T	17:52	X																								
140-34307-15	2	T	17:55	X																								
CCV 140-80198/21-A	1		17:58	X																								
CCB 140-80198/22-A	1		18:00	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 11/21/2023 11:07 End Date: 11/21/2023 12:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			11:07																									
ZZZZZZ			11:10																									
ZZZZZZ			11:12																									
ZZZZZZ			11:15																									
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:23																									
ICV 140-80441/19-A	1		11:25	X																								
ICB 140-80441/20-A	1		11:28	X																								
CRA 140-80441/21-A	1		11:30	X																								
CCV 140-80441/22-A	1		11:33	X																								
CCB 140-80441/23-A	1		11:35	X																								
MB 140-80160/7-B	1	T	11:38	X																								
LCS 140-80160/8-B	1	T	11:40	X																								
LCSD 140-80160/9-B	1	T	11:43	X																								
ZZZZZZ			11:46																									
ZZZZZZ			11:48																									
ZZZZZZ			11:51																									
140-34307-1	1	T	11:53	X																								
140-34307-6	1	T	11:56	X																								
140-34307-6 PDS	1	T	11:58	X																								
140-34307-6 PDSD	1	T	12:01	X																								
CCV 140-80441/22-A	1		12:03	X																								
CCB 140-80441/23-A	1		12:06	X																								
140-34307-11	1	T	12:08	X																								
140-34307-16	1	T	12:11	X																								
140-34307-17	1	T	12:14	X																								
MB 140-80440/10-B	1	T	12:16	X																								
LCS 140-80440/11-B	1	T	12:19	X																								
ZZZZZZ			12:21																									
ZZZZZZ			12:24																									
ZZZZZZ			12:26																									
140-34307-2	1	T	12:29	X																								
140-34307-7	1	T	12:31	X																								
CCV 140-80441/22-A	1		12:34	X																								
CCB 140-80441/23-A	1		12:36	X																								
140-34307-7 MS	1	T	12:39	X																								
140-34307-7 MSD	1	T	12:42	X																								
140-34307-12	1	T	12:44	X																								
140-34307-19	1	T	12:47	X																								
CCV 140-80441/22-A	1		12:49	X																								

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Instrument ID: ADT Analysis Method: 29/7470A

Start Date: 11/21/2023 11:07 End Date: 11/21/2023 12:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
CCB 140-80441/23-A	1		12:52	X																								

Prep Types:
T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.: Analysis Batch No.: 80449

ICP Instrument ID: DUO Start Date: 11/19/2023 End Date: 11/19/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
ICIS 140-80449/1	09:43										
CCVL 140-80449/3	09:53	99		99							
ICV 140-80449/4	09:58	98		98							
ICB 140-80449/5	10:03	100		100							
ICSA 140-80449/6	10:08	91		91							
ICSAB 140-80449/7	10:13	93		93							
CRI 140-80449/8	10:17	99		98							
CCV 140-80449/9	10:22	95		95							
CCB 140-80449/10	10:27	98		97							
MB 140-80161/6-A	10:32	96		96							
LCS 140-80161/7-A	10:37	96		95							
LCSD 140-80161/8-A	10:42	96		95							
MB 140-80160/7-A	10:47	98		97							
LCS 140-80160/8-A	10:52	95		94							
LCSD 140-80160/9-A	10:56	96		95							
140-34307-2	11:16	95		93							
CCV 140-80449/21	11:20	93		92							
CCB 140-80449/22	11:25	96		94							
140-34307-7	11:30	94		93							
140-34307-7 PDS	11:35	93		92							
140-34307-7 PDSD	11:40	93		92							
140-34307-12	11:44	93		92							
140-34307-19	11:49	95		94							
140-34307-7 SD	11:54	96		94							
140-34307-1	12:14	97		94							
CCV 140-80449/33	12:20	92		90							
CCB 140-80449/34	12:24	96		93							
140-34307-6	12:29	97		95							
140-34307-6 PDS	12:34	96		93							
140-34307-6 PDSD	12:39	96		94							
140-34307-11	12:44	97		95							
140-34307-16	12:50	97		94							
140-34307-17	12:55	95		94							
140-34307-6 SD	13:00	97		95							
CRI 140-80449/42	13:05	96		94							
CCV 140-80449/43	13:10	93		92							
CCB 140-80449/44	13:14	96		94							
140-34307-1	13:51	98		96							
140-34307-6	13:56	95		94							
140-34307-6 PDS	14:01	95		94							
140-34307-6 PDSD	14:06	95		94							
140-34307-11	14:11	95		96							

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.: Analysis Batch No.: 80449

ICP Instrument ID: DUO Start Date: 11/19/2023 End Date: 11/19/2023

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 224.306	Q	Element Y 371.030	Q	Element	Q	Element	Q	Element	Q
140-34307-6 SD	14:16	95		93							
CCV 140-80449/55	14:21	92		91							
CCB 140-80449/56	14:25	95		93							
140-34307-16	14:30	97		95							
CRI 140-80449/58	14:35	96		94							
CCV 140-80449/59	14:40	92		92							
CCB 140-80449/60	14:45	94		92							
IS Name on Instrument											

15A-IN
ICP INTERNAL STANDARDS RELATIONS
METALS

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.: Analysis Batch No.: 80449

ICP Instrument ID: DUO Start Date: 11/19/2023 End Date: 11/19/2023

Analyte	Wavelength	Internal Standard Used:				
		Element Y 224.306	Element Y 371.030	Element Y 371.030	Element	Element
Antimony	206.833	X				
Arsenic	189.042	X				
Barium	455.403			X		
Beryllium	313.042		X			
Cadmium	226.502	X				
Chromium	267.716		X			
Cobalt	228.616	X				
Copper	324.754		X			
Lead	220.353		X			
Manganese	257.610		X			
Nickel	231.604	X				
Selenium	196.090	X				
Silver	328.068		X			
Thallium	190.856	X				
Vanadium	292.402		X			
Zinc	213.856	X				
Aluminum	308.215			X		
Boron	249.678		X			
Calcium	317.933			X		
Iron	259.940			X		
Lithium	670.784			X		
Magnesium	279.079			X		
Molybdenum	202.030	X				
Phosphorus	178.284	X				
Potassium	766.490			X		
Silicon	250.690			X		
Sodium	589.592			X		
Strontium	421.552			X		
Tin	189.989	X				
Titanium	334.941			X		
Internal Standard Name on Instrument		Y_2243A	Y_3710A	Y_3710R		

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80160 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (FH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00096	90SPKNX10P 00025
140-34307-A-1	AP29-1 CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	115 mL	<2 SU		
140-34307-A-6	AP29-2, CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	105 mL	<2 SU		
140-34307-A-11	AP29-3, CONTAINER 1,3	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	115 mL	<2 SU		
140-34307-A-16	BLANK CONTAINER 12	AT Prep (FH), 29/6010C	T	1 Sample	100 mL				
140-34307-A-17	BLANK CONTAINER 8A	AT Prep (FH), 29/6010C	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-80160/7		AT Prep (FH), 29/6010C		1 Sample	100 mL				
LCS 140-80160/8		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-80160/9		AT Prep (FH), 29/6010C		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00024	90SPKNX9P 00025	AnalysisComment			
140-34307-A-1	AP29-1 CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-34307-A-6	AP29-2, CONTAINER 1,3	AT Prep (FH), 29/6010C	T			Acetone in probe rinse			
140-34307-A-11	AP29-3, CONTAINER 1,3	AT Prep (FH), 29/6010C	T						
140-34307-A-16	BLANK CONTAINER 12	AT Prep (FH), 29/6010C	T			Filter only			
140-34307-A-17	BLANK CONTAINER 8A	AT Prep (FH), 29/6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80160 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (FH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00024	90SPKNX9P 00025	AnalysisComment			
MB 140-80160/7		AT Prep (FH), 29/6010C							
LCS 140-80160/8		AT Prep (FH), 29/6010C		1 mL	1 mL				
LCSD 140-80160/9		AT Prep (FH), 29/6010C		1 mL	1 mL				

Batch Notes	
Microwave Oven ID	cem3
Program Name	air1600 filt pr+combo filt 800W pr+combo 1600W
Start date/time for FH digestion	11/13/2023 07:47
End date/time for FH digestion	11/14/2023 14:35
Nitric Acid ID	641645 4.0ml
Hydrofluoric Acid ID	598394 3.0ml
Hydrochloric Acid ID	641639 5.0ml
0.1N HNO3 ID	624721 20ml
Boric Acid ID	597177 2.0ml
Filter Paper ID	10203501-3251-AR
Hot Plate ID	11-13 B, 11-14 E
Oven, Bath or Block Temperature 1	11-13 95, 11-14 90 Degrees C
Thermometer ID	11-13 Metals 15, 11-14 Metals 26
Snap Cap Lot #	082523
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80161 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (BH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	BH_pH	BH_IV	90SPKNX10P 00025	90SPKNX8P 00024
140-34307-A-2	AP29-1 CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	340 mL		
140-34307-A-7	AP29-2, CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	350 mL		
140-34307-A-12	AP29-3, CONTAINER 4	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	325 mL		
140-34307-A-19	BLANK CONTAINER 9	AT Prep (BH), 29/6010C	T	1 Sample	100 mL	<2 SU	100 mL		
MB 140-80161/6		AT Prep (BH), 29/6010C		1 Sample	100 mL				
LCS 140-80161/7		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL
LCSD 140-80161/8		AT Prep (BH), 29/6010C		1 Sample	100 mL			1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00025					
140-34307-A-2	AP29-1 CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-34307-A-7	AP29-2, CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-34307-A-12	AP29-3, CONTAINER 4	AT Prep (BH), 29/6010C	T						
140-34307-A-19	BLANK CONTAINER 9	AT Prep (BH), 29/6010C	T						
MB 140-80161/6		AT Prep (BH), 29/6010C							
LCS 140-80161/7		AT Prep (BH), 29/6010C		1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80161 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (BH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX9P 00025					
LCSD 140-80161/8		AT Prep (BH), 29/6010C		1 mL					

Batch Notes	
Start date/time for BH digestion	11/13/2023 07:40
End date/time for BH digestion	11/14/2023 13:40
Nitric Acid ID	642672 16ml
Hydrogen Peroxide ID	634637 0.540ml
Hydrochloric Acid ID	641639 8ml
Filter Paper ID	10203501-3251-AR
Hot Plate ID	B
Oven, Bath or Block Temperature 1	11-13 95, 11-14 91 Degrees C
Thermometer ID	11-13 Metals 15, 11-14 Metals 34
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80160 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (FH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	HNO3ProbeRinseVol	HNO3ProbeRinsepH	90L1HgCA1000P 00096	90SPKNX10P 00025
140-34307-A-1	AP29-1 CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	115 mL	<2 SU		
140-34307-A-6	AP29-2, CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	105 mL	<2 SU		
140-34307-A-11	AP29-3, CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	115 mL	<2 SU		
140-34307-A-16	BLANK CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL				
140-34307-A-17	BLANK CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T	1 Sample	100 mL	100 mL	<2 SU		
MB 140-80160/7		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL				
LCS 140-80160/8		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL
LCSD 140-80160/9		AT Prep (FH), AT Prep FH, 29/7470A		1 Sample	100 mL			0.5 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00024	90SPKNX9P 00025	AnalysisComment			
140-34307-A-1	AP29-1 CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80160 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (FH) Batch End Date: 11/14/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	90SPKNX8P 00024	90SPKNX9P 00025	AnalysisComment			
140-34307-A-6	AP29-2, CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T			Acetone in probe rinse			
140-34307-A-11	AP29-3, CONTAINER 1,3	AT Prep (FH), AT Prep FH, 29/7470A	T						
140-34307-A-16	BLANK CONTAINER 12	AT Prep (FH), AT Prep FH, 29/7470A	T			Filter only			
140-34307-A-17	BLANK CONTAINER 8A	AT Prep (FH), AT Prep FH, 29/7470A	T						
MB 140-80160/7		AT Prep (FH), AT Prep FH, 29/7470A							
LCS 140-80160/8		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				
LCSD 140-80160/9		AT Prep (FH), AT Prep FH, 29/7470A		1 mL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80160 Batch Start Date: 11/13/23 07:30 Batch Analyst: Mcdevitt, Jenna D

Batch Method: AT Prep (FH) Batch End Date: 11/14/23 17:00

Batch Notes	
Microwave Oven ID	cem3
Program Name	air1600 filt pr+combo filt 800W pr+combo 1600W
Start date/time for FH digestion	11/13/2023 07:47
End date/time for FH digestion	11/14/2023 14:35
Nitric Acid ID	641645 4.0ml
Hydrofluoric Acid ID	598394 3.0ml
Hydrochloric Acid ID	641639 5.0ml
0.1N HNO3 ID	624721 20ml
Boric Acid ID	597177 2.0ml
Filter Paper ID	10203501-3251-AR
Hot Plate ID	11-13 B, 11-14 E
Oven, Bath or Block Temperature 1	11-13 95, 11-14 90 Degrees C
Thermometer ID	11-13 Metals 15, 11-14 Metals 26
Snap Cap Lot #	082523
Pipette/Syringe/Dispenser ID	met-016
Batch Comment	pH paper lot # LRS-4801

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80181 Batch Start Date: 11/13/23 11:58 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/13/23 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
140-34307-A-4	AP29-1 CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	390 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
140-34307-A-9	AP29-2, CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	395 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
140-34307-A-9 MS	AP29-2, CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	395 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
140-34307-A-9 MSD	AP29-2, CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	395 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
140-34307-A-14	AP29-3, CONTAINER 5B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	385 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
140-34307-A-18	BLANK CONTAINER 8B	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH 7			
140-34307-A-20	BLANK CONTAINER 10	Air Train Vol., AT Prep (KMnO4), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25 ; pH<2			
MB 140-80181/11		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80181 Batch Start Date: 11/13/23 11:58 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/13/23 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
LCS 140-80181/12		Air Train Vol., AT Prep (KMnO4), 29/7470A		1 Sample	50 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80189 Batch Start Date: 11/13/23 15:09 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/13/23 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
140-34307-A-3	AP29-1 CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	90 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-8	AP29-2, CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-8 MS	AP29-2, CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-8 MSD	AP29-2, CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-13	AP29-3, CONTAINER 5A	Air Train Vol., AT Prep (Empty), 29/7470A	T	1 Sample	100 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
MB 140-80189/9		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				
LCS 140-80189/10		Air Train Vol., AT Prep (Empty), 29/7470A		1 Sample	50 mL				

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80189 Batch Start Date: 11/13/23 15:09 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/13/23 17:00

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80190 Batch Start Date: 11/14/23 11:00 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/14/23 14:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
140-34307-A-5	AP29-1 CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-10	AP29-2, CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-10 MS	AP29-2, CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-10 MSD	AP29-2, CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-15	AP29-3, CONTAINER 5C	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	275 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
140-34307-A-21	BLANK CONTAINER 11	Air Train Vol., AT Prep (HCl), 29/7470A	T	1 Sample	150 mL	pH paper lot# LRS-4801 DOE 3/15/25; pH<2			
MB 140-80190/10		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				
LCS 140-80190/11		Air Train Vol., AT Prep (HCl), 29/7470A		1 Sample	50 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80196 Batch Start Date: 11/14/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (KMnO4) Batch End Date: 11/14/23 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 01053			
140-34307-A-4-A	AP29-1 CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-34307-A-9-A	AP29-2, CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-34307-A-9-B MS	AP29-2, CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-34307-A-9-C MSD	AP29-2, CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL	0.5 mL			
140-34307-A-14-A	AP29-3, CONTAINER 5B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-34307-A-18-A	BLANK CONTAINER 8B	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
140-34307-A-20-A	BLANK CONTAINER 10	AT Prep (KMnO4), 29/7470A	T	25 mL	50 mL				
MB 140-80181/11-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL				
LCS 140-80181/12-A		AT Prep (KMnO4), 29/7470A		25 mL	50 mL	2.5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80196 Batch Start Date: 11/14/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (KMnO4) Batch End Date: 11/14/23 18:00

Batch Notes	
Oven, Bath or Block Temperature 1	In 15:50 92 Degrees C
Oven, Bath or Block Temperature 2	Out 17:50 92 Degrees C
Digestion Tube/Cup ID	082523
Hot Block ID	D
Thermometer ID	metals 10
Lot # of Nitric Acid	641647 1.25ml
Lot # of hydrochloric acid	643342 2ml
Sulfuric Acid Lot Number	630743 2.5ml
Potassium Permanganate ID	642173 7.5ml
Potassium Persulfate ID	641125 4ml
Hydroxylamine Hydrochloride ID	640999 3ml
Pipette ID	met-015, P645
Filter ID	17612847

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80198 Batch Start Date: 11/14/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (Empty) Batch End Date: 11/14/23 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 01053	90L1HGDayVER 00927		
140-34307-A-3-A	AP29-1 CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-34307-A-8-A	AP29-2, CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
140-34307-A-8-B MS	AP29-2, CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-34307-A-8-C MSD	AP29-2, CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL	0.5 mL			
140-34307-A-13-A	AP29-3, CONTAINER 5A	AT Prep (Empty), 29/7470A	T	2.5 mL	50 mL				
MB 140-80189/9-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL				
LCS 140-80189/10-A		AT Prep (Empty), 29/7470A		2.5 mL	50 mL	2.5 mL			
ICV 140-80198/18		AT Prep (Empty), 29/7470A		50 mL	50 mL		1.25 mL		
ICB 140-80198/19		AT Prep (Empty), 29/7470A		50 mL	50 mL				
CRA 140-80198/20		AT Prep (Empty), 29/7470A		50 mL	50 mL	0.1 mL			
CCV 140-80198/21		AT Prep (Empty), 29/7470A		50 mL	50 mL	2.5 mL			
CCB 140-80198/22		AT Prep (Empty), 29/7470A		50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80198 Batch Start Date: 11/14/23 08:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (Empty) Batch End Date: 11/14/23 18:00

Batch Notes	
Oven, Bath or Block Temperature 1	In 15:50 D 92 F (cal) 95 Celsius
Oven, Bath or Block Temperature 2	Out 17:50 D 92 F (cal) 95 Celsius
Digestion Tube/Cup ID	082523
Hot Block ID	D, F (cal)
Thermometer ID	D metals10 F metals 34
Lot # of Nitric Acid	641647 1.25ml
Lot # of hydrochloric acid	643342 2ml
Sulfuric Acid Lot Number	630743 2.5ml
Potassium Permanganate ID	642173 7.5ml
Potassium Persulfate ID	641125 4ml
Hydroxylamine Hydrochloride ID	640999 3ml
Pipette/Syringe/Dispenser ID	met-015, met-016, P645

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80199 Batch Start Date: 11/14/23 14:35 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (HCl) Batch End Date: 11/14/23 18:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	ImpingerVol	KMnO4_HCLRinse	InitialAmount	FinalAmount	90L1HGDayCAL 01053	
140-34307-A-5-A	AP29-1 CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL		
140-34307-A-10-A	AP29-2, CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL		
140-34307-A-10-B MS	AP29-2, CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL	0.5 mL	
140-34307-A-10-C MSD	AP29-2, CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL	0.5 mL	
140-34307-A-15-A	AP29-3, CONTAINER 5C	AT Prep (HCl), 29/7470A	T	225 mL	50 mL	10 mL	50 mL		
140-34307-A-21-A	BLANK CONTAINER 11	AT Prep (HCl), 29/7470A	T	100 mL	50 mL	10 mL	50 mL		
MB 140-80190/10-A		AT Prep (HCl), 29/7470A				10 mL	50 mL		
LCS 140-80190/11-A		AT Prep (HCl), 29/7470A				10 mL	50 mL	2.5 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80199 Batch Start Date: 11/14/23 14:35 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (HCl) Batch End Date: 11/14/23 18:00

Batch Notes	
Oven, Bath or Block Temperature 1	In 15:50 92 Celsius
Oven, Bath or Block Temperature 2	Out 17:50 92 Celsius
Digestion Tube/Cup ID	082523
Hot Block ID	D
Thermometer ID	metals 10
Lot # of Nitric Acid	641647 1.25ml
Lot # of hydrochloric acid	643342 2ml
Hydrochloric Acid ID	634479 50ml
Sulfuric Acid Lot Number	630743 2.5ml
Potassium Permanganate ID	642173 7.5ml
Potassium Persulfate ID	641125 4ml
Hydroxylamine Hydrochloride ID	640999 3ml
Pipette ID	met-016, P645
Filter ID	17612847

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80439 Batch Start Date: 11/20/23 12:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep FH Batch End Date: 11/20/23 18:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
140-34307-A-1-A	AP29-1 CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-34307-A-6-A	AP29-2, CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-34307-A-11-A	AP29-3, CONTAINER 1,3	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-34307-A-16-A	BLANK CONTAINER 12	AT Prep FH, 29/7470A	T	5 mL	50 mL				
140-34307-A-17-A	BLANK CONTAINER 8A	AT Prep FH, 29/7470A	T	5 mL	50 mL				
MB 140-80160/7-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCS 140-80160/8-A		AT Prep FH, 29/7470A		5 mL	50 mL				
LCSD 140-80160/9-A		AT Prep FH, 29/7470A		5 mL	50 mL				

Batch Notes	
Oven, Bath or Block Temperature 1	In 16:05 90 Degrees C
Oven, Bath or Block Temperature 2	Out 18:05 90 Degrees C
Digestion Tube/Cup ID	082523
Hot Block ID	D
Thermometer ID	Metals 10
Nitric Acid ID	641647 1.25ml
Hydrochloric Acid ID	643342 2.0ml
Sulfuric Acid ID	630743 2.5ml
Potassium Permanganate ID	642173 7.5ml
Potassium Persulfate ID	641125 4ml
Hydroxylamine Hydrochloride ID	640999 3ml
Pipette/Syringe/Dispenser ID	P645

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80440 Batch Start Date: 11/19/23 12:02 Batch Analyst: Collins, Kerry N

Batch Method: Air Train Vol. Batch End Date: 11/19/23 12:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
140-34307-A-2	AP29-1 CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-34307-A-7	AP29-2, CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-34307-A-7 MS	AP29-2, CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-34307-A-7 MSD	AP29-2, CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-34307-A-12	AP29-3, CONTAINER 4	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
140-34307-A-19	BLANK CONTAINER 9	Air Train Vol., AT Prep (BH), 29/7470A	T	1 Sample	100 mL				
MB 140-80440/10		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				
LCS 140-80440/11		Air Train Vol., AT Prep (BH), 29/7470A		1 Sample	100 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80441 Batch Start Date: 11/20/23 12:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 11/20/23 18:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	90L1HGDayCAL 01055	90L1HGDayVER 00929	AnalysisComment	
140-34307-A-2-B	AP29-1 CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL			Added 12.5ml extra KMn04	
140-34307-A-7-B	AP29-2, CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL			Added 7.5ml extra KMn04	
140-34307-A-7-C MS	AP29-2, CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL		Added 7.5ml extra KMn04	
140-34307-A-7-D MSD	AP29-2, CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL	0.5 mL		Added 7.5ml extra KMn04	
140-34307-A-12-B	AP29-3, CONTAINER 4	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL			Added 12.5ml extra KMn04	
140-34307-A-19-B	BLANK CONTAINER 9	AT Prep (BH), 29/7470A	T	2.5 mL	50 mL			Added 7.5ml extra KMn04	
MB 140-80440/10-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL			Added 12.5ml extra KMn04	
LCS 140-80440/11-A		AT Prep (BH), 29/7470A		2.5 mL	50 mL	2.5 mL		Added 12.5ml extra KMn04	
ICV 140-80441/19		AT Prep (BH), 29/7470A		50 mL	50 mL		1.25 mL		
ICB 140-80441/20		AT Prep (BH), 29/7470A		50 mL	50 mL				
CRA 140-80441/21		AT Prep (BH), 29/7470A		50 mL	50 mL	0.1 mL			
CCV 140-80441/22		AT Prep (BH), 29/7470A		50 mL	50 mL	2.5 mL			
CCB 140-80441/23		AT Prep (BH), 29/7470A		50 mL	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins Knoxville Job No.: 140-34307-1

SDG No.:

Batch Number: 80441 Batch Start Date: 11/20/23 12:00 Batch Analyst: Collins, Kerry N

Batch Method: AT Prep (BH) Batch End Date: 11/20/23 18:30

Batch Notes	
Oven, Bath or Block Temperature 1	In 16:05 90 (cal) 91 (samples) Celsius
Oven, Bath or Block Temperature 2	Out 18:05 90 (cal) 91 (samples) Celsius
Digestion Tube/Cup ID	082523
Hot Block ID	D (cal) E (samples)
Thermometer ID	D metals 10 E metals 26
Lot # of Nitric Acid	641647 1.25ml
Lot # of hydrochloric acid	643342 2.0ml
Sulfuric Acid Lot Number	630743 2.5ml
Potassium Permanganate ID	642173 7.5ml
Potassium Persulfate ID	641125 4.0ml
Hydroxylamine Hydrochloride ID	640999 3.0ml
Pipette/Syringe/Dispenser ID	met-015, met-016, P645

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-80161/6-a			
10	10	1	10	1	QC	lcs 140-80161/7-a			
11	11	1	11	1	QC	lcsd 140-80161/8-a			
12	12	1	12	1	Unk	mb 140-80160/7-a			
13	13	1	1	2	QC	lcs 140-80160/8-a			
14	14	1	2	2	QC	lcsd 140-80160/9-a			
15	15	1	3	2	Unk	140-34237-a-2-a			
16	16	1	4	2	Unk	140-34237-a-2-a PDS			
17	17	1	5	2	Unk	140-34237-a-2-a PDSD			
18	18	1	6	2	Unk	140-34307-a-2-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	Unk	140-34307-a-7-a			
22	22	1	10	2	Unk	140-34307-a-7-a PDS			
23	23	1	11	2	Unk	140-34307-a-7-a PDSD			
24	24	1	12	2	Unk	140-34307-a-12-a			
25	25	1	1	3	Unk	140-34307-a-19-a			
26	26	1	2	3	Unk	140-34307-a-7-a SD@5	2ML TO 10ML		
27	27	1	3	3	Unk	140-34237-a-1-a			
28	28	1	4	3	Unk	140-34237-a-1-a PDS			
29	29	1	5	3	Unk	140-34237-a-1-a PDSD			
30	30	1	6	3	Unk	140-34307-a-1-a			
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk	140-34307-a-6-a			
34	34	1	10	3	Unk	140-34307-a-6-a PDS			
35	35	1	11	3	Unk	140-34307-a-6-a PDSD			
36	36	1	12	3	Unk	140-34307-a-11-a			
37	37	1	1	4	Unk	140-34307-a-16-a			
38	38	1	2	4	Unk	140-34307-a-17-a			
39	39	1	3	4	Unk	140-34307-a-6-a SD@5	2ML TO 10ML		
40	40	1	4	4	QC	CRI			
41	41	1	5	4	QC	CCV			
42	42	1	6	4	Unk	CCB			
43	43	1	7	4	Unk	140-34237-a-2-a			
44	44	1	8	4	Unk	140-34237-a-1-a @2	5ML TO 10ML		
45	45	1	9	4	Unk	34237-a-1-a PDS@2	5ML TO 10ML		
46	46	1	10	4	Unk	34237-a-1-a PDSD@2	5ML TO 10ML		
47	47	1	11	4	Unk	140-34307-a-1-a @2	5ML TO 10ML		
48	48	1	12	4	Unk	140-34307-a-6-a @2	5ML TO 10ML (A)		
49	49	1	1	5	Unk	34307-a-6-a PDS@2	5ML TO 10ML		
50	50	1	2	5	Unk	34307-a-6-a PDSD@2	5ML TO 10ML		
51	51	1	3	5	Unk	140-34307-a-11-a @2	5ML TO 10ML		
52	52	1	4	5	Unk	34307-a-6-a SD@10	2ML (A) TO 10ML		
53	53	1	5	5	QC	CCV			
54	54	1	6	5	Unk	CCB			
55	55	1	7	5	Unk	140-34307-a-16-a @2	5ML TO 10ML		
56	56	1	8	5	QC	CRI			
57	57	1	9	5	QC	CCV			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
58	58	1	10	5	Unk	CCB			
59	59	1	11	5	Unk	Sample-48			
60	60	1	12	5	Unk	Sample-40			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1	1	1	1	QC	CCVL			
2	2	1	2	1	QC	ICV			
3	3	1	3	1	Unk	ICB			
4	4	1	4	1	Unk	ICSA			
5	5	1	5	1	Unk	ICSAB			
6	6	1	6	1	QC	CRI			
7	7	1	7	1	QC	CCV			
8	8	1	8	1	Unk	CCB			
9	9	1	9	1	Unk	mb 140-80161/6-a			
10	10	1	10	1	QC	lcs 140-80161/7-a			
11	11	1	11	1	QC	lcsd 140-80161/8-a			
12	12	1	12	1	Unk	mb 140-80160/7-a			
13	13	1	1	2	QC	lcs 140-80160/8-a			
14	14	1	2	2	QC	lcsd 140-80160/9-a			
15	15	1	3	2	Unk 1	140-34237-a-2-a	-Rev Pb - RV=	ØK	
16	16	1	4	2	Unk	140-34237-a-2-a PDS			
17	17	1	5	2	Unk	140-34237-a-2-a PDSD			
18	18	1	6	2	Unk	140-34307-a-2-a			
19	19	1	7	2	QC	CCV			
20	20	1	8	2	Unk	CCB			
21	21	1	9	2	Unk	140-34307-a-7-a			
22	22	1	10	2	Unk	140-34307-a-7-a PDS			
23	23	1	11	2	Unk	140-34307-a-7-a PDSD			
24	24	1	12	2	Unk	140-34307-a-12-a			
25	25	1	1	3	Unk	140-34307-a-19-a			
26	26	1	2	3	Unk	140-34307-a-7-a SD@5	2ML TO 10ML		SD935
27	27	1	3	3	Unk 2	140-34237-a-1-a	Site2 -	As,Pb,TL	
28	28	1	4	3	Unk 3	140-34237-a-1-a PDS	e2		SD936
29	29	1	5	3	Unk 4	140-34237-a-1-a PDSD	e2		
30	30	1	6	3	Unk 5	140-34307-a-1-a	Site2 -	As,Co,Ni,Pb,Se,TL	
31	31	1	7	3	QC	CCV			
32	32	1	8	3	Unk	CCB			
33	33	1	9	3	Unk 6	140-34307-a-6-a	Site2		
34	34	1	10	3	Unk 7	140-34307-a-6-a PDS	e2		
35	35	1	11	3	Unk 8	140-34307-a-6-a PDSD	e2		
36	36	1	12	3	Unk 9	140-34307-a-11-a	Site2		
37	37	1	1	4	Unk 11	140-34307-a-16-a	Site2		
38	38	1	2	4	Unk	140-34307-a-17-a ✓			
39	39	1	3	4	Unk 10	140-34307-a-6-a SD@5	2ML TO 10ML e	10	
40	40	1	4	4	QC	CRI			
41	41	1	5	4	QC	CCV			
42	42	1	6	4	Unk	CCB			
43	43	1	7	4	Unk	Sample-34			
44	44	1	8	4	Unk	Sample-35			
45	45	1	9	4	Unk	Sample-36			
46	46	1	10	4	Unk	Sample-37			
47	47	1	11	4	Unk	Sample-38			
48	48	1	12	4	Unk	Sample-39			
49	49	1	1	5	Unk	Sample-40			

F111923
Sl-315 Y-174
CCVL-1228 H2O-59
ICV-250
ICSA(Si)-79
ICSAB-131
CRI-1256
CCV-1255

237= Ag,As,Ba,Be,Cd,Cr,Pb,Sb,Tl

307= Ag,As,Ba,Be,Cd,Co,Cr,Cu,Mn,Ni,Pb,
Sb,Se,Tl,V,Zn [P]

5085 3560-6611
88535 61975-115096
10289 7202-13376

11/27/2023
12:19 PM

29_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80161

Analyst: Mcdevitt, Jenna D

Batch Open: 11/13/2023 7:30:00AM

Batch End: 11/14/2023 5:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-2 (29_6010C)	N/A (140-34237-1)	Air Train Ba	1 Sample	100 mL	11/22/23	13_Days	4		140-34237-A-2-A
2	140-34307-A-2 (29_6010C)	N/A (140-34307-1)	Air Train Ba	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-2-A
3	140-34307-A-7 (29_6010C)	N/A (140-34307-1)	Air Train Ba	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-7-A
4	140-34307-A-12 (29_6010C)	N/A (140-34307-1)	Air Train Ba	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-12-A
5	140-34307-A-19 (29_6010C)	N/A (140-34307-1)	Air Train Ba	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-19-A
6	MB~140-80161/6 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-80161/6-A
7	LCS~140-80161/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCS 140-80161/7-A
8	LCSD~140-80161/8 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		LCSD 140-80161/8-A

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80160 Analyst: Mcdevitt, Jenna D Batch Open: 11/13/2023 7:30:00AM

Batch End: 11/14/2023 5:00:00PM

Preparation, Total Metals (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
1	140-34237-A-1 (29_6010C)	N/A (140-34237-1)	Air Train Fro	1 Sample	100 mL	11/22/23	13_Days	4		140-34237-A-1-A
1	140-34237-A-1 (29_7470A)	N/A (140-34237-1)	Air Train Fro	1 Sample	100 mL	11/22/23	13_Days	4		140-34237-A-1-A
2	140-34307-A-1 (29_6010C)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-1-A
2	140-34307-A-1 (29_7470A)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-1-A
3	140-34307-A-6 (29_6010C)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-6-A
3	140-34307-A-6 (29_7470A)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-6-A
4	140-34307-A-11 (29_6010C)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-11-A
4	140-34307-A-11 (29_7470A)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-11-A
5	140-34307-A-16 (29_6010C)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-16-A
5	140-34307-A-16 (29_7470A)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-16-A
6	140-34307-A-17 (29_6010C)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-17-A
6	140-34307-A-17 (29_7470A)	N/A (140-34307-1)	Air Train Fro	1 Sample	100 mL	11/21/23	8_Days	4		140-34307-A-17-A
7	MB-140-80160/7 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A		MB 140-80160/7-A

29_FH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80160 Analyst: Mcdevitt, Jenna D Batch Open: 11/13/2023 7:30:00AM

Batch End: 11/14/2023 5:00:00PM

8	LCS~140-80160/8 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	
9	LCSD~140-80160/9 N/A	N/A		1 Sample	100 mL	N/A	N/A	N/A	

Sample Name: ICIS Acquired: 11/19/2023 9:43:22 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00024	.00386	-.00064	.00203	.01572	-.00012
Stddev	.00006	.00409	.00004	.00004	.00043	.00008
%RSD	25.087	106.09	5.5243	2.1908	2.7210	64.762
#1	-.00024	.00856	-.00061	.00201	.01530	-.00005
#2	-.00018	.00117	-.00063	.00200	.01615	-.00010
#3	-.00030	.00183	-.00068	.00208	.01572	-.00020

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02336	-.00036	-.00037	.00015	.00168	.00150
Stddev	.02534	.00031	.00019	.00004	.00007	.00096
%RSD	108.49	87.244	50.989	23.738	4.1146	64.177
#1	.05263	-.00015	-.00049	.00013	.00176	.00260
#2	.00873	-.00072	-.00015	.00012	.00163	.00113
#3	.00873	-.00021	-.00048	.00019	.00166	.00078

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00041	-.00348	.00060	.00021	.00087	.00074
Stddev	.00040	.00138	.00112	.00003	.00023	.00026
%RSD	99.353	39.583	186.76	13.519	26.241	35.224
#1	.00002	-.00214	.00190	.00022	.00064	.00094
#2	.00037	-.00341	.00000	.00017	.00088	.00045
#3	.00083	-.00490	-.00009	.00022	.00109	.00084

Sample Name: ICIS Acquired: 11/19/2023 9:43:22 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01163	.00097	.00033	-.00003	.00112	.00077
Stddev	.00629	.00025	.00017	.00003	.00043	.00008
%RSD	54.111	25.948	52.121	102.68	38.871	10.553
#1	.01886	.00121	.00032	-.00006	.00067	.00074
#2	.00737	.00071	.00017	-.00001	.00114	.00072
#3	.00866	.00099	.00051	-.00002	.00154	.00087

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00031	.01677	.00083	-.00555	.00016	-.00023
Stddev	.00012	.00277	.00018	.00091	.00047	.00005
%RSD	39.788	16.530	21.543	16.362	299.40	22.504
#1	.00036	.01974	.00084	-.00469	.00070	-.00017
#2	.00017	.01630	.00064	-.00650	-.00018	-.00026
#3	.00041	.01426	.00100	-.00547	-.00004	-.00027

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	-.00014	.00587
Stddev	.00007	.00063
%RSD	51.769	10.769
#1	-.00006	.00562
#2	-.00021	.00541
#3	-.00015	.00659

Sample Name: ICIS Acquired: 11/19/2023 9:43:22 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5094.1	88617.	10464.
Stddev	26.4	772.	182.
%RSD	.51745	.87114	1.7402
#1	5122.7	89331.	10644.
#2	5089.0	88722.	10280.
#3	5070.8	87798.	10467.

Sample Name: S1 Acquired: 11/19/2023 9:48:20 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.23632	1.1327	.15955	.29916	22.028	21.705
Stddev	.00109	.0070	.00028	.00223	.169	.156
%RSD	.45952	.61565	.17306	.74520	.76916	.71843
#1	.23596	1.1254	.15985	.29735	22.115	21.858
#2	.23754	1.1393	.15949	.30165	22.136	21.711
#3	.23546	1.1334	.15930	.29848	21.833	21.546

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	27.104	3.8132	7.6865	.55501	.98327	5.0549
Stddev	.140	.0017	.0033	.00295	.00147	.0297
%RSD	.51632	.04411	.04317	.53134	.14913	.58679
#1	27.180	3.8151	7.6902	.55515	.98396	5.0287
#2	27.190	3.8126	7.6855	.55788	.98426	5.0871
#3	26.943	3.8119	7.6838	.55199	.98159	5.0488

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.5350	5.8894	2.2610	3.3101	3.4863	.06286
Stddev	.0283	.0246	.0112	.0161	.0036	.00036
%RSD	.62286	.41858	.49692	.48728	.10199	.56610
#1	4.5077	5.8650	2.2516	3.3010	3.4890	.06316
#2	4.5641	5.9143	2.2734	3.3287	3.4822	.06296
#3	4.5331	5.8888	2.2580	3.3006	3.4876	.06247

Sample Name: S1 Acquired: 11/19/2023 9:48:20 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	22.814	6.3523	.33017	.01566	.35255	.14174
Stddev	.174	.0017	.00049	.00005	.00023	.00054
%RSD	.76285	.02725	.14870	.30120	.06597	.38175
#1	22.763	6.3524	.33007	.01564	.35256	.14114
#2	23.008	6.3540	.33070	.01572	.35232	.14188
#3	22.672	6.3506	.32974	.01564	.35278	.14219

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.09359	.09876	1.5643	24.136	1.6215	.15716
Stddev	.00015	.00057	.0007	.380	.0051	.00008
%RSD	.15598	.57359	.04386	1.5741	.31250	.04850
#1	.09376	.09873	1.5636	24.496	1.6247	.15721
#2	.09350	.09934	1.5650	24.172	1.6242	.15708
#3	.09351	.09820	1.5642	23.739	1.6157	.15720

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	Cts/S	Cts/S
Avg	.90811	12.401
Stddev	.00320	.005
%RSD	.35256	.03668
#1	.90863	12.400
#2	.91102	12.407
#3	.90468	12.398

Sample Name: S1 Acquired: 11/19/2023 9:48:20 Type: Cal
Method: MT0007(v23) HF AIR 102323(v2) Mode: IR Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4767.2	84808.	10185.
Stddev	9.1	576.	86.
%RSD	.19178	.67944	.84662
#1	4773.3	84827.	10134.
#2	4771.7	84223.	10137.
#3	4756.7	85375.	10285.

Sample Name: CCVL Acquired: 11/19/2023 9:53:27 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48994	12.445	.24510	1.0050	.99581	1.0299
Stddev	.00270	.121	.00074	.0041	.00308	.0078
%RSD	.55174	.96975	.30202	.40855	.30925	.75419
#1	.48692	12.584	.24565	1.0003	.99928	1.0210
#2	.49213	12.364	.24426	1.0078	.99339	1.0336
#3	.49077	12.387	.24539	1.0069	.99477	1.0351
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.290	.25408	1.0081	1.0202	.98612	12.680
Stddev	.189	.00047	.0020	.0019	.00326	.037
%RSD	.74611	.18309	.19560	.19073	.33020	.28795
#1	25.458	.25455	1.0098	1.0181	.98241	12.711
#2	25.086	.25406	1.0085	1.0206	.98744	12.640
#3	25.325	.25362	1.0059	1.0219	.98850	12.689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 11/19/2023 9:53:27 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.597	.98124	25.099	1.0185	1.0038	24.759
Stddev	.039	.00376	.122	.0049	.0004	.603
%RSD	.15712	.38285	.48804	.47673	.04332	2.4374
#1	24.637	.98435	25.213	1.0139	1.0042	25.389
#2	24.594	.97707	24.970	1.0236	1.0039	24.186
#3	24.560	.98230	25.115	1.0181	1.0033	24.703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.734	1.0150	.98306	.25769	.25360	.24377
Stddev	.088	.0018	.00522	.00302	.00123	.00214
%RSD	.35691	.17456	.53123	1.1723	.48584	.87844
#1	24.835	1.0166	.98780	.25468	.25350	.24616
#2	24.690	1.0152	.98393	.25768	.25488	.24203
#3	24.675	1.0131	.97746	.26072	.25242	.24313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCVL Acquired: 11/19/2023 9:53:27 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24648	.94172	1.0168	.99784	1.0080	.51147
Stddev	.00057	.15403	.0013	.00229	.0093	.00338
%RSD	.23191	16.356	.12326	.22951	.92331	.66169
#1	.24710	1.1194	1.0178	1.0004	1.0160	.51512
#2	.24598	.85948	1.0172	.99696	.99780	.51086
#3	.24634	.84627	1.0154	.99612	1.0103	.50844
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.0077	.98647
Stddev	.0016	.00218
%RSD	.15630	.22052
#1	1.0060	.98867
#2	1.0090	.98641
#3	1.0082	.98433
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCVL Acquired: 11/19/2023 9:53:27 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5025.6	87600.	10324.
Stddev	17.4	169.	52.
%RSD	.34718	.19332	.49987
#1	5006.3	87553.	10264.
#2	5030.5	87460.	10348.
#3	5040.1	87788.	10359.

Sample Name: ICV Acquired: 11/19/2023 9:58:17 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.48660	12.096	.24010	1.0266	.98817	1.0387
Stddev	.00165	.067	.00107	.0025	.00088	.0068
%RSD	.33828	.55121	.44672	.24685	.08939	.65773
#1	.48837	12.043	.24026	1.0284	.98796	1.0309
#2	.48512	12.171	.23895	1.0237	.98914	1.0436
#3	.48631	12.073	.24107	1.0277	.98741	1.0415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.917	.25174	.99374	1.0052	.97149	12.332
Stddev	.043	.00011	.00023	.0009	.00102	.036
%RSD	.17157	.04510	.02355	.08535	.10470	.29437
#1	24.947	.25161	.99390	1.0061	.97233	12.320
#2	24.868	.25178	.99347	1.0045	.97036	12.302
#3	24.935	.25183	.99385	1.0049	.97179	12.372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 11/19/2023 9:58:17 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.112	.96647	24.513	1.0086	.97595	25.243
Stddev	.044	.00105	.121	.0030	.00272	1.089
%RSD	.18446	.10886	.49434	.29311	.27847	4.3126
#1	24.088	.96559	24.611	1.0113	.97466	24.051
#2	24.084	.96617	24.377	1.0054	.97412	25.494
#3	24.163	.96763	24.549	1.0090	.97907	26.184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.234	1.0032	.97766	.25958	.24977	.23978
Stddev	.036	.0009	.00353	.00191	.00137	.00087
%RSD	.15003	.08571	.36091	.73660	.55021	.36425
#1	24.196	1.0030	.97686	.25743	.24918	.23915
#2	24.268	1.0024	.97461	.26021	.24878	.23941
#3	24.239	1.0041	.98152	.26109	.25134	.24078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 11/19/2023 9:58:17 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24349	.90288	.99360	.98169	1.0010	.52203
Stddev	.00080	.04375	.00080	.00097	.0004	.00103
%RSD	.32910	4.8456	.08064	.09854	.03895	.19713
#1	.24384	.95233	.99351	.98059	1.0014	.52209
#2	.24405	.88710	.99444	.98238	1.0006	.52097
#3	.24257	.86921	.99284	.98211	1.0009	.52302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.99813	.97714
Stddev	.00225	.00066
%RSD	.22541	.06744
#1	.99857	.97789
#2	.99569	.97685
#3	1.0001	.97667
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: ICV Acquired: 11/19/2023 9:58:17 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5015.8	87101.	10235.
Stddev	8.9	262.	54.
%RSD	.17828	.30038	.52908
#1	5008.1	86817.	10175.
#2	5013.7	87332.	10281.
#3	5025.6	87154.	10249.

Sample Name: ICB Acquired: 11/19/2023 10:03:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00005	-.03649	.00052	-.00060	-.00019	.00003
Stddev	.00034	.09334	.00035	.00102	.00015	.00002
%RSD	699.99	255.77	67.535	169.46	79.892	62.604
#1	.00021	-.08601	.00012	-.00023	-.00005	.00001
#2	.00008	-.09463	.00076	.00018	-.00035	.00004
#3	-.00043	.07117	.00067	-.00176	-.00018	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.04675	-.00000	-.00015	-.00004	.00027	-.00333
Stddev	.01000	.00002	.00009	.00009	.00029	.00428
%RSD	21.397	699.91	60.574	234.25	109.44	128.66
#1	-.05126	.00001	-.00010	-.00014	.00025	-.00678
#2	-.05370	.00000	-.00010	.00004	.00056	-.00465
#3	-.03528	-.00002	-.00026	-.00001	-.00002	.00146
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: ICB Acquired: 11/19/2023 10:03:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02641	-.00161	-.00951	.00005	-.00007	-.06064
Stddev	.01310	.00044	.02876	.00002	.00009	.43853
%RSD	49.592	27.459	302.26	29.173	126.22	723.16
#1	-.04153	-.00190	-.02527	.00004	.00003	-.53666
#2	-.01887	-.00183	-.02695	.00005	-.00010	.02783
#3	-.01883	-.00110	.02368	.00007	-.00013	.32691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	-.00007	-.00086	.00045	.00070	-.00187
Stddev	.01866	.00006	.00058	.00041	.00091	.00102
%RSD	2635.2	76.397	68.217	91.379	129.91	54.766
#1	-.01010	-.00001	-.00029	.00020	.00153	-.00111
#2	-.01280	-.00011	-.00081	.00093	-.00028	-.00147
#3	.02078	-.00010	-.00146	.00023	.00086	-.00304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICB Acquired: 11/19/2023 10:03:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00089	F -.20225	-.00019	.00002	-.00183	.00072
Stddev	.00107	.06414	.00008	.00004	.00064	.00285
%RSD	120.63	31.713	44.554	227.34	35.033	394.99
#1	.00180	-.12831	-.00015	.00001	-.00174	-.00221
#2	-.00029	-.24288	-.00013	-.00002	-.00251	.00091
#3	.00116	-.23558	-.00029	.00007	-.00123	.00347
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00026	-.00010
Stddev	.00027	.00003
%RSD	102.74	33.960
#1	-.00056	-.00006
#2	-.00002	-.00013
#3	-.00021	-.00011
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICB Acquired: 11/19/2023 10:03:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5085.0	88535.	10289.
Stddev	25.5	269.	71.
%RSD	.50069	.30430	.68900
#1	5112.7	88315.	10226.
#2	5079.5	88455.	10366.
#3	5062.7	88836.	10277.

Sample Name: ICSA Acquired: 11/19/2023 10:08:06 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00154	498.48	.00368	-.02064	.00216	-.00041
Stddev	.00029	2.07	.00074	.00236	.00034	.00001
%RSD	18.609	.41474	20.082	11.455	15.576	2.9096
#1	-.00134	500.64	.00286	-.01801	.00190	-.00041
#2	-.00187	498.30	.00391	-.02133	.00205	-.00043
#3	-.00142	496.51	.00428	-.02258	.00254	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	474.56	.00053	-.00168	.00584	.00067	187.51
Stddev	4.99	.00017	.00028	.00007	.00029	.73
%RSD	1.0505	33.013	16.850	1.2463	43.060	.38692
#1	473.06	.00057	-.00195	.00589	.00094	188.13
#2	480.12	.00068	-.00138	.00575	.00070	186.71
#3	470.50	.00034	-.00172	.00587	.00037	187.70
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 11/19/2023 10:08:06 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03331	.01302	499.51	.00011	-.00028	-.89980
Stddev	.04709	.00118	2.65	.00004	.00032	.91187
%RSD	141.38	9.0504	.53068	35.706	115.16	101.34
#1	-.00843	.01299	502.57	.00007	-.00001	-.05128
#2	.02400	.01186	498.16	.00013	-.00019	-1.8640
#3	.08437	.01421	497.81	.00014	-.00063	-.78412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09951	-.01454	-.02206	.00983	.00569	.00568
Stddev	.10908	.00016	.00101	.00454	.00125	.00357
%RSD	109.62	1.1282	4.5865	46.243	22.047	62.829
#1	.04145	-.01451	-.02213	.00689	.00583	.00913
#2	.03174	-.01472	-.02102	.01506	.00437	.00201
#3	.22535	-.01439	-.02304	.00753	.00686	.00589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSA Acquired: 11/19/2023 10:08:06 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00233	873.77	.00283	.00433	.01416	.00162
Stddev	.00284	1.48	.00069	.00037	.00201	.00345
%RSD	121.75	.16941	24.391	8.5191	14.200	212.94
#1	-.00100	875.20	.00334	.00427	.01339	.00253
#2	-.00559	873.88	.00205	.00400	.01265	.00453
#3	-.00040	872.24	.00311	.00473	.01645	-.00219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00057	.00489
Stddev	.00023	.00014
%RSD	40.029	2.8342
#1	.00053	.00490
#2	.00082	.00502
#3	.00037	.00474
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSA Acquired: 11/19/2023 10:08:06 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4640.0	80617.	10040.
Stddev	1.2	227.	83.
%RSD	.02510	.28102	.82660
#1	4639.9	80645.	9954.8
#2	4641.3	80378.	10043.
#3	4639.0	80828.	10121.

Sample Name: ICSAB Acquired: 11/19/2023 10:13:11 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20007	245.83	.09700	.96078	.48725	.50115
Stddev	.00075	.69	.00075	.00349	.00127	.00180
%RSD	.37646	.28154	.77124	.36356	.26101	.35870
#1	.20088	245.25	.09640	.96436	.48790	.50264
#2	.19994	245.63	.09784	.96059	.48806	.50167
#3	.19939	246.60	.09677	.95739	.48578	.49916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	239.64	.93040	.46549	.48081	.50312	95.396
Stddev	5.65	.00118	.00054	.00108	.00138	.216
%RSD	2.3593	.12657	.11626	.22519	.27521	.22598
#1	240.68	.93061	.46596	.48187	.50261	95.162
#2	233.54	.93146	.46562	.48086	.50206	95.438
#3	244.71	.92913	.46490	.47971	.50469	95.587
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 11/19/2023 10:13:11 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.8363	.99415	244.77	.48287	.96610	8.8093
Stddev	.0405	.00077	.52	.00120	.00056	.4341
%RSD	.41141	.07733	.21382	.24905	.05792	4.9279
#1	9.8377	.99334	244.18	.48407	.96624	8.3647
#2	9.7952	.99422	245.01	.48288	.96657	8.8311
#3	9.8761	.99487	245.14	.48167	.96548	9.2321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.8872	.92564	.93815	.05084	.04913	.58549
Stddev	.0099	.00146	.00655	.00408	.00143	.00205
%RSD	.10048	.15753	.69798	8.0215	2.9046	.35097
#1	9.8805	.92522	.94532	.05435	.04820	.58780
#2	9.8986	.92726	.93665	.04637	.05077	.58386
#3	9.8825	.92443	.93248	.05179	.04842	.58481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: ICSAB Acquired: 11/19/2023 10:13:11 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04572	F 2.6420	.92977	.97074	.97867	.09407
Stddev	.00071	.4287	.00185	.00075	.00514	.00524
%RSD	1.5595	16.225	.19881	.07724	.52539	5.5684
#1	.04627	3.1036	.93108	.97074	.98150	.09091
#2	.04491	2.5660	.93057	.97149	.98177	.10012
#3	.04598	2.2564	.92765	.96999	.97273	.09118
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		1.2049				
Low Limit		.79510				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.47616	.96565
Stddev	.00013	.00061
%RSD	.02807	.06348
#1	.47629	.96628
#2	.47618	.96506
#3	.47602	.96562
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: ICSAB Acquired: 11/19/2023 10:13:11 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4737.4	82708.	10145.
Stddev	15.3	364.	15.
%RSD	.32244	.43978	.14478
#1	4735.5	82358.	10148.
#2	4753.6	82683.	10158.
#3	4723.2	83084.	10129.

Sample Name: CRI Acquired: 11/19/2023 10:17:59 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00983	F .09314	.00916	.19995	.00965	.00571
Stddev	.00041	.02143	.00024	.00132	.00009	.00068
%RSD	4.1649	23.003	2.6532	.66240	.92358	11.976
#1	.00946	.08335	.00925	.20093	.00970	.00650
#2	.01027	.11772	.00888	.20048	.00955	.00531
#3	.00976	.07837	.00934	.19844	.00971	.00532
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.20000				
Range		-50.000%				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1525	.00510	.05086	.01039	.02764	.09452
Stddev	.0338	.00003	.00028	.00084	.00103	.00273
%RSD	.65547	.51730	.55110	8.0826	3.7201	2.8893
#1	5.1915	.00511	.05118	.01136	.02882	.09734
#2	5.1317	.00512	.05074	.00989	.02691	.09434
#3	5.1344	.00507	.05067	.00993	.02719	.09189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 10:17:59 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0171	.04734	4.9352	.01532	.03993	5.3880
Stddev	.0457	.00116	.0345	.00036	.00032	.3749
%RSD	.91167	2.4434	.69950	2.3652	.79745	6.9574
#1	5.0696	.04679	4.9740	.01572	.04030	5.6301
#2	4.9855	.04867	4.9239	.01520	.03973	5.5777
#3	4.9963	.04656	4.9078	.01503	.03976	4.9562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0762	.04091	.29634	.00814	.01040	.06053
Stddev	.0291	.00018	.00151	.00196	.00039	.00095
%RSD	.57252	.44252	.51084	24.053	3.7594	1.5716
#1	5.1080	.04091	.29772	.00745	.00997	.05955
#2	5.0696	.04110	.29659	.00662	.01049	.06145
#3	5.0510	.04074	.29472	.01035	.01074	.06059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 10:17:59 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01127	F 1.0914	.09969	.04993	.04907	.01141
Stddev	.00099	.1586	.00081	.00035	.00041	.00067
%RSD	8.7736	14.527	.81066	.71093	.82879	5.8417
#1	.01198	1.2651	.10063	.05029	.04948	.01082
#2	.01014	1.0549	.09922	.04993	.04907	.01127
#3	.01168	.95434	.09923	.04958	.04866	.01213
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02491	.02045
Stddev	.00008	.00014
%RSD	.33707	.67437
#1	.02491	.02057
#2	.02482	.02047
#3	.02499	.02030
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 11/19/2023 10:17:59 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5046.9	87059.	10492.
Stddev	2.0	327.	60.
%RSD	.03872	.37526	.57177
#1	5044.7	86688.	10494.
#2	5047.4	87304.	10552.
#3	5048.5	87185.	10432.

Sample Name: CCV Acquired: 11/19/2023 10:22:49 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99207	24.663	.49271	2.0074	1.9856	2.0437
Stddev	.00244	.159	.00147	.0109	.0035	.0161
%RSD	.24569	.64604	.29907	.54305	.17843	.78828
#1	.98969	24.481	.49303	1.9948	1.9815	2.0418
#2	.99197	24.731	.49399	2.0133	1.9873	2.0286
#3	.99456	24.777	.49110	2.0141	1.9879	2.0607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.247	.50038	1.9932	2.0137	2.0006	24.882
Stddev	.096	.00062	.0013	.0066	.0065	.170
%RSD	.19089	.12340	.06715	.32953	.32654	.68381
#1	50.167	.50086	1.9943	2.0113	2.0082	24.687
#2	50.353	.50060	1.9935	2.0212	1.9973	24.960
#3	50.221	.49968	1.9917	2.0086	1.9964	25.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 10:22:49 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.656	1.9677	49.670	2.0168	2.0152	49.307
Stddev	.300	.0081	.252	.0067	.0025	.136
%RSD	.61729	.41269	.50702	.33090	.12296	.27637
#1	48.312	1.9586	49.403	2.0092	2.0180	49.163
#2	48.787	1.9703	49.903	2.0196	2.0142	49.434
#3	48.868	1.9743	49.705	2.0217	2.0133	49.324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.536	2.0011	1.9705	.51094	.50208	.49608
Stddev	.182	.0019	.0027	.00307	.00072	.00201
%RSD	.36723	.09225	.13547	.60167	.14323	.40566
#1	49.328	2.0024	1.9735	.50746	.50166	.49509
#2	49.614	2.0018	1.9696	.51330	.50291	.49476
#3	49.667	1.9989	1.9684	.51205	.50166	.49840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 10:22:49 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49689	F 2.2639	1.9872	1.9871	2.0018	1.0115
Stddev	.00204	.0602	.0052	.0069	.0003	.0038
%RSD	.41123	2.6588	.25936	.34940	.01667	.37664
#1	.49468	2.3187	1.9895	1.9791	2.0018	1.0158
#2	.49727	2.2737	1.9908	1.9914	2.0014	1.0101
#3	.49871	2.1995	1.9813	1.9909	2.0021	1.0085
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9925	1.9770
Stddev	.0058	.0005
%RSD	.29252	.02457
#1	1.9950	1.9768
#2	1.9966	1.9766
#3	1.9858	1.9775
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 10:22:49 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4840.6	84552.	10234.
Stddev	8.0	429.	45.
%RSD	.16547	.50711	.44402
#1	4832.5	84663.	10235.
#2	4848.5	84913.	10188.
#3	4840.9	84078.	10278.

Sample Name: CCB Acquired: 11/19/2023 10:27:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	F -.09955	.00015	-.00388	.00002	.00005
Stddev	.00054	.01251	.00073	.00028	.00020	.00007
%RSD	109.68	12.570	489.19	7.1594	878.30	137.07
#1	.00098	-.11397	-.00059	-.00356	-.00021	.00012
#2	.00058	-.09164	.00017	-.00403	.00014	.00001
#3	-.00009	-.09303	.00088	-.00404	.00013	.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000				
Low Limit		-.05000				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.05082	.00010	.00022	-.00030	.00124	-.00652
Stddev	.00153	.00013	.00034	.00040	.00037	.00197
%RSD	3.0153	132.51	152.81	134.77	29.996	30.253
#1	-.05145	-.00004	-.00013	-.00013	.00091	-.00877
#2	-.05193	.00022	.00055	-.00075	.00117	-.00508
#3	-.04907	.00012	.00026	-.00001	.00164	-.00571
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 10:27:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03159	-.00248	-.03481	.00006	.00040	F -.34747
Stddev	.04626	.00007	.00873	.00011	.00037	.15531
%RSD	146.44	2.6473	25.075	177.89	93.329	44.697
#1	.02785	-.00254	-.04239	.00017	-.00001	-.47956
#2	-.01269	-.00241	-.02527	-.00004	.00071	-.17638
#3	.07961	-.00250	-.03676	.00005	.00048	-.38646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00367	.00070	.00311	-.00059	-.00066	-.00037
Stddev	.01160	.00109	.00414	.00255	.00064	.00024
%RSD	315.63	156.60	133.00	430.24	97.092	66.427
#1	.00708	-.00006	.00139	-.00001	-.00140	-.00017
#2	-.00924	.00195	.00011	-.00338	-.00027	-.00029
#3	.01318	.00020	.00783	.00162	-.00031	-.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 11/19/2023 10:27:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00203	.06160	.00010	.00000	-.00122	.00123
Stddev	.00161	.05626	.00076	.00008	.00104	.00192
%RSD	79.696	91.328	765.90	35638.	85.269	156.41
#1	.00154	.12452	-.00020	.00001	-.00171	-.00098
#2	.00383	.04415	.00096	-.00009	-.00002	.00215
#3	.00071	.01614	-.00046	.00007	-.00192	.00252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00049	.00110
Stddev	.00017	.00130
%RSD	34.941	118.28
#1	-.00040	.00011
#2	-.00039	.00258
#3	-.00069	.00062
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 11/19/2023 10:27:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4995.1	85718.	10159.
Stddev	30.9	473.	58.
%RSD	.61868	.55135	.56813
#1	5020.2	86244.	10166.
#2	5004.6	85583.	10213.
#3	4960.6	85328.	10099.

Sample Name: mb 140-80161/6-a Acquired: 11/19/2023 10:32:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	-.11047	.00031	-.00042	.00277	-.00000
Stddev	.00020	.01549	.00172	.00037	.00016	.00000
%RSD	37.888	14.021	551.34	88.554	5.8037	148.30
#1	.00030	-.09264	.00202	-.00016	.00290	.00000
#2	.00059	-.12055	-.00142	-.00084	.00259	-.00001
#3	.00067	-.11823	.00034	-.00025	.00282	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01740	.00002	.00000	.00073	.00173	F .60708
Stddev	.00158	.00004	.00006	.00012	.00019	.00247
%RSD	9.0796	215.45	1372.2	16.968	10.880	.40662
#1	-.01883	.00002	.00003	.00071	.00163	.60737
#2	-.01571	-.00002	.00005	.00063	.00195	.60448
#3	-.01768	.00006	-.00007	.00087	.00162	.60939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.10000
Low Limit						-.10000

Sample Name: mb 140-80161/6-a Acquired: 11/19/2023 10:32:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10243	-.00064	-.01319	.00417	.00009	.58502
Stddev	.02419	.00014	.01160	.00001	.00012	.43969
%RSD	23.613	21.946	87.986	.24954	144.37	75.158
#1	.08868	-.00056	-.02657	.00417	.00023	1.0887
#2	.13036	-.00056	-.00717	.00419	-.00001	.27764
#3	.08826	-.00080	-.00583	.00417	.00004	.38875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01019	.00058	.00160	-.00070	.00015	.00070
Stddev	.00684	.00010	.00149	.00259	.00038	.00154
%RSD	67.157	16.607	93.198	371.72	260.65	220.81
#1	.00920	.00047	.00279	-.00154	-.00010	.00132
#2	.00389	.00062	-.00007	-.00275	-.00005	.00184
#3	.01747	.00065	.00209	.00221	.00059	-.00106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-80161/6-a Acquired: 11/19/2023 10:32:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	.36008	.00374	-.00015	-.00094	.00109
Stddev	.00260	.07369	.00024	.00005	.00068	.00112
%RSD	148.45	20.465	6.3216	31.331	71.828	103.56
#1	-.00109	.43721	.00400	-.00010	-.00065	.00034
#2	.00233	.35266	.00369	-.00020	-.00046	.00238
#3	.00400	.29039	.00353	-.00016	-.00171	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00051	.00431
Stddev	.00009	.00002
%RSD	17.836	.35982
#1	-.00056	.00429
#2	-.00040	.00432
#3	-.00055	.00431
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-80161/6-a Acquired: 11/19/2023 10:32:35 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4905.0	84883.	10065.
Stddev	14.6	164.	43.
%RSD	.29749	.19287	.42847
#1	4889.6	84697.	10016.
#2	4906.8	85004.	10096.
#3	4918.6	84948.	10083.

Sample Name: lcs 140-80161/7-a Acquired: 11/19/2023 10:37:34 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04824	1.8187	.09276	1.0012	.09715	.05144
Stddev	.00108	.0265	.00123	.0031	.00038	.00020
%RSD	2.2464	1.4553	1.3234	.30563	.39057	.38365
#1	.04829	1.7899	.09345	.99999	.09757	.05156
#2	.04931	1.8242	.09348	1.0047	.09705	.05153
#3	.04714	1.8419	.09134	.99898	.09684	.05121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.407	.04922	.09934	.20042	.24670	.99520
Stddev	.128	.00025	.00054	.00039	.00066	.00854
%RSD	.25938	.51347	.54465	.19498	.26780	.85797
#1	49.531	.04944	.09984	.19998	.24701	.98672
#2	49.417	.04927	.09942	.20069	.24715	.99511
#3	49.275	.04895	.09877	.20061	.24594	1.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-80161/7-a Acquired: 11/19/2023 10:37:34 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.042	.09553	9.6562	.09998	.49574	49.713
Stddev	.082	.00081	.0380	.00033	.00184	1.002
%RSD	.17345	.84275	.39379	.32853	.37047	2.0150
#1	47.127	.09645	9.6190	.09994	.49706	50.016
#2	46.964	.09520	9.6547	.10032	.49652	48.595
#3	47.034	.09495	9.6950	.09967	.49364	50.528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.017	.49742	4.7602	.09769	.09586	.48325
Stddev	.199	.00241	.0282	.00015	.00099	.00236
%RSD	.41371	.48435	.59258	.15098	1.0324	.48890
#1	48.246	.49936	4.7849	.09752	.09606	.48505
#2	47.905	.49819	4.7662	.09774	.09674	.48412
#3	47.900	.49473	4.7295	.09781	.09479	.48057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-80161/7-a Acquired: 11/19/2023 10:37:34 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14216	5.5790	.48724	.48200	.10364	.39382
Stddev	.00090	.0376	.00308	.00159	.00137	.00123
%RSD	.63273	.67474	.63270	.33033	1.3222	.31236
#1	.14204	5.6054	.48969	.48372	.10340	.39512
#2	.14133	5.5956	.48824	.48170	.10241	.39267
#3	.14312	5.5359	.48378	.48058	.10511	.39367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19727	.48213
Stddev	.00118	.00261
%RSD	.60031	.54120
#1	.19690	.48462
#2	.19860	.48236
#3	.19631	.47941
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-80161/7-a Acquired: 11/19/2023 10:37:34 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4878.8	84109.	10065.
Stddev	36.8	635.	96.
%RSD	.75358	.75506	.94896
#1	4843.3	83721.	9955.7
#2	4876.4	83764.	10110.
#3	4916.7	84842.	10130.

Sample Name: lcsd 140-80161/8-a Acquired: 11/19/2023 10:42:18 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04815	F 2.4676	.09184	1.0030	.09653	.05128
Stddev	.00044	1.0049	.00102	.0065	.00040	.00026
%RSD	.90516	40.725	1.1080	.64266	.41886	.50436
#1	.04808	1.9929	.09227	1.0069	.09699	.05143
#2	.04862	1.7880	.09067	1.0066	.09626	.05143
#3	.04775	3.6220	.09257	.99557	.09633	.05098
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		20.000%				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.214	.04888	.09862	.19978	.24457	.99862
Stddev	.076	.00017	.00027	.00028	.00035	.02275
%RSD	.15423	.35350	.27584	.13805	.14385	2.2785
#1	49.219	.04907	.09891	.19976	.24463	.99009
#2	49.136	.04883	.09837	.20007	.24488	.98136
#3	49.288	.04873	.09859	.19952	.24419	1.0244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-80161/8-a Acquired: 11/19/2023 10:42:18 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.884	.09925	9.7678	.09948	.49265	49.221
Stddev	.346	.00699	.1362	.00034	.00071	.665
%RSD	.73858	7.0401	1.3946	.34368	.14389	1.3503
#1	47.261	.09696	9.7773	.09984	.49289	48.566
#2	46.581	.09370	9.6271	.09943	.49185	49.203
#3	46.809	.10710	9.8990	.09916	.49320	49.895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.035	.49421	4.7253	.09819	.09535	.48090
Stddev	.347	.00095	.0073	.00129	.00016	.00178
%RSD	.72170	.19285	.15525	1.3106	.17175	.37034
#1	48.228	.49530	4.7295	.09815	.09554	.48065
#2	47.635	.49358	4.7295	.09949	.09527	.47925
#3	48.242	.49374	4.7168	.09692	.09524	.48279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-80161/8-a Acquired: 11/19/2023 10:42:18 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14283	5.6470	.48472	.47744	.10319	.39129
Stddev	.00076	.0728	.00106	.00335	.00237	.00190
%RSD	.53094	1.2890	.21797	.70106	2.2983	.48517
#1	.14210	5.7252	.48438	.48104	.10289	.39338
#2	.14361	5.5813	.48590	.47687	.10098	.38967
#3	.14276	5.6344	.48387	.47442	.10570	.39082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19502	.47786
Stddev	.00044	.00080
%RSD	.22411	.16836
#1	.19551	.47857
#2	.19467	.47803
#3	.19487	.47698
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-80161/8-a Acquired: 11/19/2023 10:42:18 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4878.6	83919.	9874.1
Stddev	24.1	849.	109.6
%RSD	.49327	1.0117	1.1096
#1	4851.5	83124.	9856.8
#2	4886.9	83819.	9991.3
#3	4897.4	84813.	9774.2

Sample Name: mb 140-80160/7-a Acquired: 11/19/2023 10:47:00 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	F 2.2269	.00342	F 141.12	.00419	.00051
Stddev	.00022	2.7845	.00081	.94	.00151	.00081
%RSD	46.499	125.04	23.757	.66511	36.023	159.74
#1	-.00071	1.4961	.00300	140.04	.00465	.00009
#2	-.00029	-.11938	.00435	141.57	.00251	-.00001
#3	-.00041	5.3040	.00290	141.74	.00543	.00144
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.20000		.20000		
Low Limit		-.20000		-.20000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19050	-.00012	.00014	.00116	.00189	F .10801
Stddev	.18319	.00010	.00005	.00138	.00216	.09532
%RSD	96.163	87.558	35.732	119.19	114.40	88.248
#1	.38096	-.00004	.00017	.00043	.00074	.12810
#2	.01557	-.00008	.00016	.00029	.00054	.00425
#3	.17497	-.00023	.00008	.00274	.00438	.19167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.10000
Low Limit						-.10000

Sample Name: mb 140-80160/7-a Acquired: 11/19/2023 10:47:00 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20859	.01195	.70253	.00067	.00058	.65135
Stddev	.20615	.01758	.82670	.00065	.00025	2.3331
%RSD	98.830	147.10	117.67	96.999	43.537	358.19
#1	.14717	.00663	.54390	.00035	.00071	-.19344
#2	.04013	-.00235	-.03335	.00024	.00074	-1.1417
#3	.43846	.03158	1.5971	.00142	.00029	3.2892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1050	.00054	.00201	.00006	-.00078	.00151
Stddev	1.3579	.00022	.00261	.00071	.00072	.00081
%RSD	122.89	40.722	130.14	1138.5	92.145	53.549
#1	.68501	.00074	.00429	.00075	-.00007	.00181
#2	.00665	.00058	.00257	-.00068	-.00076	.00060
#3	2.6233	.00030	-.00084	.00012	-.00150	.00213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: mb 140-80160/7-a Acquired: 11/19/2023 10:47:00 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00269	F 9.4542	.00123	.00207	.01797	-.00094
Stddev	.00113	.9708	.00059	.00189	.02284	.00158
%RSD	42.094	10.268	47.432	91.169	127.07	167.62
#1	-.00160	8.4676	.00137	.00221	.01307	-.00276
#2	-.00386	10.408	.00174	.00012	-.00202	.00012
#3	-.00261	9.4866	.00059	.00389	.04286	-.00019
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.50000				
Low Limit		-.50000				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00034	.00259
Stddev	.00052	.00046
%RSD	150.70	17.578
#1	-.00091	.00296
#2	-.00024	.00273
#3	.00011	.00208
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: mb 140-80160/7-a Acquired: 11/19/2023 10:47:00 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	5015.4	86159.	10249.
Stddev	.8	335.	81.
%RSD	.01498	.38932	.79045
#1	5015.6	86060.	10326.
#2	5014.6	85884.	10164.
#3	5016.0	86532.	10256.

Sample Name: lcs 140-80160/8-a Acquired: 11/19/2023 10:52:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05052	1.8406	.10292	F 145.31	.10140	.05236
Stddev	.00033	.0411	.00038	1.36	.00048	.00038
%RSD	.65462	2.2322	.37011	.93405	.46918	.72542
#1	.05084	1.8800	.10261	146.78	.10195	.05279
#2	.05018	1.7980	.10335	145.07	.10112	.05205
#3	.05054	1.8438	.10281	144.10	.10113	.05226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.163	.05159	.10413	.20925	.25679	1.0180
Stddev	.408	.00018	.00027	.00132	.00059	.0020
%RSD	.79660	.34572	.26053	.62911	.22893	.19299
#1	51.525	.05176	.10431	.20773	.25627	1.0201
#2	50.721	.05160	.10427	.20995	.25668	1.0162
#3	51.241	.05141	.10382	.21007	.25743	1.0178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-80160/8-a Acquired: 11/19/2023 10:52:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.340	.09969	10.090	.10506	.51291	51.823
Stddev	.322	.00083	.090	.00040	.00097	.167
%RSD	.65242	.83620	.88832	.37945	.19002	.32175
#1	49.712	.10031	10.153	.10533	.51399	51.998
#2	49.162	.09874	9.9874	.10460	.51263	51.803
#3	49.147	.10001	10.129	.10525	.51210	51.666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.842	.52288	5.0923	.10419	.10110	.51597
Stddev	1.159	.00081	.0108	.00244	.00064	.00173
%RSD	2.3247	.15450	.21191	2.3409	.63755	.33605
#1	50.777	.52363	5.1045	.10224	.10048	.51650
#2	48.546	.52299	5.0887	.10693	.10106	.51739
#3	50.203	.52202	5.0838	.10341	.10177	.51404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcs 140-80160/8-a Acquired: 11/19/2023 10:52:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15223	F 6.0237	.50507	.50029	.10652	.41573
Stddev	.00209	.1900	.00132	.00285	.00109	.00332
%RSD	1.3735	3.1543	.26045	.57067	1.0245	.79817
#1	.14993	6.1486	.50644	.50350	.10668	.41913
#2	.15402	6.1174	.50495	.49804	.10753	.41250
#3	.15274	5.8050	.50382	.49933	.10536	.41557
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		5.0000				
Range		20.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20239	.51040
Stddev	.00110	.00128
%RSD	.54519	.25094
#1	.20131	.51187
#2	.20352	.50961
#3	.20234	.50971
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcs 140-80160/8-a Acquired: 11/19/2023 10:52:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4825.5	83276.	10096.
Stddev	20.7	485.	105.
%RSD	.42949	.58264	1.0353
#1	4801.8	83804.	10012.
#2	4840.1	83175.	10213.
#3	4834.6	82849.	10062.

Sample Name: lcsd 140-80160/9-a Acquired: 11/19/2023 10:56:57 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04990	1.8503	.10142	F 142.87	.10051	.05146
Stddev	.00013	.0041	.00097	.95	.00036	.00021
%RSD	.25323	.22389	.96042	.66780	.36214	.40571
#1	.05002	1.8547	.10043	141.84	.10010	.05122
#2	.04992	1.8496	.10144	143.04	.10065	.05163
#3	.04977	1.8465	.10237	143.72	.10079	.05152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				1.0000		
Range				20.000%		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.745	.05103	.10338	.20700	.25518	1.0051
Stddev	.159	.00015	.00020	.00069	.00059	.0020
%RSD	.31298	.28804	.19667	.33468	.23128	.19974
#1	50.563	.05086	.10354	.20702	.25458	1.0067
#2	50.857	.05111	.10315	.20629	.25522	1.0058
#3	50.814	.05111	.10346	.20768	.25575	1.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-80160/9-a Acquired: 11/19/2023 10:56:57 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.716	.09911	10.006	.10340	.50841	50.526
Stddev	.205	.00049	.076	.00019	.00063	.537
%RSD	.42064	.48951	.76345	.18178	.12488	1.0630
#1	48.693	.09866	9.9244	.10325	.50809	50.371
#2	48.931	.09962	10.076	.10335	.50800	51.124
#3	48.523	.09904	10.019	.10361	.50914	50.084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.908	.51622	5.0277	.10458	.10015	.50962
Stddev	.157	.00044	.0156	.00102	.00066	.00132
%RSD	.31555	.08517	.30982	.97353	.65655	.25887
#1	49.898	.51573	5.0443	.10535	.09941	.50925
#2	50.071	.51657	5.0253	.10342	.10068	.50853
#3	49.756	.51637	5.0134	.10496	.10035	.51109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: lcsd 140-80160/9-a Acquired: 11/19/2023 10:56:57 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14855	4.6316	.49825	.49484	.10466	.40967
Stddev	.00156	.0469	.00052	.00100	.00022	.00262
%RSD	1.0514	1.0117	.10528	.20130	.21425	.63949
#1	.14920	4.6408	.49766	.49448	.10492	.40712
#2	.14677	4.6731	.49866	.49597	.10459	.41236
#3	.14968	4.5808	.49842	.49408	.10449	.40954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20100	.50466
Stddev	.00024	.00090
%RSD	.12063	.17747
#1	.20077	.50561
#2	.20097	.50383
#3	.20125	.50454
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: lcsd 140-80160/9-a Acquired: 11/19/2023 10:56:57 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4874.7	84164.	10133.
Stddev	7.7	635.	108.
%RSD	.15732	.75462	1.0651
#1	4870.2	84764.	10255.
#2	4870.3	84228.	10093.
#3	4883.5	83499.	10050.

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00045	.00468	.00285	1.3518	.00633	.00090
Stddev	.00076	.02424	.00273	.0274	.00015	.00156
%RSD	169.34	517.66	95.797	2.0264	2.3381	173.91
#1	.00121	.01426	.00416	1.3834	.00647	.00271
#2	-.00032	.02267	-.00029	1.3358	.00618	-.00000
#3	.00047	-.02288	.00467	1.3361	.00634	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.80294	.00014	.00046	.00596	.00967	.25724
Stddev	.00500	.00016	.00056	.00060	.00128	.00212
%RSD	.62249	114.19	122.83	10.106	13.278	.82577
#1	.80640	.00008	.00012	.00663	.01115	.25540
#2	.80520	.00002	.00015	.00578	.00889	.25675
#3	.79721	.00032	.00111	.00546	.00897	.25957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40157	-.00052	.07521	.01670	.00105	1.7698
Stddev	.03050	.00097	.00735	.00060	.00043	.5624
%RSD	7.5940	184.82	9.7684	3.6049	40.751	31.778
#1	.36983	-.00010	.08315	.01739	.00105	1.4314
#2	.43064	.00016	.06865	.01639	.00062	1.4590
#3	.40424	-.00163	.07383	.01631	.00147	2.4190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3803	.00466	.15745	.01120	.00507	.00314
Stddev	.0080	.00098	.00907	.01817	.00037	.00077
%RSD	.57970	21.072	5.7609	162.24	7.3653	24.655
#1	1.3894	.00409	.16027	.03214	.00525	.00231
#2	1.3743	.00409	.14731	.00176	.00532	.00327
#3	1.3773	.00579	.16478	-.00031	.00464	.00385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00175	5.1798	.11335	.00110	.00457	-.00074
Stddev	.00145	.6153	.00020	.00003	.00171	.00160
%RSD	83.090	11.879	.18009	2.6111	37.355	217.22
#1	.00278	4.6070	.11323	.00109	.00513	-.00220
#2	.00009	5.1022	.11324	.00108	.00265	-.00099
#3	.00237	5.8302	.11359	.00113	.00593	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00007	.03735
Stddev	.00049	.00093
%RSD	709.99	2.4916
#1	.00030	.03713
#2	.00012	.03655
#3	-.00063	.03837
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 11:01:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4855.6	82877.	9694.4
Stddev	39.2	1165.	103.5
%RSD	.80736	1.4057	1.0677
#1	4814.5	81737.	9585.9
#2	4859.6	82828.	9792.1
#3	4892.6	84066.	9705.2

Sample Name: 140-34237-a-2-a PDS Acquired: 11/19/2023 11:06:39 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04813	1.9719	.09629	2.2917	.10369	.05164
Stddev	.00185	.0888	.00278	.0433	.00264	.00088
%RSD	3.8395	4.5012	2.8858	1.8894	2.5509	1.7073
#1	.04600	1.8835	.09576	2.3069	.10087	.05067
#2	.04932	1.9712	.09382	2.3255	.10406	.05239
#3	.04906	2.0610	.09930	2.2429	.10612	.05188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.779	.05038	.10168	.20664	.25389	1.2536
Stddev	1.051	.00167	.00392	.00289	.00395	.0262
%RSD	2.0697	3.3222	3.8573	1.3984	1.5561	2.0910
#1	49.672	.04941	.09916	.20352	.24948	1.2242
#2	50.903	.04941	.09968	.20922	.25710	1.2621
#3	51.762	.05231	.10620	.20717	.25510	1.2746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a PDS Acquired: 11/19/2023 11:06:39 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.891	.09594	9.9902	.11659	.50924	50.871
Stddev	.928	.00276	.2051	.00147	.01779	1.990
%RSD	1.9387	2.8748	2.0532	1.2596	3.4941	3.9122
#1	46.835	.09293	9.7617	.11544	.49930	48.929
#2	48.259	.09655	10.051	.11824	.49863	50.778
#3	48.579	.09835	10.158	.11608	.52978	52.906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.918	.51130	4.9325	.10118	.10065	.48952
Stddev	.855	.01842	.1684	.00437	.00285	.01856
%RSD	1.7129	3.6021	3.4152	4.3200	2.8333	3.7910
#1	48.941	.50052	4.8370	.09713	.09998	.48008
#2	50.282	.50082	4.8334	.10061	.09819	.47757
#3	50.531	.53257	5.1270	.10581	.10377	.51090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a PDS Acquired: 11/19/2023 11:06:39 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14400	12.017	.60245	.48564	.10754	.40026
Stddev	.00707	.359	.01827	.01298	.00160	.01629
%RSD	4.9084	2.9850	3.0326	2.6731	1.4906	4.0690
#1	.14064	11.622	.59350	.47169	.10593	.38998
#2	.13925	12.106	.59039	.48787	.10756	.39176
#3	.15213	12.322	.62347	.49737	.10913	.41903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19696	.52196
Stddev	.00249	.01762
%RSD	1.2667	3.3758
#1	.19413	.51173
#2	.19884	.51185
#3	.19791	.54231
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-2-a PDS Acquired: 11/19/2023 11:06:39 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4748.8	82174.	9569.7
Stddev	74.0	2762.	48.9
%RSD	1.5578	3.3614	.51092
#1	4669.7	80160.	9521.5
#2	4816.3	81040.	9619.2
#3	4760.4	85323.	9568.3

Sample Name: 140-34237-a-2-a PDSD Acquired: 11/19/2023 11:11:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04752	1.9462	.09720	2.3378	.10412	.05186
Stddev	.00266	.0637	.00438	.0489	.00323	.00222
%RSD	5.5949	3.2731	4.5093	2.0917	3.1011	4.2905
#1	.04543	1.8851	.09404	2.3157	.10094	.05012
#2	.04662	1.9415	.09534	2.3038	.10404	.05109
#3	.05052	2.0122	.10220	2.3938	.10739	.05436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.192	.05040	.10190	.20873	.25597	1.2356
Stddev	1.400	.00199	.00397	.00797	.00970	.0286
%RSD	2.7346	3.9540	3.8971	3.8170	3.7890	2.3180
#1	49.829	.04892	.09902	.20308	.24919	1.2073
#2	51.122	.04961	.10024	.20526	.25163	1.2348
#3	52.626	.05266	.10643	.21784	.26708	1.2646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a PDSD Acquired: 11/19/2023 11:11:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.127	.09632	10.024	.11752	.51098	51.510
Stddev	1.336	.00466	.258	.00435	.01936	2.390
%RSD	2.7768	4.8375	2.5713	3.7027	3.7897	4.6392
#1	46.761	.09131	9.7690	.11421	.49687	49.780
#2	48.187	.09712	10.019	.11591	.50301	50.513
#3	49.432	.10052	10.284	.12245	.53305	54.236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.116	.51298	4.9409	.10230	.10250	.49025
Stddev	1.324	.02023	.1981	.00373	.00389	.02226
%RSD	2.6426	3.9437	4.0092	3.6449	3.7917	4.5409
#1	48.781	.49838	4.7922	.09983	.09941	.47356
#2	50.138	.50449	4.8646	.10048	.10124	.48166
#3	51.429	.53607	5.1658	.10659	.10687	.51552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a PDSD Acquired: 11/19/2023 11:11:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14598	12.221	.60917	.48570	.10977	.40024
Stddev	.00597	.504	.02181	.01664	.00311	.01640
%RSD	4.0908	4.1231	3.5808	3.4260	2.8360	4.0967
#1	.13955	11.677	.59416	.46898	.10656	.38753
#2	.14705	12.313	.59917	.48586	.10998	.39444
#3	.15134	12.672	.63420	.50226	.11278	.41875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19923	.52314
Stddev	.00846	.01992
%RSD	4.2452	3.8076
#1	.19312	.50896
#2	.19570	.51455
#3	.20888	.54592
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-2-a PDSD Acquired: 11/19/2023 11:11:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4694.5	80665.	9446.1
Stddev	59.8	1185.	95.7
%RSD	1.2738	1.4684	1.0133
#1	4649.2	79741.	9353.9
#2	4762.3	82001.	9439.4
#3	4672.0	80255.	9545.0

Sample Name: 140-34307-a-2-a Acquired: 11/19/2023 11:16:01 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.05668	.00287	.06968	.00687	-.00001
Stddev	.00070	.02273	.00103	.00094	.00006	.00002
%RSD	189.18	40.111	35.789	1.3475	.90319	313.65
#1	-.00041	.05398	.00335	.06940	.00683	.00001
#2	.00058	.03541	.00169	.06891	.00694	-.00003
#3	.00094	.08064	.00358	.07072	.00683	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4560	.00007	.00010	.00652	.03620	.12482
Stddev	.0073	.00001	.00011	.00012	.00034	.00055
%RSD	.50416	22.431	111.18	1.8750	.93863	.43975
#1	1.4534	.00007	.00020	.00638	.03656	.12512
#2	1.4643	.00005	-.00002	.00656	.03616	.12516
#3	1.4504	.00008	.00012	.00662	.03589	.12419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-2-a Acquired: 11/19/2023 11:16:01 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.43912	-.00001	.26976	.16076	.00105	1.6500
Stddev	.02470	.00043	.00330	.00161	.00020	.1609
%RSD	5.6252	5420.8	1.2227	1.0023	19.274	9.7514
#1	.44590	.00045	.27106	.16227	.00127	1.5585
#2	.45973	-.00041	.26600	.16095	.00098	1.8358
#3	.41174	-.00007	.27220	.15906	.00088	1.5557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0240	.00431	.50994	.00269	.00615	.00323
Stddev	.0045	.00020	.00498	.00143	.00027	.00156
%RSD	.43954	4.6080	.97707	53.313	4.4600	48.253
#1	1.0266	.00408	.51382	.00274	.00646	.00496
#2	1.0266	.00443	.51168	.00409	.00597	.00278
#3	1.0188	.00441	.50432	.00123	.00601	.00194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-2-a Acquired: 11/19/2023 11:16:01 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00389	6.8950	.19178	.00175	.00402	-.00140
Stddev	.00054	.3878	.00162	.00007	.00052	.00117
%RSD	13.881	5.6241	.84465	4.2513	13.026	83.604
#1	.00412	6.4567	.19319	.00167	.00453	-.00028
#2	.00428	7.0350	.19215	.00180	.00405	-.00129
#3	.00327	7.1934	.19001	.00179	.00348	-.00261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00021	.02783
Stddev	.00023	.00029
%RSD	109.56	1.0583
#1	-.00013	.02811
#2	-.00003	.02784
#3	-.00048	.02753
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-2-a Acquired: 11/19/2023 11:16:01 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4817.5	82758.	9541.4
Stddev	51.5	1031.	135.0
%RSD	1.0691	1.2463	1.4153
#1	4759.5	81756.	9484.5
#2	4835.2	82702.	9444.2
#3	4857.9	83817.	9695.6

Sample Name: CCV Acquired: 11/19/2023 11:20:53 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0067	25.274	.49519	2.0766	2.0169	2.0955
Stddev	.0052	.117	.00369	.0073	.0060	.0044
%RSD	.51517	.46167	.74469	.35061	.29594	.21106
#1	1.0043	25.168	.49777	2.0687	2.0205	2.0972
#2	1.0126	25.257	.49683	2.0831	2.0202	2.0905
#3	1.0031	25.399	.49097	2.0780	2.0100	2.0989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.752	.51244	2.0278	2.0669	2.0068	25.448
Stddev	.240	.00264	.0127	.0086	.0067	.050
%RSD	.46465	.51507	.62879	.41834	.33489	.19614
#1	52.008	.51539	2.0411	2.0745	2.0047	25.409
#2	51.718	.51160	2.0264	2.0687	2.0143	25.431
#3	51.530	.51032	2.0157	2.0575	2.0014	25.504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 11:20:53 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.751	1.9965	51.722	2.0696	2.0583	50.877
Stddev	.176	.0021	.089	.0063	.0114	.530
%RSD	.35323	.10413	.17113	.30264	.55469	1.0418
#1	49.587	1.9941	51.771	2.0721	2.0702	51.217
#2	49.729	1.9977	51.620	2.0743	2.0573	50.266
#3	49.936	1.9976	51.775	2.0625	2.0474	51.148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.753	2.0398	1.9945	.52979	.51273	.49466
Stddev	.071	.0132	.0115	.00640	.00230	.00535
%RSD	.14088	.64666	.57841	1.2073	.44875	1.0824
#1	50.689	2.0542	2.0044	.53011	.51461	.49982
#2	50.741	2.0369	1.9972	.53602	.51343	.49503
#3	50.830	2.0283	1.9818	.52324	.51016	.48913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 11:20:53 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50175	F 5.9179	2.0164	2.0162	2.0397	1.0304
Stddev	.00380	.2254	.0125	.0021	.0059	.0119
%RSD	.75694	3.8089	.62151	.10205	.28807	1.1509
#1	.50484	6.1679	2.0303	2.0144	2.0416	1.0413
#2	.50291	5.8556	2.0129	2.0185	2.0444	1.0322
#3	.49751	5.7302	2.0059	2.0158	2.0331	1.0178
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0244	2.0039
Stddev	.0090	.0127
%RSD	.44406	.63149
#1	2.0307	2.0163
#2	2.0284	2.0044
#3	2.0141	1.9910
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 11:20:53 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4748.9	81792.	9686.5
Stddev	22.9	385.	63.5
%RSD	.48269	.47055	.65533
#1	4722.6	82157.	9618.2
#2	4759.4	81390.	9697.6
#3	4764.8	81830.	9743.7

Sample Name: CCB Acquired: 11/19/2023 11:25:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	F -.11306	.00023	.03370	.00011	.00001
Stddev	.00042	.02344	.00121	.00277	.00014	.00002
%RSD	270.27	20.733	522.30	8.2222	122.44	213.02
#1	.00015	-.09135	.00141	.03620	.00000	.00002
#2	-.00026	-.13791	.00029	.03417	.00007	.00000
#3	.00057	-.10991	-.00100	.03072	.00027	-.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000				
Low Limit		-.05000				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.05154	.00002	.00003	-.00000	.00127	-.00499
Stddev	.00064	.00002	.00005	.00039	.00039	.00097
%RSD	1.2385	110.94	145.34	9994.9	30.395	19.368
#1	-.05202	-.00000	.00004	-.00044	.00121	-.00387
#2	-.05179	.00001	-.00002	.00033	.00169	-.00561
#3	-.05082	.00003	.00008	.00010	.00092	-.00548
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 11:25:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04284	-.00103	-.02931	.00005	-.00005	F .34854
Stddev	.00708	.00124	.00921	.00003	.00017	1.0144
%RSD	16.518	120.39	31.435	57.769	350.12	291.04
#1	.03480	-.00220	-.03761	.00008	.00014	1.3936
#2	.04812	-.00116	-.01939	.00004	-.00019	.28419
#3	.04560	.00027	-.03094	.00002	-.00009	-.63215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00432	.00005	-.00023	F -.00246	-.00010	.00063
Stddev	.00649	.00013	.00087	.00118	.00044	.00010
%RSD	150.09	265.97	387.60	48.042	438.59	15.585
#1	-.01034	.00006	.00078	-.00128	.00033	.00064
#2	-.00516	.00017	-.00064	-.00246	-.00055	.00053
#3	.00254	-.00009	-.00082	-.00365	-.00008	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.00200		
Low Limit				-.00200		

Sample Name: CCB Acquired: 11/19/2023 11:25:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00132	F 3.2891	.00009	-.00007	-.00089	-.00068
Stddev	.00065	.0651	.00019	.00013	.00040	.00081
%RSD	49.345	1.9802	215.90	177.22	45.193	118.43
#1	.00156	3.3594	.00009	-.00020	-.00053	-.00139
#2	.00182	3.2772	.00028	.00006	-.00081	-.00086
#3	.00058	3.2308	-.00010	-.00009	-.00132	.00020
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00019	.00000
Stddev	.00021	.00011
%RSD	112.55	90232.
#1	.00005	.00012
#2	-.00027	-.00007
#3	-.00036	-.00006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 11/19/2023 11:25:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4908.2	83045.	9819.5
Stddev	12.7	658.	41.4
%RSD	.25957	.79203	.42200
#1	4922.9	82787.	9864.9
#2	4901.4	82554.	9809.8
#3	4900.3	83792.	9783.7

Sample Name: 140-34307-a-7-a Acquired: 11/19/2023 11:30:37 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	-.01038	.00124	.14114	.01152	-.00001
Stddev	.00030	.01200	.00062	.00077	.00007	.00001
%RSD	59.801	115.58	49.969	.54840	.60735	72.166
#1	.00044	-.02086	.00191	.14201	.01145	-.00001
#2	.00023	-.01298	.00112	.14053	.01151	-.00002
#3	.00081	.00270	.00068	.14088	.01159	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5285	.00033	.00021	.00810	.10065	.15982
Stddev	.0025	.00003	.00007	.00031	.00080	.00154
%RSD	.16164	9.6812	33.975	3.8658	.79510	.96361
#1	1.5306	.00035	.00015	.00823	.10147	.15824
#2	1.5290	.00033	.00020	.00833	.10061	.15990
#3	1.5257	.00029	.00029	.00774	.09987	.16132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a Acquired: 11/19/2023 11:30:37 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1722	-.00085	.24239	.32484	.00198	2.6488
Stddev	.0069	.00110	.01281	.00014	.00004	.7531
%RSD	.58919	129.96	5.2870	.04226	1.9568	28.434
#1	1.1682	-.00050	.22847	.32500	.00198	1.9933
#2	1.1801	.00004	.25370	.32477	.00194	2.4817
#3	1.1682	-.00208	.24499	.32475	.00201	3.4715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.4002	.01401	.60540	.00594	.00957	.00385
Stddev	.0091	.00013	.00426	.00129	.00080	.00149
%RSD	.37947	.95856	.70433	21.638	8.3453	38.817
#1	2.3955	.01416	.61001	.00648	.01027	.00313
#2	2.3944	.01390	.60160	.00447	.00974	.00284
#3	2.4107	.01397	.60460	.00687	.00870	.00556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a Acquired: 11/19/2023 11:30:37 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00420	7.0550	.19832	.00587	.00250	-.00003
Stddev	.00113	.5029	.00017	.00006	.00037	.00141
%RSD	26.927	7.1282	.08769	1.0972	14.842	4031.2
#1	.00385	6.5113	.19812	.00584	.00289	.00131
#2	.00547	7.1503	.19841	.00583	.00215	-.00149
#3	.00329	7.5034	.19843	.00595	.00247	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00020	.05620
Stddev	.00039	.00056
%RSD	190.48	1.0020
#1	-.00042	.05683
#2	.00025	.05576
#3	-.00044	.05600
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-7-a Acquired: 11/19/2023 11:30:37 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4789.7	82829.	9655.2
Stddev	30.5	650.	126.8
%RSD	.63613	.78467	1.3128
#1	4761.6	82164.	9508.8
#2	4785.3	82859.	9728.8
#3	4822.1	83463.	9727.9

Sample Name: 140-34307-a-7-a PDS Acquired: 11/19/2023 11:35:32 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04562	1.8562	.09174	1.0552	.10501	.04987
Stddev	.00191	.0853	.00245	.0433	.00363	.00230
%RSD	4.1834	4.5959	2.6738	4.1065	3.4553	4.6192
#1	.04406	1.7606	.08894	1.0098	.10112	.04739
#2	.04506	1.8836	.09349	1.0595	.10561	.05027
#3	.04775	1.9244	.09280	1.0962	.10830	.05195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.625	.04822	.09790	.20054	.33403	1.1005
Stddev	1.553	.00144	.00304	.00771	.00820	.0418
%RSD	3.1286	2.9934	3.1084	3.8470	2.4536	3.7946
#1	47.955	.04669	.09475	.19260	.32583	1.0549
#2	49.894	.04841	.09811	.20102	.33405	1.1097
#3	51.025	.04955	.10082	.20800	.34222	1.1369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a PDS Acquired: 11/19/2023 11:35:32 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	46.723	.09272	9.7250	.40728	.48825	50.828
Stddev	1.816	.00439	.3981	.00585	.01605	1.795
%RSD	3.8875	4.7312	4.0938	1.4355	3.2864	3.5313
#1	44.807	.08804	9.3008	.40093	.47187	48.946
#2	46.943	.09337	9.7837	.40847	.48893	51.019
#3	48.420	.09674	10.091	.41244	.50394	52.520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.204	.50315	5.1384	.10196	.10326	.46225
Stddev	1.731	.01627	.1561	.00313	.00287	.01326
%RSD	3.5187	3.2339	3.0373	3.0700	2.7816	2.8688
#1	47.362	.48623	4.9742	.09977	.09995	.44794
#2	49.450	.50452	5.1564	.10056	.10474	.46467
#3	50.799	.51869	5.2847	.10554	.10509	.47413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a PDS Acquired: 11/19/2023 11:35:32 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13941	12.024	.66412	.47063	.10296	.38028
Stddev	.00421	.573	.01619	.01992	.00509	.01144
%RSD	3.0182	4.7615	2.4374	4.2316	4.9462	3.0089
#1	.13483	11.386	.64718	.44976	.09852	.36774
#2	.14032	12.193	.66574	.47270	.10183	.38295
#3	.14310	12.492	.67944	.48943	.10852	.39016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19136	.52021
Stddev	.00732	.01543
%RSD	3.8249	2.9665
#1	.18380	.50417
#2	.19187	.52152
#3	.19842	.53495
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-7-a PDS Acquired: 11/19/2023 11:35:32 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4747.2	81512.	9628.9
Stddev	24.9	505.	44.9
%RSD	.52388	.61969	.46605
#1	4724.0	80969.	9588.7
#2	4744.1	81968.	9620.5
#3	4773.5	81599.	9677.3

Sample Name: 140-34307-a-7-a PDSD Acquired: 11/19/2023 11:40:15 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04638	1.8953	.09320	1.0729	.10804	.05078
Stddev	.00205	.0585	.00483	.0313	.00289	.00178
%RSD	4.4189	3.0892	5.1853	2.9165	2.6790	3.5006
#1	.04429	1.8556	.08909	1.0443	.10528	.04908
#2	.04647	1.8678	.09199	1.0680	.10778	.05065
#3	.04838	1.9625	.09852	1.1063	.11105	.05263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.456	.04963	.10056	.20624	.34106	1.1186
Stddev	1.013	.00188	.00370	.00701	.00750	.0268
%RSD	1.9678	3.7871	3.6837	3.4013	2.1983	2.3929
#1	50.489	.04790	.09741	.19960	.33434	1.0944
#2	51.372	.04936	.09962	.20555	.33968	1.1140
#3	52.509	.05163	.10464	.21358	.34914	1.1474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a PDSD Acquired: 11/19/2023 11:40:15 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.934	.09412	10.001	.40785	.50043	52.667
Stddev	.887	.00275	.209	.00395	.02004	.943
%RSD	1.8509	2.9177	2.0932	.96956	4.0040	1.7914
#1	47.183	.09147	9.8056	.40353	.48258	51.982
#2	47.707	.09393	9.9753	.40870	.49660	52.276
#3	48.913	.09695	10.222	.41130	.52210	53.743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.452	.51707	5.2579	.10827	.10611	.47815
Stddev	.819	.01759	.1858	.00112	.00326	.01936
%RSD	1.6243	3.4026	3.5330	1.0312	3.0734	4.0492
#1	49.776	.50133	5.0945	.10866	.10413	.46049
#2	50.217	.51381	5.2193	.10701	.10432	.47512
#3	51.363	.53607	5.4600	.10914	.10987	.49885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a PDSD Acquired: 11/19/2023 11:40:15 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14332	12.396	.67876	.48255	.10501	.39009
Stddev	.00509	.523	.02130	.01197	.00216	.01695
%RSD	3.5535	4.2169	3.1385	2.4801	2.0609	4.3458
#1	.13795	11.883	.66035	.47168	.10280	.37538
#2	.14391	12.376	.67384	.48061	.10511	.38626
#3	.14808	12.928	.70209	.49538	.10712	.40863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19680	.53364
Stddev	.00641	.01793
%RSD	3.2584	3.3597
#1	.19111	.51862
#2	.19553	.52880
#3	.20375	.55349
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-7-a PDSD Acquired: 11/19/2023 11:40:15 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4739.2	81844.	9564.6
Stddev	37.2	399.	46.5
%RSD	.78566	.48709	.48642
#1	4697.1	81530.	9533.3
#2	4752.8	81710.	9618.1
#3	4767.8	82292.	9542.4

Sample Name: 140-34307-a-12-a Acquired: 11/19/2023 11:44:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00030	-.03014	-.00023	.12833	.00591	-.00000
Stddev	.00029	.02636	.00050	.00207	.00006	.00001
%RSD	95.957	87.430	219.15	1.6155	.94143	860.47
#1	.00051	-.04903	-.00030	.13038	.00592	.00001
#2	-.00003	-.00003	-.00069	.12839	.00596	-.00000
#3	.00041	-.04137	.00031	.12623	.00585	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0919	.00002	-.00011	.00690	.03731	.10608
Stddev	.0055	.00005	.00003	.00011	.00011	.00304
%RSD	.50138	297.85	27.102	1.6253	.29425	2.8695
#1	1.0862	.00006	-.00014	.00677	.03743	.10328
#2	1.0926	-.00004	-.00008	.00697	.03731	.10932
#3	1.0971	.00004	-.00011	.00695	.03721	.10563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-12-a Acquired: 11/19/2023 11:44:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.33210	-.00143	.12598	.03502	.00090	1.6172
Stddev	.01889	.00046	.01919	.00016	.00024	1.1420
%RSD	5.6890	32.299	15.229	.44272	27.086	70.611
#1	.31029	-.00178	.12600	.03484	.00070	1.5454
#2	.34314	-.00159	.10679	.03509	.00117	.51289
#3	.34288	-.00091	.14516	.03513	.00083	2.7934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.85408	.00381	.49285	.00294	.00250	.00350
Stddev	.00469	.00015	.00323	.00069	.00053	.00233
%RSD	.54867	3.8311	.65481	23.571	21.210	66.414
#1	.85034	.00372	.49658	.00255	.00303	.00546
#2	.85934	.00398	.49087	.00374	.00197	.00412
#3	.85257	.00373	.49111	.00253	.00251	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-12-a Acquired: 11/19/2023 11:44:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00116	7.9341	.20640	.00122	.00332	-.00105
Stddev	.00192	.4671	.00029	.00005	.00037	.00267
%RSD	164.69	5.8875	.14248	4.3944	11.012	253.29
#1	-.00041	7.4440	.20674	.00119	.00296	-.00192
#2	.00061	7.9843	.20625	.00119	.00331	-.00319
#3	.00330	8.3742	.20622	.00128	.00369	.00194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00035	.02567
Stddev	.00049	.00009
%RSD	137.25	.35905
#1	-.00091	.02561
#2	-.00013	.02578
#3	-.00002	.02563
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-12-a Acquired: 11/19/2023 11:44:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4742.7	81549.	9390.2
Stddev	16.7	557.	53.2
%RSD	.35120	.68279	.56630
#1	4726.2	81008.	9329.7
#2	4742.4	82121.	9429.8
#3	4759.5	81519.	9411.0

Sample Name: 140-34307-a-19-a Acquired: 11/19/2023 11:49:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	-.09049	-.00150	.06551	.00208	-.00001
Stddev	.00053	.01109	.00018	.00143	.00015	.00001
%RSD	93.925	12.260	11.703	2.1769	7.3341	63.351
#1	.00033	-.09015	-.00144	.06704	.00204	-.00001
#2	.00117	-.07957	-.00170	.06525	.00196	-.00001
#3	.00019	-.10175	-.00137	.06423	.00226	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14674	.00005	-.00006	.00282	.01501	.03627
Stddev	.00217	.00002	.00005	.00017	.00006	.00112
%RSD	1.4781	48.079	88.230	6.0103	.38802	3.0762
#1	.14426	.00002	-.00004	.00263	.01506	.03513
#2	.14829	.00005	-.00002	.00295	.01495	.03633
#3	.14768	.00007	-.00012	.00288	.01503	.03736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-19-a Acquired: 11/19/2023 11:49:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.19384	-.00134	.00915	.00138	.00040	-.17542
Stddev	.01595	.00150	.00441	.00003	.00006	.59059
%RSD	8.2278	111.58	48.226	2.2403	14.347	336.68
#1	.18973	-.00302	.00607	.00135	.00038	-.14876
#2	.18035	-.00087	.00717	.00139	.00046	-.77889
#3	.21144	-.00014	.01421	.00141	.00036	.40139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34729	.00185	.27349	-.00086	.00076	.00065
Stddev	.00413	.00019	.00206	.00046	.00023	.00076
%RSD	1.1879	10.202	.75349	53.897	30.317	117.38
#1	.35118	.00192	.27556	-.00131	.00050	-.00007
#2	.34296	.00164	.27347	-.00088	.00083	.00146
#3	.34773	.00199	.27144	-.00038	.00094	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-19-a Acquired: 11/19/2023 11:49:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00216	5.4682	.12732	.00022	.00005	-.00053
Stddev	.00169	.2387	.00052	.00005	.00099	.00173
%RSD	78.229	4.3659	.40861	23.920	1982.3	324.88
#1	.00409	5.2130	.12761	.00026	.00118	-.00229
#2	.00144	5.5055	.12762	.00025	-.00039	.00117
#3	.00095	5.6861	.12672	.00016	-.00064	-.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00050	.00540
Stddev	.00034	.00014
%RSD	67.577	2.5516
#1	-.00089	.00542
#2	-.00029	.00553
#3	-.00032	.00526
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-19-a Acquired: 11/19/2023 11:49:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4860.3	83044.	9578.3
Stddev	26.4	588.	60.8
%RSD	.54290	.70832	.63457
#1	4847.8	82505.	9604.5
#2	4842.4	82955.	9621.5
#3	4890.6	83671.	9508.8

Sample Name: 140-34307-a-7-a SD@5 Acquired: 11/19/2023 11:54:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00078	.01084	.00015	.05104	.00262	-.00001
Stddev	.00023	.18426	.00033	.00077	.00005	.00001
%RSD	29.099	1699.6	223.72	1.5083	1.8547	74.028
#1	.00058	.22359	-.00012	.05025	.00264	-.00002
#2	.00074	-.09337	.00005	.05179	.00257	-.00000
#3	.00103	-.09770	.00052	.05109	.00266	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28564	.00008	.00002	.00135	.02153	.04196
Stddev	.00864	.00004	.00004	.00042	.00009	.01010
%RSD	3.0257	51.159	255.07	30.848	.40954	24.070
#1	.29561	.00007	-.00003	.00096	.02158	.05362
#2	.28036	.00004	.00003	.00131	.02159	.03598
#3	.28095	.00012	.00005	.00179	.02143	.03627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a SD@5 Acquired: 11/19/2023 11:54:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26630	-.00065	.08920	.06705	.00029	.11610
Stddev	.00533	.00156	.10613	.00054	.00035	.31321
%RSD	2.0032	239.04	118.98	.80209	117.97	269.78
#1	.26171	.00110	.21145	.06746	.00059	-.18750
#2	.27215	-.00116	.02064	.06724	.00037	.09770
#3	.26504	-.00190	.03552	.06644	-.00008	.43810
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.53907	.00284	.12497	.00257	.00208	.00085
Stddev	.08772	.00029	.00196	.00206	.00071	.00083
%RSD	16.272	10.257	1.5723	79.971	34.136	97.570
#1	.64036	.00278	.12663	.00152	.00162	.00112
#2	.48863	.00259	.12549	.00495	.00173	-.00008
#3	.48823	.00316	.12280	.00126	.00290	.00150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-7-a SD@5 Acquired: 11/19/2023 11:54:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	3.8170	.04115	.00110	-.00024	.00201
Stddev	.00090	.0625	.00035	.00013	.00109	.00169
%RSD	61.937	1.6378	.85189	11.608	461.34	83.894
#1	.00190	3.8639	.04094	.00125	.00028	.00076
#2	.00205	3.8411	.04156	.00103	-.00149	.00393
#3	.00042	3.7460	.04096	.00103	.00050	.00134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00032	.01150
Stddev	.00025	.00011
%RSD	76.228	.95813
#1	-.00004	.01162
#2	-.00051	.01144
#3	-.00041	.01143
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-7-a SD@5 Acquired: 11/19/2023 11:54:46 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4872.8	83128.	9525.7
Stddev	2.8	461.	49.3
%RSD	.05748	.55497	.51743
#1	4870.2	83439.	9499.9
#2	4872.3	82598.	9494.7
#3	4875.8	83348.	9582.6

Sample Name: 140-34237-a-1-a Acquired: 11/19/2023 11:59:42 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	1.5672	.05617	F 129.89	.04906	.00005
Stddev	.00039	1.1402	.00101	1.25	.00033	.00001
%RSD	121.82	72.751	1.7912	.96222	.68007	28.748
#1	-.00008	.90953	.05730	130.33	.04893	.00003
#2	-.00011	.90833	.05580	130.85	.04880	.00006
#3	-.00078	2.8837	.05539	128.47	.04943	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.8324	.00248	.01828	.05248	.04039	16.834
Stddev	.0141	.00008	.00030	.00101	.00049	.039
%RSD	.15969	3.3048	1.6442	1.9285	1.2235	.22893
#1	8.8342	.00239	.01852	.05354	.04090	16.878
#2	8.8455	.00253	.01838	.05237	.04036	16.809
#3	8.8175	.00253	.01794	.05153	.03991	16.813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a Acquired: 11/19/2023 11:59:42 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.67832	.03139	.32855	.11610	.13892	.81051
Stddev	.14025	.00694	.13759	.00016	.00059	.87038
%RSD	20.676	22.092	41.877	.14003	.42502	107.39
#1	.60307	.02816	.24710	.11604	.13960	.01166
#2	.59175	.02667	.25115	.11629	.13854	.68178
#3	.84013	.03936	.48740	.11598	.13861	1.7381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.5474	.04970	.13551	.04299	.04463	.01923
Stddev	.3169	.00042	.00048	.00136	.00209	.00047
%RSD	20.478	.85329	.35754	3.1556	4.6793	2.4327
#1	1.3644	.04962	.13577	.04398	.04223	.01896
#2	1.3646	.05016	.13580	.04354	.04564	.01897
#3	1.9134	.04932	.13495	.04144	.04602	.01977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a Acquired: 11/19/2023 11:59:42 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00427	F 1688.6	.04134	.00919	.05011	-.00103
Stddev	.00184	25.5	.00042	.00023	.01355	.00071
%RSD	43.153	1.5122	1.0130	2.4977	27.040	69.025
#1	.00314	1717.9	.04093	.00917	.04287	-.00041
#2	.00640	1677.4	.04176	.00897	.04172	-.00087
#3	.00328	1670.7	.04132	.00943	.06574	-.00180
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00016	.12217
Stddev	.00005	.00037
%RSD	29.817	.30047
#1	-.00020	.12248
#2	-.00018	.12225
#3	-.00011	.12176
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-1-a Acquired: 11/19/2023 11:59:42 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4995.8	84174.	9857.7
Stddev	6.2	649.	100.1
%RSD	.12417	.77064	1.0149
#1	4991.4	83425.	9742.7
#2	5002.9	84563.	9925.1
#3	4993.2	84533.	9905.2

Sample Name: 140-34237-a-1-a PDS Acquired: 11/19/2023 12:04:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04912	2.7743	.14770	F 129.22	.14514	.05059
Stddev	.00252	.1057	.00368	1.57	.00539	.00248
%RSD	5.1307	3.8115	2.4883	1.2175	3.7141	4.9009
#1	.04636	2.6523	.14348	128.09	.13909	.04781
#2	.04973	2.8306	.15021	131.01	.14690	.05141
#3	.05129	2.8400	.14941	128.55	.14943	.05256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.028	.05149	.11694	.25624	.29194	17.267
Stddev	2.274	.00183	.00366	.00897	.01176	.014
%RSD	3.9190	3.5527	3.1340	3.5017	4.0270	.07985
#1	55.521	.04942	.11289	.24616	.27889	17.263
#2	58.607	.05216	.11790	.25920	.29523	17.282
#3	59.957	.05289	.12003	.26336	.30171	17.255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a PDS Acquired: 11/19/2023 12:04:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	47.650	.12408	9.9964	.21373	.63661	50.027
Stddev	2.820	.00626	.3818	.00483	.01732	3.011
%RSD	5.9187	5.0430	3.8190	2.2612	2.7203	6.0194
#1	44.578	.11732	9.5700	.20825	.61745	47.026
#2	48.252	.12525	10.113	.21552	.64124	50.006
#3	50.121	.12966	10.306	.21741	.65114	53.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.693	.54310	5.0387	.13835	.14114	.50567
Stddev	2.651	.01708	.1834	.00802	.00245	.01938
%RSD	5.3349	3.1451	3.6396	5.7988	1.7372	3.8332
#1	46.771	.52408	4.8304	.13050	.13832	.48371
#2	50.365	.54810	5.1095	.13804	.14274	.51290
#3	51.943	.55713	5.1760	.14653	.14237	.52040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a PDS Acquired: 11/19/2023 12:04:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14392	F 1623.4	.51402	.49502	.14320	.38024
Stddev	.00581	7.6	.01644	.02501	.00690	.01972
%RSD	4.0372	.46653	3.1988	5.0530	4.8202	5.1875
#1	.13739	1622.1	.49543	.46721	.13564	.35805
#2	.14585	1616.6	.52001	.50219	.14478	.38689
#3	.14853	1631.6	.52663	.51567	.14917	.39577
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19923	.60412
Stddev	.00910	.01752
%RSD	4.5657	2.8998
#1	.18913	.58432
#2	.20177	.61043
#3	.20678	.61760
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-1-a PDS Acquired: 11/19/2023 12:04:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4914.0	82991.	10040.
Stddev	.8	263.	37.
%RSD	.01728	.31739	.36614
#1	4914.9	82712.	10079.
#2	4913.2	83027.	10035.
#3	4913.8	83235.	10006.

Sample Name: 140-34237-a-1-a PDSD Acquired: 11/19/2023 12:09:43 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04913	2.8256	.14779	F 127.68	.14721	.05076
Stddev	.00012	.0211	.00182	1.49	.00026	.00020
%RSD	.24237	.74726	1.2327	1.1694	.17974	.39988
#1	.04901	2.8132	.14570	128.88	.14697	.05075
#2	.04925	2.8500	.14859	128.14	.14717	.05097
#3	.04914	2.8137	.14908	126.01	.14749	.05056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.754	.05099	.11666	.25616	.29154	17.275
Stddev	.163	.00018	.00009	.00188	.00166	.106
%RSD	.27696	.34773	.07671	.73515	.56967	.61488
#1	58.622	.05078	.11665	.25433	.29028	17.332
#2	58.703	.05111	.11675	.25809	.29342	17.341
#3	58.936	.05107	.11657	.25607	.29092	17.153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a PDSD Acquired: 11/19/2023 12:09:43 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.968	.12735	10.177	.21390	.63177	51.440
Stddev	.189	.00119	.027	.00074	.00114	.901
%RSD	.38687	.93480	.26077	.34540	.18114	1.7520
#1	48.850	.12828	10.184	.21380	.63221	50.505
#2	49.186	.12776	10.199	.21469	.63047	51.511
#3	48.867	.12600	10.147	.21322	.63263	52.304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.895	.53963	4.9865	.14169	.13841	.49954
Stddev	.128	.00039	.0105	.00233	.00104	.00167
%RSD	.25090	.07269	.21132	1.6440	.75435	.33413
#1	50.808	.54007	4.9923	.13917	.13918	.49775
#2	51.042	.53950	4.9930	.14216	.13883	.50105
#3	50.835	.53931	4.9744	.14376	.13722	.49982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a PDSD Acquired: 11/19/2023 12:09:43 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14202	F 1629.4	.50901	.50471	.14629	.37792
Stddev	.00078	13.8	.00101	.00092	.00120	.00412
%RSD	.54637	.84978	.19801	.18203	.82222	1.0889
#1	.14282	1613.6	.50863	.50381	.14520	.38197
#2	.14127	1635.3	.50825	.50565	.14758	.37806
#3	.14198	1639.3	.51015	.50468	.14610	.37374
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19924	.59832
Stddev	.00130	.00075
%RSD	.65347	.12569
#1	.19798	.59835
#2	.20058	.59906
#3	.19916	.59756
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-1-a PDSD Acquired: 11/19/2023 12:09:43 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4917.3	83583.	9909.8
Stddev	33.7	103.	21.3
%RSD	.68558	.12305	.21499
#1	4878.8	83608.	9934.2
#2	4941.6	83671.	9894.9
#3	4931.5	83470.	9900.3

Sample Name: 140-34307-a-1-a Acquired: 11/19/2023 12:14:56 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	.63989	.00995	F 131.03	.03396	.00003
Stddev	.00059	.00695	.00082	1.82	.00037	.00001
%RSD	466.60	1.0866	8.2884	1.3912	1.0757	21.433
#1	.00072	.64300	.01070	131.02	.03359	.00004
#2	-.00047	.63192	.01007	129.21	.03432	.00003
#3	.00014	.64474	.00907	132.86	.03398	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.57441	.00141	-.00002	.03067	.06254	.36832
Stddev	.00213	.00005	.00013	.00031	.00034	.00084
%RSD	.37089	3.8324	658.86	1.0010	.55117	.22889
#1	.57673	.00146	.00007	.03035	.06288	.36770
#2	.57253	.00136	.00004	.03070	.06256	.36798
#3	.57396	.00142	-.00017	.03096	.06219	.36928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-1-a Acquired: 11/19/2023 12:14:56 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.43051	-.00179	.13013	.03127	.07679	6.0485
Stddev	.04464	.00091	.00442	.00010	.00014	.8917
%RSD	10.369	50.935	3.3968	.31614	.18799	14.742
#1	.47757	-.00284	.12704	.03116	.07694	5.1622
#2	.42518	-.00120	.13519	.03133	.07665	6.0378
#3	.38877	-.00133	.12816	.03132	.07679	6.9455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.3465	.01805	-.00413	.01146	.01675	.01500
Stddev	.0095	.00034	.00272	.00309	.00174	.00122
%RSD	.14999	1.8861	65.729	26.978	10.392	8.1035
#1	6.3371	.01797	-.00643	.01299	.01675	.01631
#2	6.3561	.01776	-.00114	.01348	.01501	.01478
#3	6.3465	.01843	-.00483	.00790	.01850	.01390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-1-a Acquired: 11/19/2023 12:14:56 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00530	F 1416.2	-.00030	.00385	.01151	-.00176
Stddev	.00285	7.8	.00038	.00010	.00085	.00200
%RSD	53.661	.55031	127.54	2.5123	7.4282	113.15
#1	.00228	1423.0	-.00060	.00380	.01178	-.00174
#2	.00793	1417.8	-.00041	.00378	.01055	.00022
#3	.00569	1407.7	.00013	.00396	.01219	-.00377
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00086	.04128
Stddev	.00019	.00005
%RSD	21.580	.12257
#1	-.00072	.04122
#2	-.00107	.04131
#3	-.00080	.04131
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-1-a Acquired: 11/19/2023 12:14:56 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4931.4	83268.	9717.0
Stddev	14.1	474.	29.7
%RSD	.28658	.56927	.30573
#1	4947.6	83066.	9747.0
#2	4921.7	83810.	9687.5
#3	4924.9	82929.	9716.5

Sample Name: CCV Acquired: 11/19/2023 12:20:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99979	25.067	.49263	2.0284	2.0129	2.1100
Stddev	.00294	.149	.00179	.0083	.0102	.0113
%RSD	.29452	.59599	.36260	.40986	.50487	.53766
#1	1.0025	25.193	.49401	2.0340	2.0245	2.1173
#2	.99667	25.107	.49061	2.0189	2.0090	2.0969
#3	1.0002	24.902	.49327	2.0324	2.0053	2.1157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.327	.51031	2.0165	2.0617	1.9816	25.100
Stddev	.213	.00186	.0050	.0067	.0042	.145
%RSD	.41514	.36496	.25029	.32560	.21045	.57793
#1	51.573	.51239	2.0219	2.0694	1.9852	25.249
#2	51.212	.50974	2.0158	2.0571	1.9825	25.092
#3	51.197	.50880	2.0118	2.0586	1.9771	24.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 12:20:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.195	2.0095	51.397	2.0709	2.0472	50.423
Stddev	.274	.0116	.223	.0108	.0053	1.028
%RSD	.54597	.57810	.43429	.52324	.26016	2.0388
#1	50.467	2.0222	51.605	2.0767	2.0520	51.610
#2	50.199	2.0070	51.427	2.0584	2.0482	49.852
#3	49.919	1.9994	51.161	2.0776	2.0414	49.807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.155	2.0285	1.9800	.53224	.50917	.49381
Stddev	.299	.0040	.0043	.00352	.00103	.00298
%RSD	.58371	.19881	.21796	.66101	.20175	.60393
#1	51.470	2.0329	1.9838	.53592	.51027	.49483
#2	51.117	2.0275	1.9753	.53189	.50903	.49615
#3	50.877	2.0250	1.9809	.52891	.50823	.49045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 12:20:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49809	F 5.5387	2.0082	2.0110	2.0188	1.0209
Stddev	.00337	.1110	.0057	.0102	.0136	.0036
%RSD	.67687	2.0042	.28161	.50871	.67107	.34772
#1	.49753	5.4417	2.0146	2.0221	2.0344	1.0248
#2	.50170	5.5147	2.0061	2.0086	2.0126	1.0198
#3	.49503	5.6598	2.0039	2.0021	2.0095	1.0180
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	2.0134	1.9879
Stddev	.0064	.0043
%RSD	.31757	.21868
#1	2.0202	1.9926
#2	2.0075	1.9871
#3	2.0125	1.9840
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 12:20:06 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4676.3	79844.	9321.1
Stddev	34.3	431.	55.2
%RSD	.73413	.53974	.59196
#1	4643.8	79386.	9260.1
#2	4672.9	80242.	9367.5
#3	4712.2	79903.	9335.7

Sample Name: CCB Acquired: 11/19/2023 12:24:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	-.01233	-.00003	.00225	.00057	-.00001
Stddev	.00021	.22933	.00099	.00167	.00055	.00001
%RSD	221.05	1860.3	3756.0	74.399	96.244	92.443
#1	.00034	-.16088	-.00117	.00043	.00027	-.00002
#2	-.00005	-.12789	.00046	.00259	.00023	-.00002
#3	-.00000	.25179	.00063	.00372	.00120	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.04706	.00006	.00009	-.00044	.00078	.00508
Stddev	.00681	.00001	.00027	.00036	.00073	.01625
%RSD	14.465	13.181	295.64	82.337	93.607	319.87
#1	-.05207	.00005	.00040	-.00003	.00159	-.00497
#2	-.04981	.00006	-.00002	-.00070	.00059	-.00362
#3	-.03931	.00007	-.00011	-.00059	.00017	.02383
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 12:24:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06366	-.00192	F .04554	.00003	-.00001	F -.60397
Stddev	.01112	.00107	.10842	.00004	.00036	1.1488
%RSD	17.464	55.654	238.10	159.03	3682.0	190.21
#1	.07556	-.00270	-.01033	.00002	.00037	-1.9302
#2	.06189	-.00237	-.02356	-.00001	-.00035	.03243
#3	.05354	-.00070	.17050	.00007	-.00005	.08583
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit			.03900			.32000
Low Limit			-.03900			-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02076	.00041	-.00082	-.00099	.00041	.00037
Stddev	.04547	.00060	.00205	.00190	.00173	.00128
%RSD	219.05	145.14	250.18	192.79	425.31	342.09
#1	-.00295	.00109	.00130	-.00153	.00190	.00084
#2	-.00796	.00019	-.00278	-.00256	-.00149	.00135
#3	.07319	-.00005	-.00098	.00113	.00082	-.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 11/19/2023 12:24:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00260	F 3.4896	.00007	-.00019	-.00031	-.00040
Stddev	.00053	.0789	.00041	.00024	.00056	.00207
%RSD	20.263	2.2617	571.26	125.34	180.83	511.25
#1	.00315	3.4894	.00022	-.00044	-.00062	.00096
#2	.00209	3.5686	.00038	-.00017	-.00065	.00061
#3	.00258	3.4107	-.00039	.00004	.00034	-.00279
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00048	.00010
Stddev	.00018	.00032
%RSD	37.655	311.90
#1	-.00067	.00048
#2	-.00031	-.00008
#3	-.00046	-.00008
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 11/19/2023 12:24:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4879.1	82606.	9492.9
Stddev	57.2	1025.	207.4
%RSD	1.1717	1.2404	2.1852
#1	4813.8	81523.	9390.7
#2	4903.3	82735.	9356.5
#3	4920.1	83560.	9731.6

Sample Name: 140-34307-a-6-a Acquired: 11/19/2023 12:29:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	.60380	.00737	F 129.03	.03109	.00110
Stddev	.00105	.01935	.00189	.94	.00009	.00184
%RSD	178.89	3.2043	25.633	.72572	.29126	167.06
#1	.00179	.62521	.00856	128.77	.03120	.00322
#2	.00015	.58757	.00519	130.08	.03103	.00002
#3	-.00018	.59863	.00836	128.26	.03105	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.67001	.00100	.00023	.04323	.05437	.47224
Stddev	.00269	.00000	.00008	.00197	.00438	.00200
%RSD	.40111	.08681	37.251	4.5606	8.0583	.42405
#1	.66924	.00100	.00027	.04550	.05943	.47191
#2	.67300	.00100	.00028	.04195	.05182	.47042
#3	.66779	.00100	.00013	.04225	.05187	.47439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a Acquired: 11/19/2023 12:29:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.37940	-.00118	.16327	.04643	.07713	5.7396
Stddev	.04441	.00036	.00361	.00114	.00017	.3786
%RSD	11.706	30.325	2.2122	2.4635	.21900	6.5954
#1	.43034	-.00108	.16033	.04773	.07713	6.0906
#2	.34882	-.00157	.16730	.04594	.07729	5.7898
#3	.35902	-.00088	.16218	.04560	.07695	5.3385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.4951	.02368	-.00970	.01194	.01591	.01529
Stddev	.0167	.00020	.00019	.00135	.00141	.00091
%RSD	.25675	.83876	1.9192	11.284	8.8896	5.9218
#1	6.5117	.02390	-.00950	.01300	.01506	.01429
#2	6.4784	.02351	-.00987	.01240	.01754	.01553
#3	6.4950	.02362	-.00973	.01042	.01512	.01605
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a Acquired: 11/19/2023 12:29:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00210	F 1408.5	-.00092	.00364	.01363	-.00266
Stddev	.00184	13.2	.00074	.00006	.00044	.00229
%RSD	87.967	.93987	80.144	1.5524	3.2499	86.184
#1	.00419	1404.9	-.00139	.00370	.01365	-.00016
#2	.00071	1397.5	-.00007	.00361	.01317	-.00467
#3	.00139	1423.2	-.00131	.00360	.01406	-.00316
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00022	.05284
Stddev	.00051	.00010
%RSD	236.49	.18510
#1	.00034	.05285
#2	-.00033	.05273
#3	-.00066	.05293
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-6-a Acquired: 11/19/2023 12:29:50 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4956.4	84025.	9797.5
Stddev	9.7	360.	49.2
%RSD	.19493	.42818	.50251
#1	4948.2	84031.	9827.5
#2	4967.1	83662.	9824.5
#3	4954.1	84382.	9740.7

Sample Name: 140-34307-a-6-a PDS Acquired: 11/19/2023 12:34:59 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04910	2.4726	.10050	F 129.19	.12960	.05139
Stddev	.00257	.1130	.00194	1.75	.00564	.00236
%RSD	5.2283	4.5718	1.9323	1.3580	4.3546	4.5949
#1	.04638	2.3480	.09826	130.88	.12333	.04881
#2	.04945	2.5012	.10178	127.38	.13118	.05191
#3	.05148	2.5686	.10145	129.31	.13428	.05344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.879	.05048	.10097	.24780	.30171	1.4466
Stddev	1.287	.00144	.00270	.00920	.01138	.0549
%RSD	2.5805	2.8462	2.6766	3.7124	3.7718	3.7960
#1	48.479	.04887	.09787	.23763	.28923	1.3850
#2	50.148	.05094	.10224	.25020	.30440	1.4643
#3	51.011	.05164	.10280	.25555	.31151	1.4905
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a PDS Acquired: 11/19/2023 12:34:59 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.579	.09818	9.8842	.14874	.57929	55.329
Stddev	1.545	.00621	.3043	.00465	.01642	1.493
%RSD	3.1812	6.3292	3.0788	3.1236	2.8344	2.6983
#1	46.875	.09111	9.5521	.14364	.56123	54.106
#2	48.973	.10062	9.9508	.14985	.58335	54.888
#3	49.889	.10280	10.150	.15274	.59331	56.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.705	.52586	4.9245	.10942	.11338	.50113
Stddev	1.358	.01410	.1669	.00399	.00255	.01693
%RSD	2.4381	2.6821	3.3892	3.6455	2.2453	3.3794
#1	54.216	.50979	4.7420	.10526	.11087	.48252
#2	56.024	.53155	4.9620	.11321	.11332	.50524
#3	56.875	.53622	5.0694	.10979	.11596	.51563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a PDS Acquired: 11/19/2023 12:34:59 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14577	F 1375.2	.47639	.49620	.11628	.38534
Stddev	.00516	12.7	.01404	.02755	.00532	.01173
%RSD	3.5417	.92319	2.9479	5.5523	4.5783	3.0440
#1	.14300	1385.2	.46023	.46568	.11023	.37182
#2	.14258	1379.4	.48334	.50369	.11837	.39140
#3	.15172	1360.9	.48560	.51924	.12025	.39280
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20126	.54143
Stddev	.00893	.01582
%RSD	4.4358	2.9210
#1	.19139	.52411
#2	.20360	.54506
#3	.20878	.55511
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-6-a PDS Acquired: 11/19/2023 12:34:59 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4887.7	82546.	9833.4
Stddev	14.5	615.	40.3
%RSD	.29745	.74524	.40954
#1	4873.4	82095.	9831.3
#2	4902.4	83247.	9794.2
#3	4887.2	82297.	9874.6

Sample Name: 140-34307-a-6-a PDSD Acquired: 11/19/2023 12:39:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04914	2.4898	.09870	F 125.84	.13027	.05015
Stddev	.00016	.0285	.00099	1.56	.00034	.00019
%RSD	.33067	1.1444	1.0056	1.2414	.26227	.37763
#1	.04899	2.5062	.09770	127.60	.13040	.05037
#2	.04911	2.5063	.09968	124.62	.13053	.05002
#3	.04931	2.4569	.09873	125.30	.12989	.05007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.471	.04927	.09780	.24389	.30366	1.4475
Stddev	.086	.00003	.00008	.00120	.00107	.0039
%RSD	.16627	.06857	.07849	.49016	.35372	.26672
#1	51.560	.04925	.09782	.24514	.30481	1.4474
#2	51.463	.04925	.09771	.24376	.30348	1.4438
#3	51.389	.04931	.09786	.24276	.30269	1.4515
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a PDSD Acquired: 11/19/2023 12:39:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.170	.09941	10.097	.14570	.57135	56.929
Stddev	.171	.00064	.014	.00053	.00112	.628
%RSD	.34048	.64719	.13450	.36193	.19617	1.1026
#1	50.265	.09869	10.109	.14630	.57175	57.517
#2	49.973	.09991	10.082	.14535	.57221	57.002
#3	50.272	.09963	10.099	.14544	.57008	56.268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.421	.51372	4.8409	.10626	.11321	.49847
Stddev	.129	.00136	.0048	.00275	.00289	.00273
%RSD	.22518	.26411	.09986	2.5914	2.5542	.54830
#1	57.542	.51523	4.8425	.10318	.11556	.50136
#2	57.285	.51335	4.8448	.10709	.11408	.49814
#3	57.436	.51259	4.8355	.10850	.10998	.49593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a PDSD Acquired: 11/19/2023 12:39:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14453	F 1343.3	.46369	.49857	.11819	.37833
Stddev	.00185	22.4	.00079	.00118	.00293	.00201
%RSD	1.2784	1.6651	.17022	.23622	2.4763	.53008
#1	.14576	1321.9	.46384	.49993	.11823	.37630
#2	.14543	1341.3	.46440	.49782	.12109	.38031
#3	.14241	1366.6	.46284	.49797	.11524	.37838
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19808	.53264
Stddev	.00171	.00035
%RSD	.86086	.06483
#1	.20005	.53269
#2	.19716	.53295
#3	.19704	.53227
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-6-a PDSD Acquired: 11/19/2023 12:39:57 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4881.6	83693.	10009.
Stddev	23.7	879.	27.
%RSD	.48542	1.0500	.27314
#1	4859.3	82707.	9987.0
#2	4879.0	83981.	10040.
#3	4906.4	84392.	10001.

Sample Name: 140-34307-a-11-a Acquired: 11/19/2023 12:44:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.63688	.00661	F 130.67	.03075	.00003
Stddev	.00057	.00823	.00093	1.32	.00018	.00001
%RSD	1537.1	1.2920	14.019	1.0083	.59797	31.548
#1	-.00055	.62995	.00696	129.26	.03080	.00003
#2	.00058	.64597	.00556	130.90	.03090	.00004
#3	-.00014	.63471	.00731	131.86	.03054	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50975	.00066	-.00103	.02934	.04057	.34345
Stddev	.00166	.00002	.00015	.00053	.00033	.00399
%RSD	.32549	3.5769	14.478	1.8197	.82002	1.1604
#1	.51149	.00065	-.00120	.02881	.04033	.34428
#2	.50819	.00069	-.00099	.02987	.04044	.33911
#3	.50958	.00065	-.00091	.02935	.04095	.34695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-11-a Acquired: 11/19/2023 12:44:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40836	-.00158	.12738	.04118	.07632	5.9367
Stddev	.03445	.00046	.01520	.00018	.00033	.8735
%RSD	8.4362	29.294	11.935	.43546	.43597	14.713
#1	.44775	-.00127	.14493	.04098	.07616	6.5241
#2	.38384	-.00211	.11853	.04133	.07670	6.3531
#3	.39349	-.00136	.11867	.04123	.07610	4.9329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.3873	.01443	-.01748	.00691	.01505	.01557
Stddev	.0196	.00031	.00153	.00140	.00179	.00143
%RSD	.30744	2.1333	8.7687	20.251	11.867	9.2005
#1	6.3690	.01409	-.01574	.00782	.01565	.01714
#2	6.3851	.01452	-.01864	.00530	.01646	.01434
#3	6.4080	.01468	-.01806	.00762	.01304	.01524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-11-a Acquired: 11/19/2023 12:44:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00403	F 1405.4	-.00231	.00337	.01186	-.00218
Stddev	.00255	24.9	.00022	.00014	.00058	.00311
%RSD	63.298	1.7718	9.7082	4.2097	4.8577	142.83
#1	.00113	1387.4	-.00241	.00349	.01126	-.00004
#2	.00505	1395.0	-.00246	.00321	.01240	-.00574
#3	.00592	1433.9	-.00205	.00341	.01194	-.00075
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00075	.03019
Stddev	.00022	.00019
%RSD	29.114	.63798
#1	-.00095	.03039
#2	-.00078	.03001
#3	-.00052	.03015
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-11-a Acquired: 11/19/2023 12:44:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4964.3	83758.	9894.4
Stddev	11.5	221.	86.5
%RSD	.23110	.26379	.87423
#1	4965.1	83583.	9956.0
#2	4975.4	83684.	9931.7
#3	4952.5	84006.	9795.5

Sample Name: 140-34307-a-16-a Acquired: 11/19/2023 12:50:04 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	.55000	.00354	F 133.23	.02678	.00002
Stddev	.00058	.01461	.00167	1.34	.00016	.00001
%RSD	301.46	2.6559	47.272	1.0025	.59856	42.982
#1	-.00057	.56177	.00388	133.57	.02679	.00001
#2	.00048	.53365	.00501	131.76	.02693	.00003
#3	-.00048	.55458	.00172	134.36	.02661	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18498	.00010	-.00138	.01379	.00277	.11150
Stddev	.00109	.00007	.00008	.00038	.00006	.00051
%RSD	.58915	68.704	6.1039	2.7834	2.1600	.46057
#1	.18461	.00008	-.00147	.01423	.00270	.11096
#2	.18621	.00018	-.00131	.01353	.00277	.11198
#3	.18413	.00005	-.00135	.01361	.00282	.11156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-16-a Acquired: 11/19/2023 12:50:04 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.20762	-.00178	.06657	.00519	.07525	.38740
Stddev	.01072	.00099	.01981	.00005	.00012	1.2837
%RSD	5.1647	55.595	29.754	.98249	.15534	331.37
#1	.19672	-.00066	.04415	.00521	.07523	-.35036
#2	.21815	-.00254	.08167	.00513	.07514	1.8697
#3	.20799	-.00214	.07391	.00523	.07537	-.35715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.18537	-.00004	-.03145	-.00095	.00541	.01290
Stddev	.01194	.00035	.00401	.00241	.00145	.00118
%RSD	6.4423	912.87	12.741	252.93	26.812	9.1832
#1	.18284	.00023	-.03292	-.00280	.00615	.01291
#2	.17490	.00009	-.02691	.00177	.00633	.01409
#3	.19837	-.00044	-.03451	-.00182	.00374	.01172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-16-a Acquired: 11/19/2023 12:50:04 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00227	F 1331.0	-.00415	.00228	.00694	-.00203
Stddev	.00135	10.3	.00045	.00016	.00156	.00165
%RSD	59.405	.77453	10.930	7.0951	22.521	81.209
#1	.00118	1319.3	-.00442	.00231	.00664	-.00015
#2	.00185	1334.9	-.00363	.00211	.00863	-.00325
#3	.00377	1338.8	-.00441	.00243	.00555	-.00268
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00				
Low Limit		-900.00				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00056	.01761
Stddev	.00016	.00022
%RSD	28.404	1.2761
#1	-.00038	.01744
#2	-.00069	.01786
#3	-.00060	.01752
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-16-a Acquired: 11/19/2023 12:50:04 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4954.4	83685.	9807.3
Stddev	8.2	232.	20.2
%RSD	.16455	.27677	.20616
#1	4953.3	83459.	9802.2
#2	4963.0	83922.	9790.0
#3	4946.8	83674.	9829.5

Sample Name: 140-34307-a-17-a Acquired: 11/19/2023 12:55:13 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00040	-.09699	.00313	F 142.00	.00266	-.00000
Stddev	.00034	.01092	.00030	2.52	.00008	.00003
%RSD	85.983	11.258	9.4368	1.7753	2.9896	565.31
#1	-.00073	-.08940	.00280	143.72	.00274	-.00001
#2	-.00043	-.09206	.00320	139.11	.00265	.00002
#3	-.00004	-.10950	.00338	143.17	.00258	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14088	-.00007	.00009	.00074	.00332	.02486
Stddev	.00142	.00009	.00004	.00042	.00021	.00322
%RSD	1.0059	138.58	46.278	56.191	6.2380	12.936
#1	.13954	-.00015	.00014	.00117	.00352	.02195
#2	.14237	.00003	.00007	.00072	.00334	.02831
#3	.14074	-.00007	.00007	.00034	.00311	.02433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-17-a Acquired: 11/19/2023 12:55:13 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09170	-.00169	.01138	.00087	.00024	1.0762
Stddev	.01131	.00055	.00672	.00003	.00016	.5018
%RSD	12.336	32.310	59.097	2.8979	66.640	46.627
#1	.10427	-.00224	.01305	.00090	.00012	1.0208
#2	.08849	-.00114	.01710	.00087	.00043	1.6034
#3	.08235	-.00170	.00397	.00085	.00018	.60442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.29108	.00035	-.00091	.00091	-.00018	.00132
Stddev	.00310	.00011	.00072	.00124	.00078	.00091
%RSD	1.0650	31.577	78.973	135.60	436.20	68.757
#1	.28792	.00035	-.00132	.00233	.00069	.00072
#2	.29411	.00024	-.00133	.00039	-.00084	.00236
#3	.29122	.00046	-.00008	.00002	-.00039	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-17-a Acquired: 11/19/2023 12:55:13 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00154	.11392	.00033	.00061	-.00055	.00214
Stddev	.00072	.09908	.00014	.00013	.00076	.00278
%RSD	46.750	86.975	42.708	21.723	139.21	129.98
#1	-.00194	.22355	.00049	.00072	-.00104	.00111
#2	-.00197	.08746	.00027	.00066	-.00094	.00002
#3	-.00071	.03075	.00023	.00047	.00033	.00529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00044	.00338
Stddev	.00028	.00008
%RSD	63.364	2.3848
#1	-.00029	.00336
#2	-.00077	.00347
#3	-.00027	.00332
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-17-a Acquired: 11/19/2023 12:55:13 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4860.8	83525.	9749.6
Stddev	24.2	878.	64.4
%RSD	.49747	1.0516	.66083
#1	4833.2	82578.	9701.0
#2	4878.4	84312.	9725.0
#3	4870.7	83685.	9822.6

Sample Name: 140-34307-a-6-a SD@5 Acquired: 11/19/2023 13:00:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00048	.04683	.00321	27.802	.00649	-.00000
Stddev	.00022	.00890	.00097	.010	.00019	.00000
%RSD	44.937	18.996	30.054	.03576	2.9671	126.09
#1	.00024	.05642	.00210	27.791	.00663	-.00001
#2	.00064	.03886	.00385	27.811	.00627	-.00000
#3	.00057	.04519	.00368	27.804	.00657	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10156	.00021	-.00002	.00834	.01072	.09533
Stddev	.00100	.00006	.00006	.00042	.00009	.00161
%RSD	.98388	27.122	265.66	5.0741	.82135	1.6914
#1	.10268	.00028	-.00002	.00860	.01065	.09625
#2	.10076	.00017	-.00009	.00786	.01082	.09628
#3	.10125	.00019	.00003	.00858	.01069	.09347
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a SD@5 Acquired: 11/19/2023 13:00:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11401	-.00200	.00577	.00927	.01556	1.6955
Stddev	.02181	.00104	.00889	.00003	.00020	.8426
%RSD	19.132	52.138	153.89	.37762	1.2585	49.695
#1	.12443	-.00269	-.00418	.00923	.01577	2.1568
#2	.08895	-.00252	.01291	.00930	.01538	.72298
#3	.12867	-.00080	.00859	.00927	.01554	2.2066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3368	.00482	-.00163	.00125	.00118	.00451
Stddev	.0056	.00005	.00225	.00410	.00047	.00035
%RSD	.41980	.94968	138.12	327.58	40.153	7.7305
#1	1.3311	.00484	-.00198	-.00172	.00133	.00464
#2	1.3423	.00486	.00078	.00592	.00156	.00412
#3	1.3371	.00477	-.00368	-.00045	.00065	.00478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a SD@5 Acquired: 11/19/2023 13:00:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00207	289.20	-.00022	.00071	.00103	-.00057
Stddev	.00021	.76	.00032	.00007	.00030	.00085
%RSD	10.119	.26360	146.88	10.424	29.010	147.53
#1	.00230	289.82	-.00058	.00080	.00078	-.00152
#2	.00202	288.35	.00003	.00068	.00137	.00012
#3	.00189	289.42	-.00011	.00066	.00095	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00046	.01104
Stddev	.00014	.00004
%RSD	29.957	.39876
#1	-.00030	.01109
#2	-.00053	.01101
#3	-.00056	.01103
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-6-a SD@5 Acquired: 11/19/2023 13:00:19 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4917.6	84311.	9764.9
Stddev	14.0	106.	75.6
%RSD	.28431	.12590	.77462
#1	4901.6	84271.	9677.9
#2	4924.0	84432.	9801.7
#3	4927.3	84231.	9815.1

Sample Name: CRI Acquired: 11/19/2023 13:05:16 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01058	.17255	.00918	.20096	.01013	.00535
Stddev	.00011	.14709	.00102	.00461	.00024	.00003
%RSD	1.0521	85.246	11.059	2.2963	2.3432	.63049
#1	.01057	.09772	.00843	.19596	.01036	.00531
#2	.01070	.07792	.00877	.20188	.00989	.00538
#3	.01047	.34202	.01033	.20505	.01014	.00535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1299	.00507	.05065	.00989	.02671	.09634
Stddev	.0188	.00004	.00010	.00027	.00056	.00706
%RSD	.36744	.80809	.19725	2.7307	2.1005	7.3242
#1	5.1144	.00511	.05066	.00959	.02607	.09235
#2	5.1246	.00507	.05075	.01011	.02693	.09219
#3	5.1509	.00503	.05055	.00996	.02712	.10449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 13:05:16 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1996	.04933	4.9999	.01511	.03970	5.2719
Stddev	.0616	.00041	.0705	.00010	.00027	.3618
%RSD	1.1844	.83317	1.4095	.67463	.67165	6.8627
#1	5.2536	.04966	4.9943	.01510	.03992	5.2282
#2	5.1325	.04887	4.9324	.01502	.03940	5.6535
#3	5.2127	.04947	5.0730	.01522	.03978	4.9339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2370	.04090	.29597	.00922	.01027	.05739
Stddev	.0392	.00013	.00075	.00170	.00022	.00098
%RSD	.74768	.31857	.25374	18.477	2.1830	1.7142
#1	5.2552	.04096	.29570	.00930	.01045	.05664
#2	5.1921	.04100	.29682	.01089	.01035	.05702
#3	5.2638	.04075	.29539	.00748	.01002	.05850
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 13:05:16 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01106	F 4.8811	.09904	.04971	.04896	.01099
Stddev	.00133	.1787	.00060	.00021	.00164	.00019
%RSD	12.040	3.6603	.60123	.41487	3.3533	1.7044
#1	.00971	4.6858	.09836	.04972	.04810	.01088
#2	.01111	4.9212	.09943	.04950	.04792	.01120
#3	.01237	5.0363	.09934	.04991	.05085	.01087
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02476	.02038
Stddev	.00037	.00003
%RSD	1.4824	.12825
#1	.02496	.02038
#2	.02498	.02041
#3	.02434	.02035
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 11/19/2023 13:05:16 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4886.7	83351.	9788.8
Stddev	13.0	248.	55.6
%RSD	.26613	.29770	.56755
#1	4871.7	83081.	9738.6
#2	4895.2	83569.	9779.2
#3	4893.1	83402.	9848.5

Sample Name: CCV Acquired: 11/19/2023 13:10:07 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98720	24.669	.49167	2.0117	2.0142	2.0530
Stddev	.00218	.049	.00219	.0042	.0015	.0159
%RSD	.22062	.20039	.44489	.20891	.07266	.77302
#1	.98769	24.689	.49099	2.0150	2.0155	2.0347
#2	.98482	24.704	.48989	2.0070	2.0126	2.0607
#3	.98909	24.612	.49411	2.0131	2.0144	2.0635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.622	.50361	1.9971	2.0295	1.9718	24.963
Stddev	.132	.00025	.0011	.0071	.0021	.013
%RSD	.26127	.04968	.05411	.34961	.10733	.05342
#1	50.764	.50381	1.9979	2.0298	1.9742	24.977
#2	50.601	.50370	1.9959	2.0365	1.9712	24.963
#3	50.502	.50333	1.9976	2.0223	1.9701	24.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 13:10:07 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.595	2.0433	50.352	2.0295	2.0300	49.281
Stddev	.021	.0027	.168	.0017	.0026	1.747
%RSD	.04074	.13425	.33312	.08217	.12726	3.5446
#1	50.618	2.0464	50.443	2.0295	2.0320	47.293
#2	50.590	2.0414	50.455	2.0312	2.0271	49.977
#3	50.578	2.0420	50.158	2.0278	2.0308	50.572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.481	2.0082	1.9660	.52017	.50388	.49122
Stddev	.100	.0006	.0081	.00108	.00224	.00021
%RSD	.19333	.03137	.41066	.20785	.44540	.04232
#1	51.580	2.0089	1.9606	.51955	.50600	.49134
#2	51.483	2.0076	1.9622	.52142	.50153	.49098
#3	51.381	2.0082	1.9753	.51954	.50412	.49133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 13:10:07 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49391	F 6.5819	1.9929	2.0009	2.0029	1.0171
Stddev	.00324	.0661	.0006	.0027	.0050	.0032
%RSD	.65525	1.0042	.02989	.13404	.24697	.31919
#1	.49446	6.6202	1.9934	2.0036	2.0050	1.0135
#2	.49043	6.6199	1.9923	1.9982	1.9972	1.0180
#3	.49683	6.5056	1.9931	2.0009	2.0063	1.0198
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9910	1.9707
Stddev	.0045	.0020
%RSD	.22493	.10041
#1	1.9902	1.9730
#2	1.9958	1.9696
#3	1.9869	1.9695
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 13:10:07 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4721.8	81868.	9604.0
Stddev	19.9	208.	198.0
%RSD	.42163	.25353	2.0618
#1	4701.2	81904.	9432.8
#2	4723.1	81644.	9558.4
#3	4741.0	82055.	9820.9

Sample Name: CCB Acquired: 11/19/2023 13:14:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	F -.08981	-.00073	.02462	.00033	-.00000
Stddev	.00013	.00664	.00045	.00152	.00028	.00001
%RSD	327.19	7.3907	62.042	6.1732	85.151	949.46
#1	-.00011	-.09745	-.00021	.02471	.00030	-.00000
#2	-.00012	-.08651	-.00098	.02306	.00006	-.00001
#3	.00011	-.08546	-.00099	.02610	.00062	.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000				
Low Limit		-.05000				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.05147	.00008	.00003	-.00003	.00089	-.00529
Stddev	.00182	.00008	.00009	.00024	.00037	.00090
%RSD	3.5438	94.921	343.33	857.50	41.059	17.019
#1	-.05171	.00015	.00005	.00007	.00053	-.00617
#2	-.05315	-.00000	.00010	.00015	.00126	-.00531
#3	-.04953	.00010	-.00008	-.00030	.00089	-.00437
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 13:14:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07087	-.00179	-.02173	.00002	-.00009	.15883
Stddev	.00458	.00094	.00304	.00002	.00017	.18249
%RSD	6.4598	52.402	13.979	105.14	183.24	114.89
#1	.06590	-.00133	-.02489	.00004	-.00020	-.02255
#2	.07180	-.00117	-.01883	.00000	.00011	.34240
#3	.07491	-.00287	-.02146	.00001	-.00019	.15664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01172	.00000	-.00220	.00018	-.00030	.00029
Stddev	.01398	.00009	.00086	.00169	.00015	.00070
%RSD	119.29	2491.6	38.907	963.16	47.711	240.57
#1	-.02781	.00011	-.00135	.00169	-.00031	.00097
#2	-.00265	-.00006	-.00220	-.00164	-.00016	-.00043
#3	-.00469	-.00004	-.00306	.00047	-.00045	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 11/19/2023 13:14:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00102	F 4.2249	-.00014	-.00022	-.00077	-.00062
Stddev	.00058	.0514	.00032	.00009	.00079	.00194
%RSD	56.884	1.2171	229.31	40.445	102.70	313.76
#1	.00036	4.2143	.00019	-.00015	-.00145	-.00286
#2	.00126	4.1797	-.00015	-.00018	-.00096	.00047
#3	.00145	4.2809	-.00045	-.00032	.00010	.00053
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00031	-.00003
Stddev	.00024	.00005
%RSD	76.664	165.29
#1	-.00056	.00001
#2	-.00028	-.00002
#3	-.00009	-.00009
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: CCB Acquired: 11/19/2023 13:14:52 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4895.9	83135.	9563.9
Stddev	19.9	635.	109.5
%RSD	.40745	.76352	1.1449
#1	4880.1	82653.	9491.4
#2	4889.4	82897.	9689.8
#3	4918.3	83854.	9510.4

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 13:31:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00490	.00157	1.3925	.00667	-.00002
Stddev	.00044	.02412	.00129	.0047	.00015	.00001
%RSD	90.000	491.90	82.142	.34073	2.1842	54.048
#1	.00090	.02258	.00024	1.3881	.00672	-.00003
#2	.00054	-.02258	.00281	1.3920	.00679	-.00003
#3	.00003	.01471	.00165	1.3975	.00651	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.81632	.00009	.00008	.00590	.00858	.26466
Stddev	.00150	.00011	.00014	.00023	.00030	.00247
%RSD	.18370	126.49	170.24	3.8551	3.5231	.93422
#1	.81788	.00021	.00023	.00590	.00872	.26235
#2	.81489	.00002	.00008	.00568	.00824	.26727
#3	.81618	.00002	-.00006	.00613	.00879	.26436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 13:31:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.41387	-.00109	.07283	.01673	.00056	.75865
Stddev	.02410	.00089	.00804	.00002	.00018	.58191
%RSD	5.8241	81.614	11.037	.11276	32.683	76.703
#1	.43159	-.00128	.07263	.01671	.00038	1.1533
#2	.42359	-.00012	.06489	.01675	.00055	1.0323
#3	.38642	-.00187	.08096	.01674	.00075	.09036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.4449	.00413	.15327	.00271	.00385	.00341
Stddev	.0095	.00020	.00239	.00148	.00044	.00077
%RSD	.65752	4.8925	1.5586	54.643	11.360	22.530
#1	1.4372	.00433	.15327	.00422	.00380	.00416
#2	1.4420	.00413	.15565	.00263	.00345	.00343
#3	1.4555	.00393	.15088	.00127	.00432	.00263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 13:31:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00279	5.9516	.11521	.00101	.00368	-.00118
Stddev	.00155	.4116	.00037	.00005	.00102	.00242
%RSD	55.576	6.9166	.31999	4.4813	27.795	204.55
#1	.00426	5.4900	.11480	.00097	.00272	-.00034
#2	.00117	6.0842	.11552	.00100	.00475	-.00391
#3	.00296	6.2806	.11530	.00106	.00356	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.00004	.03728
Stddev	.00024	.00013
%RSD	666.21	.33956
#1	-.00020	.03716
#2	.00002	.03741
#3	.00028	.03725
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-2-a Acquired: 11/19/2023 13:31:55 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4757.0	81881.	9386.1
Stddev	43.4	413.	148.0
%RSD	.91166	.50442	1.5770
#1	4712.4	81442.	9360.5
#2	4759.7	81941.	9252.6
#3	4799.0	82262.	9545.3

Sample Name: 140-34237-a-1-a @2 Acquired: 11/19/2023 13:36:49 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00024	.38395	.02782	F 67.962	.02502	.00009
Stddev	.00003	.00680	.00044	.441	.00013	.00016
%RSD	14.759	1.7706	1.5929	.64899	.51045	177.06
#1	-.00026	.39158	.02812	67.668	.02487	.00001
#2	-.00020	.37855	.02803	68.469	.02507	-.00001
#3	-.00025	.38171	.02731	67.749	.02511	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4506	.00130	.00953	.02648	.02046	8.4811
Stddev	.0227	.00005	.00029	.00116	.00026	.0243
%RSD	.50966	4.0550	2.9972	4.3745	1.2746	.28669
#1	4.4768	.00124	.00959	.02631	.02041	8.4999
#2	4.4374	.00132	.00922	.02772	.02074	8.4898
#3	4.4377	.00133	.00979	.02542	.02023	8.4537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a @2 Acquired: 11/19/2023 13:36:49 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.32824	.01384	.10819	.05836	.07051	.84971
Stddev	.02520	.00197	.00051	.00023	.00008	.53778
%RSD	7.6779	14.246	.47473	.38894	.11100	63.290
#1	.34520	.01337	.10789	.05826	.07054	.57186
#2	.29928	.01214	.10790	.05861	.07057	1.4696
#3	.34024	.01600	.10878	.05819	.07042	.50769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.70107	.02608	.06843	.02162	.02272	.01047
Stddev	.00683	.00021	.00254	.00198	.00149	.00036
%RSD	.97490	.79247	3.7130	9.1622	6.5766	3.4233
#1	.69403	.02586	.06799	.02148	.02219	.01087
#2	.70768	.02626	.06614	.02366	.02441	.01036
#3	.70150	.02612	.07116	.01971	.02156	.01018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34237-a-1-a @2 Acquired: 11/19/2023 13:36:49 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00237	849.60	.02161	.00462	.02004	.00034
Stddev	.00169	2.52	.00029	.00003	.00056	.00169
%RSD	71.034	.29642	1.3548	.66130	2.7749	501.36
#1	.00293	851.59	.02183	.00466	.02066	-.00160
#2	.00371	850.45	.02172	.00460	.01987	.00111
#3	.00048	846.77	.02128	.00461	.01959	.00151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00017	.06261
Stddev	.00010	.00010
%RSD	58.456	.15295
#1	-.00029	.06272
#2	-.00010	.06255
#3	-.00013	.06257
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34237-a-1-a @2 Acquired: 11/19/2023 13:36:49 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4909.7	83436.	9737.4
Stddev	26.2	262.	123.1
%RSD	.53455	.31356	1.2643
#1	4887.6	83176.	9700.3
#2	4903.0	83434.	9637.1
#3	4938.7	83699.	9874.8

Sample Name: 34237-a-1-a PDS@2 Acquired: 11/19/2023 13:41:48 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04817	2.2463	.12165	F 67.547	.12178	.04963
Stddev	.00118	.0800	.00266	.366	.00259	.00127
%RSD	2.4490	3.5631	2.1859	.54148	2.1270	2.5662
#1	.04721	2.1726	.11941	67.769	.11887	.04827
#2	.04781	2.2349	.12096	67.746	.12266	.04983
#3	.04949	2.3314	.12459	67.125	.12382	.05080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.782	.05030	.10829	.22472	.26354	9.2015
Stddev	1.070	.00135	.00286	.00726	.00631	.0298
%RSD	1.9900	2.6804	2.6371	3.2316	2.3960	.32360
#1	52.592	.04898	.10548	.21816	.25697	9.1685
#2	54.092	.05025	.10821	.22348	.26409	9.2095
#3	54.664	.05168	.11119	.23253	.26957	9.2264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34237-a-1-a PDS@2 Acquired: 11/19/2023 13:41:48 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.237	.11301	9.9060	.15577	.56353	49.569
Stddev	1.221	.00283	.1949	.00237	.01438	1.967
%RSD	2.4802	2.5021	1.9677	1.5212	2.5509	3.9685
#1	47.942	.11011	9.7044	.15326	.54937	47.385
#2	49.403	.11317	9.9199	.15611	.56310	51.203
#3	50.367	.11576	10.094	.15796	.57811	50.118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.747	.52009	4.9173	.11637	.11302	.48933
Stddev	1.089	.01340	.1607	.00131	.00260	.01527
%RSD	2.1464	2.5758	3.2686	1.1272	2.2966	3.1215
#1	49.578	.50671	4.7612	.11510	.11046	.47392
#2	50.929	.52007	4.9084	.11630	.11295	.48960
#3	51.734	.53350	5.0823	.11772	.11565	.50446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34237-a-1-a PDS@2 Acquired: 11/19/2023 13:41:48 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.13938	835.25	.49598	.48464	.12207	.38476
Stddev	.00449	.79	.01471	.01389	.00374	.00970
%RSD	3.2233	.09404	2.9661	2.8661	3.0626	2.5201
#1	.13515	834.92	.48157	.46970	.11775	.37361
#2	.13891	836.15	.49539	.48704	.12409	.38949
#3	.14409	834.69	.51098	.49717	.12435	.39119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19386	.54222
Stddev	.00521	.01364
%RSD	2.6894	2.5156
#1	.18841	.52848
#2	.19437	.54241
#3	.19880	.55576
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 34237-a-1-a PDS@2 Acquired: 11/19/2023 13:41:48 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4848.0	83046.	9590.3
Stddev	21.9	547.	4.9
%RSD	.45096	.65869	.05099
#1	4825.5	82436.	9595.5
#2	4849.3	83207.	9585.8
#3	4869.1	83494.	9589.5

Sample Name: 34237-a-1-a PDSD@2 Acquired: 11/19/2023 13:46:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04794	2.2356	.12078	F 66.958	.12016	.04901
Stddev	.00163	.0547	.00323	.502	.00277	.00133
%RSD	3.3988	2.4461	2.6723	.74987	2.3080	2.7089
#1	.04634	2.1762	.11729	66.417	.11735	.04776
#2	.04786	2.2465	.12139	67.409	.12025	.04887
#3	.04960	2.2840	.12366	67.048	.12289	.05041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	53.689	.04969	.10723	.22203	.26141	9.1720
Stddev	.671	.00148	.00305	.00528	.00774	.0435
%RSD	1.2503	2.9716	2.8432	2.3782	2.9605	.47428
#1	52.998	.04837	.10460	.21666	.25372	9.1275
#2	53.731	.04940	.10653	.22223	.26130	9.2145
#3	54.339	.05129	.11057	.22721	.26920	9.1740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34237-a-1-a PDSD@2 Acquired: 11/19/2023 13:46:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.825	.11270	9.8799	.15428	.56100	50.138
Stddev	.835	.00371	.1747	.00241	.01587	.560
%RSD	1.6762	3.2915	1.7682	1.5641	2.8283	1.1175
#1	48.884	.10864	9.6842	.15182	.54707	50.011
#2	50.114	.11357	9.9353	.15438	.55766	49.651
#3	50.477	.11591	10.020	.15664	.57827	50.750
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.131	.51446	4.9078	.11615	.11389	.48587
Stddev	.743	.01457	.1527	.00497	.00365	.01525
%RSD	1.4537	2.8328	3.1118	4.2784	3.2060	3.1385
#1	50.299	.50171	4.7713	.11043	.11138	.47300
#2	51.363	.51131	4.8794	.11861	.11221	.48190
#3	51.730	.53035	5.0728	.11942	.11808	.50271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34237-a-1-a PDSD@2 Acquired: 11/19/2023 13:46:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14023	829.99	.49298	.47994	.11972	.37836
Stddev	.00272	3.31	.01558	.01176	.00167	.01427
%RSD	1.9379	.39919	3.1604	2.4499	1.3961	3.7714
#1	.13744	827.73	.47914	.46732	.11779	.36484
#2	.14038	833.79	.48996	.48189	.12067	.37697
#3	.14287	828.44	.50985	.49059	.12070	.39327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19172	.53704
Stddev	.00498	.01479
%RSD	2.5978	2.7536
#1	.18705	.52386
#2	.19115	.53424
#3	.19696	.55303
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 34237-a-1-a PDSD@2 Acquired: 11/19/2023 13:46:38 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4898.6	84097.	9853.4
Stddev	9.6	278.	30.3
%RSD	.19654	.33038	.30772
#1	4889.5	84360.	9869.2
#2	4908.6	83806.	9818.5
#3	4897.7	84125.	9872.6

Sample Name: 140-34307-a-1-a @2 Acquired: 11/19/2023 13:51:27 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.25691	.00446	F 67.903	.01729	.00001
Stddev	.00045	.00857	.00039	.847	.00030	.00001
%RSD	440.30	3.3372	8.6472	1.2475	1.7423	132.30
#1	-.00049	.26674	.00410	66.966	.01701	.00003
#2	-.00021	.25307	.00487	68.614	.01761	.00000
#3	.00039	.25094	.00443	68.131	.01725	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26337	.00084	.00001	.01436	.03083	.17925
Stddev	.00229	.00005	.00025	.00044	.00027	.00152
%RSD	.86862	5.9569	1750.2	3.0378	.86340	.84984
#1	.26303	.00087	.00029	.01431	.03112	.17755
#2	.26127	.00088	-.00003	.01482	.03059	.18048
#3	.26580	.00079	-.00022	.01395	.03079	.17971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-1-a @2 Acquired: 11/19/2023 13:51:27 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.28972	-.00057	.06356	.01548	.03879	2.7936
Stddev	.00745	.00107	.00352	.00004	.00020	.5605
%RSD	2.5714	187.54	5.5442	.26980	.52339	20.065
#1	.28270	-.00034	.06107	.01543	.03883	2.3315
#2	.29753	-.00173	.06759	.01550	.03857	2.6323
#3	.28892	.00037	.06202	.01550	.03897	3.4172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.2695	.00944	.00112	.00290	.00757	.00711
Stddev	.0329	.00023	.00093	.00037	.00049	.00041
%RSD	1.0071	2.4796	83.070	12.870	6.4987	5.7239
#1	3.2330	.00918	.00208	.00323	.00701	.00694
#2	3.2969	.00963	.00108	.00298	.00777	.00757
#3	3.2786	.00952	.00021	.00249	.00794	.00682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-1-a @2 Acquired: 11/19/2023 13:51:27 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00249	715.53	.00002	.00186	.00501	-.00162
Stddev	.00257	4.99	.00086	.00010	.00039	.00267
%RSD	103.03	.69779	5077.9	5.1668	7.7095	165.07
#1	.00437	710.28	.00097	.00197	.00485	-.00200
#2	-.00044	720.22	-.00020	.00178	.00472	.00122
#3	.00355	716.07	-.00072	.00183	.00544	-.00408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00031	.02088
Stddev	.00005	.00012
%RSD	15.801	.59362
#1	-.00028	.02096
#2	-.00037	.02074
#3	-.00029	.02095
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-1-a @2 Acquired: 11/19/2023 13:51:27 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4967.3	84897.	9851.2
Stddev	22.3	589.	58.3
%RSD	.44836	.69410	.59198
#1	4947.3	84224.	9918.5
#2	4963.2	85143.	9818.9
#3	4991.3	85323.	9816.1

Sample Name: 140-34307-a-6-a @2 Acquired: 11/19/2023 13:56:30 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	.24963	.00437	F 68.370	.01591	.00001
Stddev	.00048	.01730	.00047	1.000	.00033	.00001
%RSD	1297.5	6.9289	10.664	1.4634	2.0837	96.837
#1	-.00052	.23097	.00486	68.321	.01558	-.00000
#2	.00027	.25281	.00433	67.395	.01592	.00001
#3	.00036	.26512	.00393	69.394	.01624	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31878	.00051	-.00003	.02084	.02654	.23942
Stddev	.00534	.00006	.00003	.00030	.00039	.00350
%RSD	1.6739	11.989	102.75	1.4213	1.4670	1.4599
#1	.31694	.00057	-.00004	.02056	.02618	.23539
#2	.31460	.00044	.00000	.02082	.02649	.24119
#3	.32479	.00051	-.00006	.02115	.02696	.24167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a @2 Acquired: 11/19/2023 13:56:30 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.24795	-.00169	.06230	.02323	.03999	3.5340
Stddev	.01634	.00102	.00636	.00036	.00083	.5231
%RSD	6.5895	60.392	10.203	1.5561	2.0643	14.802
#1	.24106	-.00261	.05534	.02291	.03915	4.0664
#2	.26660	-.00059	.06780	.02315	.04001	3.5150
#3	.23618	-.00186	.06375	.02362	.04080	3.0207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.4057	.01250	-.00585	.00616	.00763	.00786
Stddev	.0619	.00026	.00106	.00083	.00046	.00068
%RSD	1.8168	2.0522	18.042	13.492	6.0917	8.7074
#1	3.3778	.01221	-.00530	.00521	.00804	.00865
#2	3.3627	.01270	-.00519	.00652	.00772	.00749
#3	3.4766	.01258	-.00707	.00675	.00713	.00745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-6-a @2 Acquired: 11/19/2023 13:56:30 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00227	724.54	-.00067	.00176	.00627	-.00193
Stddev	.00326	11.09	.00023	.00011	.00058	.00150
%RSD	143.49	1.5304	33.587	6.1068	9.1976	77.536
#1	.00210	718.74	-.00055	.00164	.00637	-.00152
#2	-.00090	717.57	-.00053	.00178	.00566	-.00359
#3	.00561	737.33	-.00094	.00186	.00680	-.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00056	.02763
Stddev	.00038	.00039
%RSD	68.596	1.4077
#1	-.00034	.02726
#2	-.00033	.02760
#3	-.00100	.02803
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-6-a @2 Acquired: 11/19/2023 13:56:30 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML (A)

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4854.6	83695.	9748.0
Stddev	34.4	844.	114.7
%RSD	.70928	1.0090	1.1768
#1	4893.5	83444.	9676.7
#2	4842.3	84636.	9880.4
#3	4828.0	83004.	9687.1

Sample Name: 34307-a-6-a PDS@2 Acquired: 11/19/2023 14:01:33 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04816	2.1285	.09676	F 67.590	.11223	.04997
Stddev	.00193	.0739	.00488	.521	.00304	.00204
%RSD	3.9990	3.4717	5.0381	.77106	2.7090	4.0792
#1	.04655	2.0568	.09379	67.627	.10943	.04801
#2	.04765	2.1244	.09411	68.092	.11181	.04984
#3	.05029	2.2044	.10239	67.052	.11546	.05208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.074	.04943	.09922	.21659	.26808	1.2245
Stddev	1.338	.00187	.00357	.00616	.00839	.0340
%RSD	2.6721	3.7798	3.6020	2.8446	3.1294	2.7786
#1	48.779	.04767	.09585	.21013	.26005	1.1891
#2	49.992	.04923	.09884	.21722	.26740	1.2273
#3	51.451	.05139	.10296	.22240	.27679	1.2570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a PDS@2 Acquired: 11/19/2023 14:01:33 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.634	.09961	10.021	.12279	.53620	52.324
Stddev	1.601	.00517	.320	.00390	.01722	1.676
%RSD	3.1625	5.1929	3.1969	3.1740	3.2124	3.2041
#1	49.099	.09461	9.7036	.11902	.52085	51.029
#2	50.508	.09928	10.016	.12253	.53292	51.726
#3	52.294	.10494	10.344	.12681	.55483	54.218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	54.550	.50721	4.9115	.10021	.09971	.48978
Stddev	1.595	.01764	.1683	.00215	.00282	.01652
%RSD	2.9235	3.4773	3.4274	2.1501	2.8311	3.3733
#1	53.052	.49107	4.7480	.09911	.09652	.47580
#2	54.371	.50453	4.9021	.09883	.10072	.48552
#3	56.226	.52604	5.0843	.10269	.10189	.50801
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a PDS@2 Acquired: 11/19/2023 14:01:33 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14296	712.31	.47603	.48277	.10770	.38240
Stddev	.00465	1.68	.01623	.01702	.00301	.01419
%RSD	3.2547	.23551	3.4098	3.5258	2.7993	3.7105
#1	.13868	712.17	.46102	.46675	.10484	.36995
#2	.14229	714.06	.47380	.48092	.10742	.37940
#3	.14792	710.71	.49326	.50064	.11085	.39785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.19199	.50972
Stddev	.00621	.01763
%RSD	3.2360	3.4581
#1	.18594	.49292
#2	.19167	.50817
#3	.19836	.52807
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 34307-a-6-a PDS@2 Acquired: 11/19/2023 14:01:33 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4830.1	83360.	9779.9
Stddev	14.6	824.	123.3
%RSD	.30149	.98803	1.2603
#1	4819.7	82769.	9637.9
#2	4823.8	83011.	9843.4
#3	4846.7	84301.	9858.5

Sample Name: 34307-a-6-a PDSD@2 Acquired: 11/19/2023 14:06:20 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04993	2.2529	.10271	F 67.602	.11796	.05153
Stddev	.00180	.0485	.00303	.734	.00220	.00184
%RSD	3.5975	2.1514	2.9501	1.0858	1.8673	3.5714
#1	.04805	2.2799	.09959	67.944	.11861	.04988
#2	.05009	2.1969	.10288	66.760	.11551	.05121
#3	.05164	2.2819	.10564	68.104	.11976	.05351
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.374	.05133	.10337	.22549	.27755	1.2710
Stddev	.885	.00196	.00344	.00758	.00996	.0232
%RSD	1.7226	3.8132	3.3266	3.3603	3.5875	1.8273
#1	51.893	.04935	.09988	.21924	.26875	1.2816
#2	50.352	.05139	.10348	.22331	.27554	1.2444
#3	51.877	.05326	.10676	.23392	.28835	1.2870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a PDSD@2 Acquired: 11/19/2023 14:06:20 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.525	.10426	10.229	.12627	.55417	54.266
Stddev	.844	.00262	.168	.00373	.02344	1.198
%RSD	1.6384	2.5119	1.6453	2.9533	4.2302	2.2078
#1	51.812	.10354	10.322	.12326	.53076	55.182
#2	50.575	.10207	10.035	.12510	.55411	52.910
#3	52.188	.10716	10.331	.13044	.57764	54.706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	55.501	.52680	5.0857	.10292	.10378	.50555
Stddev	.913	.01831	.2344	.00448	.00410	.02251
%RSD	1.6451	3.4758	4.6089	4.3556	3.9531	4.4533
#1	56.034	.50835	4.8442	.09873	.09998	.48216
#2	54.447	.52707	5.1005	.10238	.10323	.50741
#3	56.022	.54497	5.3122	.10764	.10813	.52707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a PDSD@2 Acquired: 11/19/2023 14:06:20 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14845	723.55	.49259	.50825	.11344	.39946
Stddev	.00584	19.07	.02377	.01049	.00360	.01543
%RSD	3.9353	2.6355	4.8254	2.0645	3.1762	3.8638
#1	.14220	745.56	.46856	.50798	.11227	.38326
#2	.14938	712.24	.49310	.49789	.11058	.40110
#3	.15377	712.84	.51609	.51887	.11749	.41400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.20045	.52861
Stddev	.00709	.01837
%RSD	3.5360	3.4748
#1	.19409	.50984
#2	.19916	.52943
#3	.20809	.54655
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 34307-a-6-a PDSD@2 Acquired: 11/19/2023 14:06:20 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4824.9	83066.	9593.4
Stddev	16.9	905.	207.3
%RSD	.35103	1.0897	2.1611
#1	4843.5	82415.	9361.7
#2	4820.7	84099.	9761.3
#3	4810.4	82683.	9657.1

Sample Name: 140-34307-a-11-a @2 Acquired: 11/19/2023 14:11:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.58128	.00378	F 69.040	.01616	-.00000
Stddev	.00063	.48674	.00044	3.316	.00003	.00001
%RSD	2118.9	83.735	11.519	4.8023	.16444	426.67
#1	.00021	1.1432	.00361	65.505	.01615	-.00001
#2	.00044	.31169	.00346	69.533	.01618	-.00001
#3	-.00074	.28900	.00428	72.080	.01613	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.26730	.00039	-.00008	.01462	.02006	.18507
Stddev	.03376	.00002	.00022	.00088	.00123	.01715
%RSD	12.631	4.6158	293.87	6.0043	6.1317	9.2652
#1	.30623	.00041	-.00033	.01370	.01871	.20441
#2	.24958	.00039	.00007	.01469	.02036	.17173
#3	.24608	.00037	.00004	.01545	.02112	.17906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-11-a @2 Acquired: 11/19/2023 14:11:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.30284	-.00079	.15093	.02046	.03970	3.1443
Stddev	.04582	.00267	.16399	.00128	.00013	.6063
%RSD	15.130	339.08	108.66	6.2546	.31806	19.284
#1	.34778	.00229	.34028	.01898	.03967	3.5772
#2	.25618	-.00250	.05440	.02129	.03983	3.4044
#3	.30456	-.00216	.05811	.02109	.03958	2.4513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.3864	.00823	-.01008	.00341	.00615	.00721
Stddev	.0496	.00010	.00080	.00144	.00079	.00055
%RSD	1.4650	1.2037	7.8966	42.075	12.844	7.6148
#1	3.4411	.00826	-.01100	.00495	.00620	.00746
#2	3.3443	.00813	-.00956	.00319	.00691	.00760
#3	3.3739	.00832	-.00969	.00210	.00533	.00658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-11-a @2 Acquired: 11/19/2023 14:11:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00308	738.93	-.00125	.00164	.00657	-.00228
Stddev	.00108	7.80	.00054	.00013	.00246	.00064
%RSD	35.231	1.0549	43.090	7.9142	37.436	27.953
#1	.00316	730.20	-.00156	.00178	.00905	-.00181
#2	.00412	741.41	-.00157	.00161	.00651	-.00203
#3	.00196	745.19	-.00063	.00152	.00414	-.00301
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00028	.01566
Stddev	.00003	.00010
%RSD	11.641	.61703
#1	-.00030	.01577
#2	-.00025	.01559
#3	-.00031	.01562
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-11-a @2 Acquired: 11/19/2023 14:11:07 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4863.3	85283.	9623.4
Stddev	25.0	3552.	96.1
%RSD	.51474	4.1648	.99869
#1	4837.7	89375.	9700.9
#2	4864.5	83473.	9515.9
#3	4887.7	83000.	9653.6

Sample Name: 34307-a-6-a SD@10 Acquired: 11/19/2023 14:16:08 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00022	-.02783	.00233	14.139	.00341	-.00002
Stddev	.00046	.01399	.00104	.031	.00010	.00002
%RSD	208.20	50.264	44.857	.21735	3.0777	142.17
#1	.00028	-.02193	.00130	14.140	.00347	-.00000
#2	.00066	-.01776	.00230	14.108	.00347	-.00004
#3	-.00027	-.04380	.00339	14.169	.00329	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03323	.00017	-.00009	.00407	.00610	.04504
Stddev	.00149	.00003	.00009	.00017	.00042	.00168
%RSD	4.4935	19.257	106.83	4.1151	6.8800	3.7249
#1	.03157	.00015	-.00017	.00399	.00593	.04360
#2	.03364	.00020	-.00011	.00396	.00658	.04688
#3	.03447	.00015	.00002	.00426	.00579	.04463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a SD@10 Acquired: 11/19/2023 14:16:08 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06311	-.00113	-.00272	.00468	.00774	.42373
Stddev	.02099	.00088	.01567	.00005	.00028	.53936
%RSD	33.261	77.872	577.12	1.1311	3.6200	127.29
#1	.03900	-.00215	-.01808	.00462	.00791	.86028
#2	.07304	-.00060	.01325	.00471	.00741	.59014
#3	.07729	-.00064	-.00332	.00471	.00789	-.17922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.68976	.00258	-.00069	-.00061	.00001	.00279
Stddev	.00802	.00024	.00007	.00114	.00054	.00117
%RSD	1.1630	9.3033	10.841	188.80	3694.4	41.903
#1	.68050	.00283	-.00068	-.00000	.00051	.00170
#2	.69464	.00255	-.00062	-.00193	-.00056	.00402
#3	.69413	.00235	-.00077	.00011	.00009	.00265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 34307-a-6-a SD@10 Acquired: 11/19/2023 14:16:08 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00158	148.89	-.00052	.00027	.00030	-.00035
Stddev	.00019	.42	.00029	.00009	.00138	.00099
%RSD	11.876	.28234	56.124	31.768	456.46	280.51
#1	.00156	148.50	-.00071	.00022	.00140	-.00130
#2	.00139	149.33	-.00067	.00022	.00076	-.00044
#3	.00177	148.84	-.00018	.00037	-.00125	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00034	.00550
Stddev	.00047	.00005
%RSD	140.86	.95280
#1	-.00008	.00548
#2	-.00004	.00546
#3	-.00089	.00556
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 34307-a-6-a SD@10 Acquired: 11/19/2023 14:16:08 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 2ML (A) TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4858.8	82714.	9515.1
Stddev	6.0	891.	172.9
%RSD	.12414	1.0770	1.8170
#1	4853.4	82735.	9354.7
#2	4857.6	81813.	9492.2
#3	4865.3	83595.	9698.2

Sample Name: CCV Acquired: 11/19/2023 14:21:03 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98797	24.934	.49146	2.0160	2.0025	2.0786
Stddev	.00356	.281	.00175	.0133	.0090	.0062
%RSD	.36017	1.1257	.35693	.66010	.44905	.29908
#1	.98425	24.663	.49052	2.0037	1.9997	2.0856
#2	.98833	24.917	.49038	2.0141	1.9953	2.0766
#3	.99134	25.223	.49348	2.0302	2.0126	2.0736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.013	.50678	2.0048	2.0360	1.9541	25.170
Stddev	.194	.00188	.0092	.0072	.0044	.221
%RSD	.37940	.37140	.46048	.35367	.22393	.87973
#1	50.848	.50535	1.9983	2.0290	1.9518	24.991
#2	50.964	.50608	2.0007	2.0434	1.9513	25.101
#3	51.226	.50891	2.0154	2.0355	1.9591	25.418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 14:21:03 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.672	2.0697	51.299	2.0470	2.0319	49.812
Stddev	.422	.0122	.469	.0090	.0077	1.113
%RSD	.81580	.58811	.91460	.44008	.37838	2.2337
#1	51.375	2.0624	50.768	2.0366	2.0278	49.171
#2	51.487	2.0630	51.475	2.0510	2.0271	49.168
#3	52.154	2.0838	51.655	2.0532	2.0408	51.097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.104	2.0179	1.9717	.52612	.50785	.48979
Stddev	.308	.0088	.0134	.00212	.00141	.00286
%RSD	.59208	.43688	.67713	.40361	.27773	.58296
#1	51.908	2.0113	1.9679	.52412	.50625	.48869
#2	51.945	2.0147	1.9607	.52588	.50841	.48765
#3	52.460	2.0279	1.9866	.52835	.50890	.49304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 14:21:03 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49457	F 8.0624	2.0025	1.9915	2.0009	1.0183
Stddev	.00315	.1929	.0126	.0130	.0051	.0047
%RSD	.63781	2.3926	.62940	.65005	.25382	.46647
#1	.49193	7.8401	1.9949	1.9849	1.9961	1.0142
#2	.49371	8.1857	1.9956	1.9832	2.0003	1.0172
#3	.49806	8.1614	2.0171	2.0064	2.0062	1.0235
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9906	1.9764
Stddev	.0055	.0102
%RSD	.27675	.51777
#1	1.9865	1.9691
#2	1.9968	1.9720
#3	1.9883	1.9881
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 14:21:03 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4669.3	80272.	9246.3
Stddev	9.5	213.	66.2
%RSD	.20305	.26542	.71566
#1	4670.7	80153.	9314.5
#2	4659.2	80145.	9182.4
#3	4678.0	80518.	9242.0

Sample Name: CCB Acquired: 11/19/2023 14:25:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	F -.11671	.00041	.02060	.00037	-.00001
Stddev	.00081	.00713	.00042	.00214	.00031	.00000
%RSD	315.79	6.1126	103.46	10.378	82.916	49.465
#1	.00078	-.12489	.00073	.01931	.00055	-.00001
#2	-.00068	-.11350	-.00007	.01942	.00055	-.00000
#3	.00067	-.11175	.00057	.02307	.00002	-.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000				
Low Limit		-.05000				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.05091	.00003	-.00013	-.00048	.00090	-.00592
Stddev	.00083	.00003	.00010	.00015	.00036	.00061
%RSD	1.6359	89.867	81.454	30.680	39.499	10.374
#1	-.05183	.00006	-.00020	-.00046	.00094	-.00538
#2	-.05069	.00000	-.00001	-.00034	.00124	-.00659
#3	-.05021	.00003	-.00017	-.00063	.00053	-.00580
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 14:25:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10666	-.00196	-.01114	.00008	-.00010	F -.36804
Stddev	.01644	.00065	.01305	.00001	.00007	.82414
%RSD	15.409	33.200	117.15	14.716	72.250	223.93
#1	.12153	-.00168	-.02582	.00007	-.00014	.37609
#2	.10944	-.00270	-.00672	.00009	-.00016	-1.2538
#3	.08901	-.00150	-.00087	.00008	-.00002	-.22639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00405	-.00007	-.00021	-.00012	-.00019	.00078
Stddev	.00126	.00010	.00078	.00137	.00040	.00103
%RSD	31.038	144.04	369.05	1186.6	209.86	131.74
#1	-.00544	-.00010	-.00102	-.00080	-.00020	.00156
#2	-.00301	.00004	-.00014	-.00101	.00022	-.00039
#3	-.00368	-.00014	.00053	.00146	-.00058	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 11/19/2023 14:25:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00189	F 4.9214	-.00053	-.00029	-.00104	.00212
Stddev	.00123	.1324	.00024	.00008	.00061	.00041
%RSD	65.152	2.6910	44.470	29.583	58.959	19.364
#1	.00170	5.0742	-.00039	-.00033	-.00050	.00173
#2	.00321	4.8490	-.00081	-.00019	-.00091	.00208
#3	.00077	4.8408	-.00040	-.00034	-.00170	.00255
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	F -.00060	.00011
Stddev	.00010	.00005
%RSD	16.095	47.186
#1	-.00054	.00013
#2	-.00056	.00005
#3	-.00071	.00015
Check ?	Chk Fail	Chk Pass
High Limit	.00055	
Low Limit	-.00055	

Sample Name: CCB Acquired: 11/19/2023 14:25:47 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4851.6	82590.	9498.7
Stddev	22.6	544.	53.7
%RSD	.46508	.65854	.56576
#1	4830.6	81980.	9444.4
#2	4848.9	83024.	9551.8
#3	4875.5	82767.	9500.0

Sample Name: 140-34307-a-16-a @2 Acquired: 11/19/2023 14:30:45 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00032	.20022	.00213	F 68.195	.01345	.00001
Stddev	.00012	.00821	.00043	.816	.00008	.00001
%RSD	38.328	4.1027	20.397	1.1964	.57263	110.70
#1	-.00044	.19761	.00224	68.645	.01352	.00002
#2	-.00032	.19363	.00165	68.688	.01337	-.00000
#3	-.00020	.20943	.00250	67.253	.01346	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				40.000		
Low Limit				-40.000		

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07385	.00012	-.00037	.00705	.00106	.05382
Stddev	.00233	.00006	.00013	.00017	.00020	.00240
%RSD	3.1548	56.117	36.325	2.4425	18.683	4.4654
#1	.07417	.00011	-.00050	.00708	.00102	.05441
#2	.07601	.00018	-.00024	.00686	.00128	.05117
#3	.07138	.00005	-.00037	.00720	.00089	.05587
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-16-a @2 Acquired: 11/19/2023 14:30:45 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.12539	-.00119	.02443	.00264	.03787	-.36159
Stddev	.03348	.00230	.01257	.00004	.00018	1.1129
%RSD	26.703	192.91	51.465	1.5806	.48476	307.79
#1	.08692	.00143	.01448	.00259	.03806	.53715
#2	.14793	-.00288	.02024	.00265	.03785	-1.6065
#3	.14133	-.00213	.03856	.00267	.03769	-.01547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09401	.00064	-.01751	-.00160	.00082	.00762
Stddev	.00062	.00029	.00224	.00529	.00021	.00087
%RSD	.65783	46.146	12.815	330.02	25.462	11.443
#1	.09368	.00030	-.01857	-.00662	.00105	.00732
#2	.09362	.00077	-.01493	-.00213	.00064	.00694
#3	.09472	.00085	-.01902	.00393	.00078	.00861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: 140-34307-a-16-a @2 Acquired: 11/19/2023 14:30:45 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00019	670.96	-.00214	.00102	.00284	-.00007
Stddev	.00098	5.66	.00045	.00011	.00049	.00092
%RSD	512.90	.84386	20.837	10.376	17.411	1295.7
#1	.00122	665.56	-.00225	.00104	.00304	-.00111
#2	.00008	670.47	-.00252	.00112	.00228	.00061
#3	-.00073	676.85	-.00165	.00091	.00320	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	-.00056	.00876
Stddev	.00021	.00004
%RSD	37.783	.44274
#1	-.00063	.00873
#2	-.00073	.00880
#3	-.00032	.00874
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Sample Name: 140-34307-a-16-a @2 Acquired: 11/19/2023 14:30:45 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment: 5ML TO 10ML

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4935.7	84226.	9628.1
Stddev	10.4	540.	129.7
%RSD	.21036	.64089	1.3468
#1	4937.8	83813.	9650.5
#2	4924.4	84029.	9745.1
#3	4944.9	84837.	9488.7

Sample Name: CRI Acquired: 11/19/2023 14:35:50 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00970	.10278	.00937	.19738	.01020	.00534
Stddev	.00024	.01785	.00074	.00228	.00003	.00001
%RSD	2.5101	17.368	7.8623	1.1562	.28998	.19062
#1	.00942	.08251	.01020	.19484	.01018	.00533
#2	.00986	.11617	.00878	.19805	.01024	.00535
#3	.00982	.10965	.00914	.19926	.01019	.00535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1575	.00516	.05064	.00973	.02609	.09213
Stddev	.0095	.00005	.00003	.00017	.00039	.00173
%RSD	.18346	.90542	.06678	1.7577	1.4961	1.8788
#1	5.1667	.00514	.05065	.00962	.02565	.09036
#2	5.1478	.00521	.05067	.00993	.02637	.09221
#3	5.1578	.00513	.05061	.00964	.02626	.09382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 14:35:50 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3253	.04913	5.0375	.01519	.03960	5.2670
Stddev	.0493	.00153	.0345	.00007	.00015	.9225
%RSD	.92481	3.1111	.68516	.47184	.37683	17.514
#1	5.2696	.04801	5.0266	.01515	.03976	5.7398
#2	5.3430	.04850	5.0098	.01514	.03947	4.2040
#3	5.3632	.05087	5.0761	.01527	.03958	5.8573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2717	.04105	.29314	.00959	.01156	.05740
Stddev	.0266	.00014	.00174	.00141	.00092	.00059
%RSD	.50511	.34598	.59481	14.748	7.9557	1.0362
#1	5.2589	.04107	.29117	.00807	.01050	.05808
#2	5.2540	.04119	.29447	.01086	.01215	.05705
#3	5.3024	.04090	.29379	.00985	.01203	.05705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRI Acquired: 11/19/2023 14:35:50 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01012	F 3.4976	.09932	.04929	.04703	.01176
Stddev	.00189	.1287	.00036	.00049	.00093	.00030
%RSD	18.650	3.6788	.36592	.99254	1.9714	2.5666
#1	.01229	3.3633	.09902	.04886	.04780	.01146
#2	.00887	3.5095	.09922	.04919	.04730	.01176
#3	.00919	3.6198	.09973	.04982	.04600	.01207
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000				
Range		50.000%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	.02477	.02027
Stddev	.00010	.00001
%RSD	.38998	.04411
#1	.02467	.02028
#2	.02487	.02027
#3	.02478	.02026
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CRI Acquired: 11/19/2023 14:35:50 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4874.3	82933.	9456.5
Stddev	19.4	328.	60.3
%RSD	.39776	.39568	.63745
#1	4872.4	82557.	9399.7
#2	4855.9	83159.	9519.8
#3	4894.5	83084.	9450.0

Sample Name: CCV Acquired: 11/19/2023 14:40:42 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98982	25.140	.48873	2.0361	2.0031	2.0735
Stddev	.00207	.134	.00154	.0056	.0058	.0078
%RSD	.20868	.53386	.31521	.27709	.29114	.37715
#1	.99190	25.187	.48711	2.0306	1.9969	2.0813
#2	.98979	25.244	.48891	2.0419	2.0085	2.0656
#3	.98777	24.988	.49018	2.0359	2.0038	2.0736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.930	.50762	2.0054	2.0352	1.9523	25.363
Stddev	.294	.00062	.0021	.0066	.0035	.150
%RSD	.57715	.12233	.10445	.32328	.18145	.59130
#1	50.607	.50826	2.0055	2.0299	1.9483	25.352
#2	51.181	.50702	2.0033	2.0426	1.9550	25.519
#3	51.003	.50759	2.0075	2.0332	1.9536	25.219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 14:40:42 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.240	2.0844	51.520	2.0537	2.0283	50.037
Stddev	.279	.0090	.303	.0084	.0026	.904
%RSD	.53426	.43271	.58765	.40859	.12715	1.8058
#1	52.317	2.0862	51.242	2.0586	2.0278	49.052
#2	52.472	2.0924	51.843	2.0585	2.0260	50.827
#3	51.930	2.0746	51.474	2.0440	2.0310	50.233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.457	2.0172	1.9755	.52618	.50787	.48875
Stddev	.261	.0021	.0056	.00271	.00084	.00126
%RSD	.49702	.10150	.28324	.51480	.16542	.25834
#1	52.452	2.0174	1.9783	.52865	.50802	.48956
#2	52.720	2.0150	1.9691	.52661	.50862	.48730
#3	52.199	2.0191	1.9791	.52329	.50696	.48941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 11/19/2023 14:40:42 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49495	F 5.2618	2.0040	2.0013	2.0027	1.0144
Stddev	.00080	.1566	.0017	.0058	.0082	.0078
%RSD	.16154	2.9756	.08286	.28778	.40811	.76779
#1	.49569	5.0853	2.0035	2.0011	1.9944	1.0207
#2	.49411	5.3158	2.0026	2.0072	2.0108	1.0057
#3	.49506	5.3842	2.0058	1.9957	2.0029	1.0169
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2.0000				
Range		10.500%				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	1.9893	1.9762
Stddev	.0038	.0021
%RSD	.18881	.10849
#1	1.9860	1.9780
#2	1.9934	1.9738
#3	1.9884	1.9768
Check ?	Chk Pass	Chk Pass
Value		
Range		

Sample Name: CCV Acquired: 11/19/2023 14:40:42 Type: QC
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4710.6	81379.	9333.8
Stddev	26.3	694.	88.7
%RSD	.55782	.85339	.95076
#1	4682.2	80619.	9375.3
#2	4734.0	81538.	9231.9
#3	4715.6	81980.	9394.2

Sample Name: CCB Acquired: 11/19/2023 14:45:29 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280A	Al3082R	As1890A	B_2496A	Ba4554R	Be3130A
Line	328.068 {103}	308.215 {109}	189.042 {478}	249.678 {135}	455.403 { 74}	313.042 {108}
IS Ref	(Y_3710A)	(Y_3710R)	(Y_2243A)	(Y_3710A)	(Y_3710R)	(Y_3710A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	F -.10110	-.00011	.03198	.00028	.00001
Stddev	.00055	.03386	.00118	.00191	.00004	.00001
%RSD	214.04	33.490	1039.0	5.9596	15.800	132.87
#1	-.00016	-.06328	.00076	.02985	.00032	.00000
#2	.00005	-.11141	.00035	.03353	.00030	.00000
#3	.00088	-.12860	-.00146	.03256	.00023	.00001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000				
Low Limit		-.05000				

Elem	Ca3179R	Cd2265A	Co2286A	Cr2677A	Cu3247A	Fe2599R
Line	317.933 {106}	226.502 {449}	228.616 {447}	267.716 {126}	324.754 {104}	259.940 {130}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_3710A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F -.05048	-.00001	-.00006	-.00024	.00097	.00188
Stddev	.00097	.00004	.00015	.00035	.00023	.00180
%RSD	1.9271	599.59	269.13	149.96	23.783	95.842
#1	-.04937	.00003	-.00015	-.00062	.00115	.00045
#2	-.05118	-.00005	-.00014	-.00017	.00106	.00391
#3	-.05088	-.00001	.00012	.00008	.00071	.00129
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.02490					
Low Limit	-.02490					

Sample Name: CCB Acquired: 11/19/2023 14:45:29 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	K_7664R	Li6707R	Mg2790R	Mn2576A	Mo2020A	aN
Line	766.490 { 44}	670.784 { 50}	279.079 {121}	257.610 {131}	202.030 {467}	330.237 {102}
IS Ref	(Y_3710R)	(Y_3710R)	(Y_3710R)	(Y_3710A)	(Y_2243A)	(Y_3710R)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07430	-.00263	-.01946	.00007	-.00015	F -.86017
Stddev	.03223	.00151	.00192	.00004	.00012	.53531
%RSD	43.372	57.306	9.8484	50.398	78.554	62.233
#1	.07777	-.00403	-.01759	.00007	-.00005	-1.3203
#2	.04048	-.00284	-.02142	.00004	-.00011	-.27268
#3	.10465	-.00103	-.01937	.00011	-.00027	-.98749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						.32000
Low Limit						-.32000

Elem	Na5895R	Ni2316A	P_1782A	Pb2203A	bP	Sb2068A
Line	589.592 { 57}	231.604 {445}	178.284 {489}	220.353 {153}	220.353 {453}	206.833 {463}
IS Ref	(Y_3710R)	(Y_2243A)	(Y_2243A)	(Y_3710A)	(Y_2243A)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00525	.00011	-.00051	-.00082	-.00067	.00032
Stddev	.00632	.00020	.00130	.00109	.00013	.00110
%RSD	120.39	185.28	256.22	133.58	19.966	346.71
#1	.00933	.00009	-.00019	.00034	-.00081	-.00095
#2	-.00203	.00031	-.00194	-.00095	-.00054	.00094
#3	.00845	-.00008	.00061	-.00184	-.00068	.00096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Sample Name: CCB Acquired: 11/19/2023 14:45:29 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960A	Si2506R	Sn1899A	Sr4215R	Ti3349R	Tl1908A
Line	196.090 {472}	250.690 {134}	189.989 {477}	421.552 { 80}	334.941 {101}	190.856 {477}
IS Ref	(Y_2243A)	(Y_3710R)	(Y_2243A)	(Y_3710R)	(Y_3710R)	(Y_2243A)
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00267	F 3.2517	-.00045	-.00019	-.00123	.00137
Stddev	.00198	.2185	.00043	.00004	.00078	.00185
%RSD	74.112	6.7190	96.097	19.473	63.698	135.55
#1	.00415	3.0650	-.00057	-.00015	-.00122	-.00048
#2	.00342	3.1981	-.00080	-.00021	-.00045	.00136
#3	.00042	3.4920	.00003	-.00021	-.00202	.00323
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.06700				
Low Limit		-.06700				

Elem	V_2924A	Zn2138A
Line	292.402 {115}	213.856 {457}
IS Ref	(Y_3710A)	(Y_2243A)
Units	ppm	ppm
Avg	F -.00057	-.00002
Stddev	.00028	.00006
%RSD	49.343	301.59
#1	-.00042	-.00008
#2	-.00039	-.00001
#3	-.00089	.00003
Check ?	Chk Fail	Chk Pass
High Limit	.00055	
Low Limit	-.00055	

Sample Name: CCB Acquired: 11/19/2023 14:45:29 Type: Unk
Method: MT0007(v23) HF AIR 102323(v2) Mode: CONC Corr. Factor: 1.000000
User: kerry Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243A	Y_3710A	Y_3710R
Line	224.306 {450}	371.030 { 91}	371.030 { 91}2
Units	Cts/S	Cts/S	Cts/S
Avg	4809.4	81383.	9353.4
Stddev	9.5	702.	161.6
%RSD	.19854	.86275	1.7283
#1	4799.5	82142.	9429.6
#2	4810.0	80758.	9462.8
#3	4818.6	81248.	9167.7

Eurofins Knoxville ICP Batch Review Checklist – SOPs: KNOX-MT-0007r18, KNOX-MT-0008r10

Chart Name:	F111923	Analysis Batch #:	80449	Analyst:	KNC	Instrument:	DUO

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated per SOP?	Y	✓	
2. Was CCVL within limits? (90-110%R)	Y	✓	
3. ICV analyzed within limits? (90-110%R and <5.0% RSD)	Y	✓	
4. CCV analyzed at required frequency & within limits? (90 - 110%R and <5.0% RSD)	Y	✓	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM#_____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste ≤RL)	Y	✓	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM#_____)
6. ICSA/ICSAB run before samples?	Y	✓	
7. ICSAB Interferents and analytes within limits? (80 - 120%R)	Y	✓	
8. ICSA criteria for non-interfering elements met? (Water/Soil/Waste ±1x RL) (Air/SEP/PM10/JN ±2x RL if RL ≤10 µg/L; ±1x RL if RL >10 µg/L)	Y	✓	☐ **ICSA->2X MDL; Stock Impurities** (NCM#_____)
9. Reporting Limit Check Standard (CRI) within limits? (Water/Soil/Waste=70-130%R; Air/SEP/PM10/JN Waste=50-150%)	Y	✓	
10. 6010C samples bracketed by RL Check Standards?	Y	✓	
B. Client Sample and QC Sample Results			
1. Were samples with target element concentrations > the linear range (LR) diluted and reanalyzed?	NA	✓	Comments: High S: (IEC)
2. Were all hits reported from a run with interfering elements < LR?	Y	✓	
3. Elements with F, k or ^ flags reported from a dilution if necessary?	Y	✓	
4. Were sample results reported as ND with elevated RLs?	Y	✓	☐ **RL-Dilution, Matrix** (NCM# _____) ☒ **RL-Dilution, Interferents** (NCM# 50935) 36 ☐ **RL-Dilution, Matrix, Neg. Analyte** (NCM# _____)
5. Internal standard (IS) response ±30% of ICB IS? *If no, list details:*	Y	✓	☐ **ISTD – Matrix, DL Required** (NCM#_____) ☐ Low IS response. Reanalyzed.
6. Report flag turned to No for Mg-SEP Step1 and Na-Steps 2 & 5?	NA	✓	
7. Calculations checked for error? (Document manual calc in comments.)	Y	✓	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Zn <RL; Air/SEP/PM10/JN Waste <RL)	Y	✓	☐ **Method Blank–Report, ND** (NCM#_____) ☐ **Method Blank – Report, 10X** (NCM#_____) ☐ **Method Blank–Insufficient Sample** (NCM#_____) ☐ See narrative-common analyte in SEP leachate.
2. LCS done per prep batch & within QC limits?	Y	✓	☐ **LCS/LCSD –Insufficient Sample** (NCM#_____) ☐ **LCS/LCSD - %R High** (NCM#_____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	NA	✓	☐ **MS/MSD/DUP-Insufficient Volume** (NCM#_____)
4. MS/MSD %R and RPD within QC limits?	NA	✓	☐ LCS acceptable-matrix effects ☐ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM#_____)
5. DUP RPD within limits?	NA	✓	☐ **DUP - %RPD** (NCM#_____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R)	Y	✓	☐ **Post Digestion Spike - %R** (NCM#_____) ☐ **MS/MSD; High Bias; PDS Acceptable** (NCM#_____)
7. Serial dilution per prep batch & ≤ 10% D for analytes >50X MDL?	Y	✓	☐ **Serial Dilution - %D** (NCM#_____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: KNC 11-21-23	2nd Level Review by: 11-22-23

Calculation: Ba at 1159

$0.04906\ mg/L \times 0.080\ L \times \frac{0.100\ L}{0.080\ L} \times 1000\ \mu g/mg = 4.906\ \mu g$

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard				
S:6	Standard #1 (0.1 ug/L)	Standard				
S:5	Standard #2 (0.2 ug/L)	Standard				
S:4	Standard #3 (0.5 ug/L)	Standard				
S:3	Standard #4 (1.0 ug/L)	Standard				
S:2	Standard #5 (5.0 ug/L)	Standard				
S:1	Standard #6 (10.0 ug/l)	Standard				
1:1	ICV 140-80198/18-A	ICV				
1:2	ICB 140-80198/19-A	ICB				
1:3	CRA 140-80198/20-A	CRDL Standard				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:4	MB 140-79374/1-B	Method Blank				
1:5	140-33793-A-8-B MDLV	Unknown				
1:6	MB 140-79892/11-B	Method Blank				
1:7	LCS 140-79892/12-B	LCS				
1:8	LCSD 140-79892/13-B	LCS				
1:9	140-34168-A-1-B	Unknown				
1:10	140-34168-A-6-B	Unknown				
1:11	140-34168-A-6-B pds	Unknown				
1:12	140-34168-A-6-B pdsd	Unknown				
1:13	140-34168-A-11-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:14	140-34168-A-16-B	Unknown				
1:15	140-34169-A-1-B	Unknown				
1:16	140-34169-A-6-B	Unknown				
1:17	140-34169-A-6-B pds	Unknown				
1:18	140-34169-A-6-B pdsd	Unknown				
1:19	140-34169-A-11-B	Unknown				
1:20	140-34169-A-16-B	Unknown				
1:21	140-34169-A-21-B	Unknown				
1:22	140-34169-A-22-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:23	MB 140-80189/9-B	Method Blank				
1:24	LCS 140-80189/10-B	LCS				
1:25	140-34237-A-3-D	Unknown				
1:26	140-34237-A-3-E MS	Unknown				
1:27	140-34237-A-3-F MSD	Unknown				
1:28	140-34307-A-3-B	Unknown				
1:29	140-34307-A-8-D	Unknown				
1:30	140-34307-A-8-E MS	Unknown				
1:31	140-34307-A-8-F MSD	Unknown				
1:32	140-34307-A-13-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:33	MB 140-80193/13-B	Method Blank				
1:34	LCS 140-80193/14-B	LCS				
1:35	140-34168-A-2-C	Unknown				
1:36	140-34168-A-7-E	Unknown				
1:37	140-34168-A-7-F MS	Unknown				
1:38	140-34168-A-7-G MSD	Unknown				
1:39	140-34168-A-12-C	Unknown				
1:40	140-34169-A-2-C	Unknown				
1:41	140-34169-A-7-E	Unknown				

Worksheet: DAILY TEMPLATE

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
1:42	140-34169-A-7-F MS	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:43	140-34169-A-7-G MSD	Unknown				
1:44	140-34169-A-12-C	Unknown				
1:45	140-34169-A-17-C	Unknown				
1:46	140-34169-A-23-C	Unknown				
1:47	MB 140-80181/11-B	Method Blank				
1:48	LCS 140-80181/12-B	LCS				
1:49	140-34237-A-4-D	Unknown				
1:50	140-34237-A-4-E MS	Unknown				
1:51	140-34237-A-4-F MSD	Unknown				
1:52	140-34307-A-4-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:53	140-34307-A-9-D	Unknown				
1:54	140-34307-A-9-E MS	Unknown				
1:55	140-34307-A-9-F MSD	Unknown				
1:56	140-34307-A-14-B	Unknown				
1:57	140-34307-A-18-B	Unknown				
1:58	140-34307-A-20-B	Unknown				
1:59	MB 140-80190/10-B	Method Blank				
1:60	LCS 140-80190/11-B	LCS				
2:1	140-34237-A-5-D	Unknown				
2:2	140-34237-A-5-E MS	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
2:3	140-34237-A-5-F MSD	Unknown				
2:4	140-34307-A-5-B	Unknown				
2:5	140-34307-A-10-D	Unknown				
2:6	140-34307-A-10-E MS	Unknown				
2:7	140-34307-A-10-F MSD	Unknown				
2:8	140-34307-A-15-B	Unknown				
2:9	140-34307-A-21-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
2:10	140-34307-A-5-B @2	Unknown				
2:11	140-34307-A-10-D @2	Unknown				
2:12	140-34307-A-10-E MS @2	Unknown				
2:13	140-34307-A-10-F MSD @2	Unknown				
2:14	140-34307-A-15-B @2	Unknown				
S:9	CCV 140-80198/21-A	Unknown				
S:10	CCB 140-80198/22-A	Unknown				

5ml to 10ml ICNC 11-15-23

Worksheet: DAILY TEMPLATE

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard				
S:6	Standard #1 (0.1 ug/L)	Standard				
S:5	Standard #2 (0.2 ug/L)	Standard				
S:4	Standard #3 (0.5 ug/L)	Standard				
S:3	Standard #4 (1.0 ug/L)	Standard				
S:2	Standard #5 (5.0 ug/L)	Standard				
S:1	Standard #6 (10.0 ug/l)	Standard				
1:1	ICV 140-80198/18-A	ICV				
1:2	ICB 140-80198/19-A	ICB				
1:3	CRA 140-80198/20-A	CRDL Standard				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:4	MB 140-79374/1-B	Method Blank				
1:5	140-33793-A-8-B MDLV	Unknown				
1:6	MB 140-79892/11-B	Method Blank				
1:7	LCS 140-79892/12-B	LCS				
1:8	LCSD 140-79892/13-B	LCS				
1:9	140-34168-A-1-B	Unknown				
1:10	140-34168-A-6-B	Unknown				
1:11	140-34168-A-6-B pds	Unknown				
1:12	140-34168-A-6-B pdsd	Unknown				
1:13	140-34168-A-11-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:14	140-34168-A-16-B	Unknown				
1:15	140-34169-A-1-B	Unknown				
1:16	140-34169-A-6-B	Unknown				
1:17	140-34169-A-6-B pds	Unknown				
1:18	140-34169-A-6-B pdsd	Unknown				
1:19	140-34169-A-11-B	Unknown				
1:20	140-34169-A-16-B	Unknown				
1:21	140-34169-A-21-B	Unknown				
1:22	140-34169-A-22-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:23	MB 140-80189/9-B	Method Blank				
1:24	LCS 140-80189/10-B	LCS				
1:25	140-34237-A-3-D	Unknown				
1:26	140-34237-A-3-E MS	Unknown				
1:27	140-34237-A-3-F MSD	Unknown				
1:28	140-34307-A-3-B	Unknown				
1:29	140-34307-A-8-D	Unknown				
1:30	140-34307-A-8-E MS	Unknown				
1:31	140-34307-A-8-F MSD	Unknown				
1:32	140-34307-A-13-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:33	MB 140-80193/13-B	Method Blank				
1:34	LCS 140-80193/14-B	LCS				
1:35	140-34168-A-2-C	Unknown				
1:36	140-34168-A-7-E	Unknown				
1:37	140-34168-A-7-F MS	Unknown				
1:38	140-34168-A-7-G MSD	Unknown				
1:39	140-34168-A-12-C	Unknown				
1:40	140-34169-A-2-C	Unknown				
1:41	140-34169-A-7-E	Unknown				

Worksheet: DAILY TEMPLATE

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
1:42	140-34169-A-7-F MS	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:43	140-34169-A-7-G MSD	Unknown				
1:44	140-34169-A-12-C	Unknown				
1:45	140-34169-A-17-C	Unknown				
1:46	140-34169-A-23-C	Unknown				
1:47	MB 140-80181/11-B	Method Blank				
1:48	LCS 140-80181/12-B	LCS				
1:49	140-34237-A-4-D	Unknown				
1:50	140-34237-A-4-E MS	Unknown				
1:51	140-34237-A-4-F MSD	Unknown				
1:52	140-34307-A-4-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
1:53	140-34307-A-9-D	Unknown				
1:54	140-34307-A-9-E MS	Unknown				
1:55	140-34307-A-9-F MSD	Unknown				
1:56	140-34307-A-14-B	Unknown				
1:57	140-34307-A-18-B	Unknown				
1:58	140-34307-A-20-B	Unknown				
1:59	MB 140-80190/10-B	Method Blank				
1:60	LCS 140-80190/11-B	LCS				
2:1	140-34237-A-5-D	Unknown				
2:2	140-34237-A-5-E MS	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				
2:3	140-34237-A-5-F MSD	Unknown				
2:4	140-34307-A-5-B @2	Unknown				
2:5	140-34307-A-10-D @2	Unknown				
2:6	140-34307-A-10-E MS @2	Unknown				
2:7	140-34307-A-10-F MSD @2	Unknown				
2:8	140-34307-A-15-B @2	Unknown				
2:9	140-34307-A-21-B	Unknown				
S:9	CCV 140-80198/21-A	CCV				
S:10	CCB 140-80198/22-A	CCB				

5ml to 10ml IWC 11-15-23

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80192

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	MB~140-79374/1-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-79374/1-B
2	140-33793-A-8-A~MDLV (29_7470A)	2023 Q4 - Metals Source Air-LODVs (140-33793-1)	Digestate	5 mL	50 mL	12/27/23	58_Days	N/A		140-33793-A-8-B MDLV

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80191

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34168-A-1-A (29_7470A)	N/A (140-34168-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-1-B
2	140-34168-A-6-A (29_7470A)	N/A (140-34168-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-6-B
3	140-34168-A-11-A (29_7470A)	N/A (140-34168-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-11-B
4	140-34168-A-16-A (29_7470A)	N/A (140-34168-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-16-B
5	140-34169-A-1-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-1-B
6	140-34169-A-6-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-6-B
7	140-34169-A-11-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-11-B
8	140-34169-A-16-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-16-B
9	140-34169-A-21-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-21-B
10	140-34169-A-22-A (29_7470A)	N/A (140-34169-1)	Digestate	5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-22-B
11	MB~140-79892/11-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-79892/11-B
12	LCS~140-79892/12-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-79892/12-B
	LCSD~140-79892/13-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-79892/13-B

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80198

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-3-A (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-3-D
2	140-34237-A-3-B~MS (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-3-E MS
3	140-34237-A-3-C~MSD (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-3-F MSD
4	140-34307-A-3-A (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-3-B
5	140-34307-A-8-A (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-8-D
6	140-34307-A-8-B~MS (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-8-E MS
7	140-34307-A-8-C~MSD (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-8-F MSD
8	140-34307-A-13-A (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-13-B
9	MB~140-80189/9-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-80189/9-B
10	LCS~140-80189/10-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		LCS 140-80189/10-B
11	STD0~140-80198/11 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-80198/11-A
12	STD1~140-80198/12 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-80198/12-A
13	STD2~140-80198/13 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-80198/13-A

HG_Empty_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80198

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

14	STD3~140-80198/14 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-80198/14-A
15	STD4~140-80198/15 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-80198/15-A
16	STD5~140-80198/16 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-80198/16-A
17	STD6~140-80198/17 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	IC 140-80198/17-A
18	ICV~140-80198/18 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICV 140-80198/18-A
19	ICB~140-80198/19 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	ICB 140-80198/19-A
20	CRA~140-80198/20 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CRA 140-80198/20-A
21	CCV~140-80198/21 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCV 140-80198/21-A
22	CCB~140-80198/22 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	CCB 140-80198/22-A
23	N/A	N/A				N/A	N/A	N/A	

11/27/2023
12:19 PM

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80194

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34168-A-2-B (29_7470A)	N/A (140-34168-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-2-C
2	140-34168-A-7-B (29_7470A)	N/A (140-34168-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-7-E
3	140-34168-A-7-C~MS (29_7470A)	N/A (140-34168-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-7-F MS
4	140-34168-A-7-D~MSD (29_7470A)	N/A (140-34168-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-7-G MSD
5	140-34168-A-12-B (29_7470A)	N/A (140-34168-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34168-A-12-C
6	140-34169-A-2-B (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-2-C
7	140-34169-A-7-B (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-7-E
8	140-34169-A-7-C~MS (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-7-F MS
9	140-34169-A-7-D~MSD (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-7-G MSD
10	140-34169-A-12-B (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-12-C
11	140-34169-A-17-B (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-17-C
12	140-34169-A-23-B (29_7470A)	N/A (140-34169-1)	AT_Volume	2.5 mL	50 mL	11/16/23	13_Days	4		140-34169-A-23-C
13	MB~140-80193/13-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-80193/13-B

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80194

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

14	LCS~140-80193/14-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A	

HG_BH_KMNO4_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80196

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 8:00:00AM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-4-A (29_7470A)	N/A (140-34237-1)	AT_Volume	25 mL	50 mL	11/22/23	13_Days	4		140-34237-A-4-D
2	140-34237-A-4-B~MS (29_7470A)	N/A (140-34237-1)	AT_Volume	25 mL	50 mL	11/22/23	13_Days	4		140-34237-A-4-E MS
3	140-34237-A-4-C~MSD (29_7470A)	N/A (140-34237-1)	AT_Volume	25 mL	50 mL	11/22/23	13_Days	4		140-34237-A-4-F MSD
4	140-34307-A-4-A (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-4-B
5	140-34307-A-9-A (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-9-D
6	140-34307-A-9-B~MS (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-9-E MS
7	140-34307-A-9-C~MSD (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-9-F MSD
8	140-34307-A-14-A (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-14-B
9	140-34307-A-18-A (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-18-B
10	140-34307-A-20-A (29_7470A)	N/A (140-34307-1)	AT_Volume	25 mL	50 mL	11/21/23	8_Days	4		140-34307-A-20-B
11	MB~140-80181/11-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		MB 140-80181/11-B
12	LCS~140-80181/12-A N/A	N/A		25 mL	50 mL	N/A	N/A	N/A		LCS 140-80181/12-B

HG_BH_HCL_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80199

Analyst: Collins, Kerry N

Batch Open: 11/14/2023 2:35:00PM

Batch End: 11/14/2023 6:00:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-5-A (29_7470A)	N/A (140-34237-1)	AT_Volume	10 mL	50 mL	11/22/23	13_Days	4		140-34237-A-5-D
2	140-34237-A-5-B~MS (29_7470A)	N/A (140-34237-1)	AT_Volume	10 mL	50 mL	11/22/23	13_Days	4		140-34237-A-5-E MS
3	140-34237-A-5-C~MSD (29_7470A)	N/A (140-34237-1)	AT_Volume	10 mL	50 mL	11/22/23	13_Days	4		140-34237-A-5-F MSD
4	140-34307-A-5-A (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-5-B
5	140-34307-A-10-A (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-10-D
6	140-34307-A-10-B~MS (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-10-E MS
7	140-34307-A-10-C~MSD (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-10-F MSD
8	140-34307-A-15-A (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-15-B
9	140-34307-A-21-A (29_7470A)	N/A (140-34307-1)	AT_Volume	10 mL	50 mL	11/21/23	8_Days	4		140-34307-A-21-B
10	MB~140-80190/10-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		MB 140-80190/10-B
11	LCS~140-80190/11-A N/A	N/A		10 mL	50 mL	N/A	N/A	N/A		LCS 140-80190/11-B

Eurofins Knoxville *KNC*

Report Generated By Teledyne Leeman QuickTrace

Analyst: knxinsthg2

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\A111523A.wszf

Creation Date: 11/15/2023 9:28:53 AM

Comment:

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	11/15/23 01:42:27 pm	0.00000	651	1.97			1.0000	N/A
Replicates	635.5	645.0	664.0	658.0					
Standard #1 (0.1 ug/L)	STD	11/15/23 01:45:01 pm	0.10000	1534	0.95	18.96%		1.0000	N/A
Replicates	1519.9	1553.5	1535.2	1526.9					
Standard #2 (0.2 ug/L)	STD	11/15/23 01:47:34 pm	0.20000	2636	0.45	9.16%		1.0000	N/A
Replicates	2624.1	2640.6	2628.1	2649.8					
Standard #3 (0.5 ug/L)	STD	11/15/23 01:50:06 pm	0.50000	5824	2.32	1.17%		1.0000	N/A
Replicates	5647.6	5789.9	5914.1	5944.1					
Standard #4 (1.0 ug/L)	STD	11/15/23 01:52:39 pm	1.00000	10967	0.17	-3.03%		1.0000	N/A
Replicates	10944.1	10990.3	10970.8	10962.3					
Standard #5 (5.0 ug/L)	STD	11/15/23 01:55:11 pm	5.00000	54450	0.30	-2.17%		1.0000	N/A
Replicates	54246.6	54391.2	54546.5	54613.9					
Standard #6 (10.0 ug/l)	STD	11/15/23 01:57:43 pm	10.00000	111720	0.38	0.57%		1.0000	N/A
Replicates	111116.5	111741.3	111992.5	112031.6					

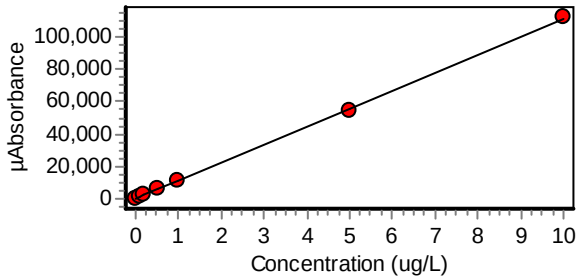
Calibration

Equation: Abs = 11087.897x + 214.899

R2: 0.99979 RSE: 10.71%

SEE: 668.8204

Flags:



ICV 140-80198/18-A	ICV	11/15/23 02:00:15 pm	2.48640	27784	0.40			1.0000	99.46
Replicates	27642.3	27761.9	27828.7	27903.4					
ICB 140-80198/19-A	ICB	11/15/23 02:02:46 pm	-0.00554	153	46.86			1.0000	N/A
Replicates	141.2	131.4	195.7	145.6					
CRA 140-80198/20-A	CRDL	11/15/23 02:05:18 pm	0.18824	2302	0.43			1.0000	94.12
Replicates	2305.2	2311.9	2300.8	2290.4					
CCV 140-80198/21-A	CCV	11/15/23 02:07:52 pm	4.92470	54819	0.19			1.0000	98.49
Replicates	54667.5	54833.8	54884.3	54891.3					
CCB 140-80198/22-A	CCB	11/15/23 02:10:26 pm	-0.00249	187	48.02			1.0000	N/A
Replicates	186.0	172.8	205.0	185.2					

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
MB 140-79374/1-B				MB	11/15/23 02:12:58 pm	-0.00507	159	29.83			1.0000	N/A
Replicates	170.6	146.1	142.5	175.5								
140-33793-A-8-B MDLV				UNK	11/15/23 02:15:30 pm	0.19650	2394	0.66			1.0000	N/A
Replicates	2388.9	2375.9	2400.8	2409.1								
MB 140-79892/11-B				MB	11/15/23 02:18:02 pm	-0.00626	145	27.33			1.0000	N/A
Replicates	134.3	145.6	172.1	129.8								
LCS 140-79892/12-B				LCS	11/15/23 02:20:35 pm	4.93670	54953	0.28			1.0000	98.73
Replicates	54746.0	54933.8	55026.8	55105.1								
LCSD 140-79892/13-B				LCS	11/15/23 02:23:07 pm	4.99930	55647	0.41			1.0000	99.99
Replicates	55347.0	55608.0	55769.7	55862.7								
140-34168-A-1-B				UNK	11/15/23 02:25:40 pm	0.01079	335	7.96			1.0000	N/A
Replicates	343.8	321.2	337.2	335.9								
140-34168-A-6-B				UNK	11/15/23 02:28:12 pm	-0.01085	95	3.21			1.0000	N/A
Replicates	100.1	94.2	92.9	91.2								
140-34168-A-6-B pds				UNK	11/15/23 02:30:45 pm	0.98283	11112	0.22			1.0000	N/A
Replicates	11080.2	11111.0	11123.1	11135.3								
140-34168-A-6-B pdsd				UNK	11/15/23 02:33:18 pm	0.99496	11247	0.21			1.0000	N/A
Replicates	11225.2	11228.7	11266.7	11267.1								
140-34168-A-11-B				UNK	11/15/23 02:35:50 pm	-0.01133	89	13.00			1.0000	N/A
Replicates	83.0	112.0	73.7	88.5								
CCV 140-80198/21-A				CCV	11/15/23 02:38:24 pm	4.87540	54273	0.42			1.0000	97.51
Replicates	53979.4	54235.1	54370.3	54506.9								
CCB 140-80198/22-A				CCB	11/15/23 02:40:58 pm	-0.00345	177	54.92			1.0000	N/A
Replicates	196.3	154.9	162.4	192.9								
140-34168-A-16-B				UNK	11/15/23 02:43:30 pm	-0.00818	124	18.58			1.0000	N/A
Replicates	130.1	110.7	110.5	145.3								
140-34169-A-1-B				UNK	11/15/23 02:46:02 pm	-0.00982	106	12.93			1.0000	N/A
Replicates	100.6	124.3	91.0	108.1								
140-34169-A-6-B				UNK	11/15/23 02:48:33 pm	-0.01309	70	10.25			1.0000	N/A
Replicates	83.0	79.6	66.1	50.3								
140-34169-A-6-B pds				UNK	11/15/23 02:51:06 pm	1.00940	11407	0.70			1.0000	N/A
Replicates	11458.6	11486.4	11363.2	11318.7								
140-34169-A-6-B pdsd				UNK	11/15/23 02:53:38 pm	0.96577	10923	0.31			1.0000	N/A
Replicates	10876.3	10929.2	10932.6	10954.7								
140-34169-A-11-B				UNK	11/15/23 02:56:10 pm	-0.01013	103	14.64			1.0000	N/A
Replicates	83.8	112.1	94.6	120.0								
140-34169-A-16-B				UNK	11/15/23 02:58:42 pm	-0.00855	120	6.65			1.0000	N/A
Replicates	114.3	115.0	125.5	125.6								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-34169-A-21-B				UNK	11/15/23 03:01:15 pm	-0.01308	70	7.85			1.0000	N/A
Replicates	86.1	60.4	63.9	68.9								
140-34169-A-22-B				UNK	11/15/23 03:03:48 pm	-0.01201	82	13.38			1.0000	N/A
Replicates	84.6	88.7	56.2	97.3								
CCV 140-80198/21-A				CCV	11/15/23 03:06:22 pm	4.91220	54680	0.28			1.0000	98.24
Replicates	54718.4	54837.1	54693.9	54472.2								
CCB 140-80198/22-A				CCB	11/15/23 03:08:56 pm	-0.00466	163	16.07			1.0000	N/A
Replicates	152.2	162.9	165.9	172.0								
MB 140-80189/9-B				MB	11/15/23 03:11:29 pm	-0.00701	137	10.28			1.0000	N/A
Replicates	143.5	144.5	128.9	131.9								
LCS 140-80189/10-B				LCS	11/15/23 03:14:02 pm	4.83230	53795	0.32			1.0000	96.65
Replicates	53565.7	53777.5	53879.0	53956.1								
140-34237-A-3-D				UNK	11/15/23 03:16:34 pm	-0.01324	68	6.12			1.0000	N/A
Replicates	70.9	78.4	66.4	56.9								
140-34237-A-3-E MS				UNK	11/15/23 03:19:06 pm	0.97115	10983	0.33			1.0000	N/A
Replicates	10930.8	10991.9	11003.3	11005.8								
140-34237-A-3-F MSD				UNK	11/15/23 03:21:37 pm	0.95733	10830	0.32			1.0000	N/A
Replicates	10787.2	10818.5	10861.3	10852.0								
140-34307-A-3-B				UNK	11/15/23 03:24:09 pm	0.00560	277	20.33			1.0000	N/A
Replicates	271.1	263.1	281.6	292.1								
140-34307-A-8-D				UNK	11/15/23 03:26:41 pm	0.02103	448	1.61			1.0000	N/A
Replicates	447.8	452.5	443.3	448.7								
140-34307-A-8-E MS				UNK	11/15/23 03:29:13 pm	0.98660	11154	0.24			1.0000	N/A
Replicates	11121.3	11149.3	11183.8	11162.5								
140-34307-A-8-F MSD				UNK	11/15/23 03:31:46 pm	1.02020	11527	0.52			1.0000	N/A
Replicates	11441.9	11534.8	11569.4	11561.8								
140-34307-A-13-B				UNK	11/15/23 03:34:18 pm	0.00893	314	12.86			1.0000	N/A
Replicates	313.1	305.3	305.3	332.3								
CCV 140-80198/21-A				CCV	11/15/23 03:36:52 pm	4.95060	55106	0.47			1.0000	99.01
Replicates	54780.0	55051.3	55214.2	55379.2								
CCB 140-80198/22-A				CCB	11/15/23 03:39:27 pm	-0.00598	149	9.35			1.0000	N/A
Replicates	144.2	156.7	150.2	143.4								
MB 140-80193/13-B				MB	11/15/23 03:41:59 pm	-0.00916	113	7.93			1.0000	N/A
Replicates	121.8	118.7	106.0	107.0								
LCS 140-80193/14-B				LCS	11/15/23 03:44:32 pm	4.85700	54069	0.36			1.0000	97.14
Replicates	53819.0	54019.8	54171.3	54265.3								
140-34168-A-2-C				UNK	11/15/23 03:47:05 pm	0.08507	1158	1.22			1.0000	N/A
Replicates	1170.5	1160.0	1159.4	1142.7								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-34168-A-7-E				UNK	11/15/23 03:49:38 pm	0.15561	1940	0.86			1.0000	N/A
Replicates	1926.9	1951.9	1954.4	1928.2								
140-34168-A-7-F MS				UNK	11/15/23 03:52:10 pm	1.13050	12750	0.09			1.0000	N/A
Replicates	12759.8	12734.0	12754.8	12752.0								
140-34168-A-7-G MSD				UNK	11/15/23 03:54:42 pm	1.12070	12642	0.37			1.0000	N/A
Replicates	12584.8	12632.3	12652.5	12696.8								
140-34168-A-12-C				UNK	11/15/23 03:57:13 pm	-0.01583	39	9.23			1.0000	N/A
Replicates	19.7	58.9	36.4	42.4								
140-34169-A-2-C				UNK	11/15/23 03:59:45 pm	0.01006	326	2.93			1.0000	N/A
Replicates	326.5	323.9	324.4	331.0								
140-34169-A-7-E				UNK	11/15/23 04:02:17 pm	0.10881	1421	0.47			1.0000	N/A
Replicates	1424.8	1419.6	1414.3	1426.8								
140-34169-A-7-F MS				UNK	11/15/23 04:04:49 pm	1.08430	12238	0.41			1.0000	N/A
Replicates	12169.1	12236.1	12272.2	12274.1								
CCV 140-80198/21-A				CCV	11/15/23 04:07:23 pm	4.90360	54585	0.41			1.0000	98.07
Replicates	54276.4	54575.2	54725.7	54764.5								
CCB 140-80198/22-A				CCB	11/15/23 04:09:58 pm	-0.00350	176	15.77			1.0000	N/A
Replicates	171.8	170.0	182.0	180.7								
140-34169-A-7-G MSD				UNK	11/15/23 04:12:30 pm	1.08160	12208	0.43			1.0000	N/A
Replicates	12146.1	12186.0	12240.0	12259.0								
140-34169-A-12-C				UNK	11/15/23 04:15:02 pm	0.12710	1624	1.65			1.0000	N/A
Replicates	1606.4	1642.2	1601.9	1646.1								
140-34169-A-17-C				UNK	11/15/23 04:17:35 pm	-0.01427	57	10.48			1.0000	N/A
Replicates	62.9	32.1	64.1	67.9								
140-34169-A-23-C				UNK	11/15/23 04:20:08 pm	-0.01134	89	18.04			1.0000	N/A
Replicates	107.3	62.2	78.7	108.5								
MB 140-80181/11-B				MB	11/15/23 04:22:41 pm	-0.00989	105	10.00			1.0000	N/A
Replicates	98.1	121.1	103.8	97.8								
LCS 140-80181/12-B				LCS	11/15/23 04:25:14 pm	4.87500	54269	0.30			1.0000	97.50
Replicates	54035.5	54274.7	54360.9	54403.2								
140-34237-A-4-D				UNK	11/15/23 04:27:46 pm	-0.01348	65	5.80			1.0000	N/A
Replicates	60.7	75.2	56.0	69.8								
140-34237-A-4-E MS				UNK	11/15/23 04:30:18 pm	0.94937	10741	0.48			1.0000	N/A
Replicates	10669.9	10742.5	10771.0	10782.2								
140-34237-A-4-F MSD				UNK	11/15/23 04:32:50 pm	0.94243	10664	0.38			1.0000	N/A
Replicates	10614.1	10670.5	10662.3	10710.7								
140-34307-A-4-B				UNK	11/15/23 04:35:22 pm	0.15642	1949	1.05			1.0000	N/A
Replicates	1927.3	1942.8	1957.3	1969.5								

Sample Name				Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
CCV 140-80198/21-A				CCV	11/15/23 04:37:56 pm	4.92020	54770	0.52			1.0000	98.40
Replicates	54398.8	54725.9	54898.2	55055.9								
CCB 140-80198/22-A				CCB	11/15/23 04:40:30 pm	-0.00835	122	26.82			1.0000	N/A
Replicates	152.4	126.9	117.9	92.2								
140-34307-A-9-D				UNK	11/15/23 04:43:02 pm	0.37521	4375	0.47			1.0000	N/A
Replicates	4352.5	4365.4	4394.9	4388.1								
140-34307-A-9-E MS				UNK	11/15/23 04:45:34 pm	1.32310	14885	0.43			1.0000	N/A
Replicates	14799.0	14877.8	14918.3	14945.3								
140-34307-A-9-F MSD				UNK	11/15/23 04:48:07 pm	1.30640	14700	0.33			1.0000	N/A
Replicates	14642.1	14686.4	14754.9	14715.6								
140-34307-A-14-B				UNK	11/15/23 04:50:39 pm	0.35645	4167	0.34			1.0000	N/A
Replicates	4149.2	4173.8	4165.8	4179.9								
140-34307-A-18-B				UNK	11/15/23 04:53:12 pm	-0.01260	75	9.64			1.0000	N/A
Replicates	63.5	94.6	72.2	70.2								
140-34307-A-20-B				UNK	11/15/23 04:55:44 pm	-0.00854	120	20.26			1.0000	N/A
Replicates	125.2	114.3	97.9	143.6								
MB 140-80190/10-B				MB	11/15/23 04:58:17 pm	-0.00911	114	19.17			1.0000	N/A
Replicates	139.6	99.1	98.8	118.0								
LCS 140-80190/11-B				LCS	11/15/23 05:00:50 pm	4.97870	55418	0.36			1.0000	99.57
Replicates	55134.1	55424.7	55528.8	55583.2								
140-34237-A-5-D				UNK	11/15/23 05:03:23 pm	0.02225	462	6.80			1.0000	N/A
Replicates	485.0	462.4	449.9	448.9								
140-34237-A-5-E MS				UNK	11/15/23 05:05:55 pm	0.99207	11215	0.42			1.0000	N/A
Replicates	11170.5	11183.0	11237.2	11269.0								
CCV 140-80198/21-A				CCV	11/15/23 05:08:29 pm	4.90080	54554	0.43			1.0000	98.02
Replicates	54242.2	54528.2	54672.8	54773.2								
CCB 140-80198/22-A				CCB	11/15/23 05:11:04 pm	-0.00591	149	7.59			1.0000	N/A
Replicates	151.0	149.5	154.3	142.5								
140-34237-A-5-F MSD				UNK	11/15/23 05:13:36 pm	0.99275	11222	0.18			1.0000	N/A
Replicates	11195.0	11221.1	11232.1	11241.3								
140-34307-A-5-B				UNK	11/15/23 05:16:08 pm	11.76300	130647	0.38		O	1.0000	N/A
Replicates	129970.2	130614.8	130903.3	131098.4								
140-34307-A-10-D				UNK	11/15/23 05:18:40 pm	10.82300	120224	0.47		O	1.0000	N/A
Replicates	119470.4	120147.1	120528.1	120752.4								
140-34307-A-10-E MS				UNK	11/15/23 05:21:13 pm	11.75300	130529	0.42		O	1.0000	N/A
Replicates	129789.6	130466.6	130830.3	131030.5								
140-34307-A-10-F MSD				UNK	11/15/23 05:23:45 pm	11.92700	132458	0.36		O	1.0000	N/A
Replicates	131798.2	132415.0	132726.8	132893.0								

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-34307-A-15-B	UNK	11/15/23 05:26:17 pm	11.14400	123777	0.37		O	1.0000	N/A
Replicates	123140.3	123739.1	124045.6	124182.6					
140-34307-A-21-B	UNK	11/15/23 05:28:50 pm	0.01439	374	24.36			1.0000	N/A
Replicates	425.1	383.4	337.1	352.3					
CCV 140-80198/21-A	CCV	11/15/23 05:31:24 pm	4.86580	54166	0.47			1.0000	97.32
Replicates	53824.8	54126.5	54327.2	54385.0					
CCB 140-80198/22-A	CCB	11/15/23 05:33:58 pm	-0.00380	173	35.00			1.0000	N/A
Replicates	166.9	170.2	194.0	160.2					
140-34307-A-5-B @2	UNK	11/15/23 05:45:17 pm	6.00680	66817	0.44			1.0000	N/A
Replicates	66420.8	66783.6	66972.6	67091.8					
140-34307-A-10-D @2	UNK	11/15/23 05:47:50 pm	5.56190	61885	0.38			1.0000	N/A
Replicates	61583.0	61833.3	61980.0	62142.0					
140-34307-A-10-E MS @2	UNK	11/15/23 05:50:23 pm	6.06250	67435	0.11			1.0000	N/A
Replicates	67323.2	67484.0	67476.5	67456.7					
140-34307-A-10-F MSD @2	UNK	11/15/23 05:52:55 pm	6.04670	67260	0.37			1.0000	N/A
Replicates	66921.8	67224.6	67412.0	67481.3					
140-34307-A-15-B @2	UNK	11/15/23 05:55:28 pm	5.62790	62617	0.43			1.0000	N/A
Replicates	62242.0	62601.8	62769.0	62854.7					
CCV 140-80198/21-A	UNK	11/15/23 05:58:02 pm	4.87080	54222	0.43			1.0000	N/A
Replicates	53939.0	54144.5	54333.4	54469.9					
CCB 140-80198/22-A	UNK	11/15/23 06:00:37 pm	-0.00497	160	27.93			1.0000	N/A
Replicates	164.6	140.3	177.1	157.1					

Eurofins Knoxville Mercury Batch Review Checklist
SOPs: KNOX-MT-0009r16, KNOX-MT-0010r15, KNOX-MT-0008r8, KNOX-MT-0001r6

Chart Name:	AIII523A	Analysis Batch #:	80319	Analyst:	KNC	Instrument:	ADT	

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated with at least 5 standards and a blank?	Y	✓	
2. Linearity and intercept verified? (r≥0.995 and x-intercept <RL)	Y	✓	
3. ICV analyzed at beginning of run & within limits? (90 - 110%R)	Y	✓	
4. CCV analyzed at required frequency & within limits? (80 - 120%R)	Y	✓	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM# _____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste/30B <RL)	Y	✓	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM# _____)
6. Reporting Limit Check Standard (CRI) within limits? (±30%; ±50 % for Method 30B)	Y	✓	
B. Client Sample and QC Sample Results			
1. Were samples with results > the linear range (LR) diluted and reanalyzed?	Y	✓	Comments: NCM 50735
2. Were samples with negative results >RL reanalyzed at a dilution?	NA	✓	
3. Were samples analyzed with the holding time? Holding times do not apply to MDLVs	Y	✓	☐ **Holding Time-Receipt** (NCM# _____) ☐ **Holding Time-Initial Analysis** (NCM# _____) ☐ **Holding Time-Reanalysis** (NCM# _____) ☐ **Holding Time- Insufficient Time** (NCM# _____)
4. Calculations checked for error? (Document manual calc in comments.)	Y	✓	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Air/SEP/PM10/JN Waste/30B <RL)	Y	✓	☐ **Method Blank–Report, ND** (NCM# _____) ☐ **Method Blank – Report, 10X** (NCM# _____) ☐ **Method Blank–Insufficient Sample** (NCM# _____)
2. LCS done per prep batch & within QC limits?	Y	✓	☐ **LCS/LCS –Insufficient Sample** (NCM# _____) ☐ **LCS/LCSD - %R High** (NCM# _____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	Y	✓	☐ **MS/MSD/DUP-Insufficient Vol** (NCM# _____)
4. MS/MSD %R and RPD within QC limits?	N	✓	☐ LCS acceptable-matrix effects ☒ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM# _____)
5. DUP RPD within limits?	NA	✓	☐ **DUP - %RPD** (NCM# _____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R and ≤20 RPD)	Y	✓	☐ **Post Digestion Spike - %R** (NCM# _____) ☐ **MS/MSD; High Bias; PDS Accept.** (NCM# _____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: KNC 11-15-23	2nd Level Review by: Dmlund 11-16-23
Calculation: 140-34307-A-5@2 at 1745	
6.00680 µg/L × 0.275 L × 50ml/10ml × 10ml/5ml = 16.519 µg	

Tube	Sample Name	Sample Type	Weight	Prep Volume	Aliquot Vol	Dilute To Vol
S:7	Calibration Blank	Standard				
S:6	Standard #1 (0.1 ug/L)	Standard				
S:5	Standard #2 (0.2 ug/L)	Standard				
S:4	Standard #3 (0.5 ug/L)	Standard				
S:3	Standard #4 (1.0 ug/L)	Standard				
S:2	Standard #5 (5.0 ug/L)	Standard				
S:1	Standard #6 (10.0 ug/l)	Standard				
1:1	ICV 140-80441/19-A	ICV				
1:2	ICB 140-80441/20-A	ICB				
1:3	CRA 140-80441/21-A	CRDL Standard				
S:9	CCV 140-80441/22-A	CCV				
S:10	CCB 140-80441/23-A	CCB				
1:4	MB 140-80160/7-B	Method Blank				
1:5	LCS 140-80160/8-B	LCS				
1:6	LCSD 140-80160/9-B	LCS				
1:7	140-34237-A-1-B	Unknown				
1:8	140-34237-A-1-B pds	Unknown				
1:9	140-34237-A-1-B pds	Unknown - Relabled				
1:10	140-34307-A-1-B	Unknown				
1:11	140-34307-A-6-B	Unknown				
1:12	140-34307-A-6-B pds	Unknown				
1:13	140-34307-A-6-B pds	Unknown - Relabled				
S:9	CCV 140-80441/22-A	CCV				
S:10	CCB 140-80441/23-A	CCB				
1:14	140-34307-A-11-B	Unknown				
1:15	140-34307-A-16-B	Unknown				
1:16	140-34307-A-17-B	Unknown				
1:17	MB 140-80440/10-B	Method Blank				
1:18	LCS 140-80440/11-B	LCS				
1:19	140-34237-A-2-E	Unknown				
1:20	140-34237-A-2-F MS	Unknown				
1:21	140-34237-A-2-G MSD	Unknown				
1:22	140-34307-A-2-C	Unknown				
1:23	140-34307-A-7-E	Unknown				
S:9	CCV 140-80441/22-A	CCV				
S:10	CCB 140-80441/23-A	CCB				
1:24	140-34307-A-7-F MS	Unknown				
1:25	140-34307-A-7-G MSD	Unknown				
1:26	140-34307-A-12-C	Unknown				
1:27	140-34307-A-19-C	Unknown				
S:9	CCV 140-80441/22-A	CCV				
S:10	CCB 140-80441/23-A	CCB				

29_FH_HG_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80439

Analyst: Collins, Kerry N

Batch Open: 11/20/2023 12:00:00PM

Batch End: 11/20/2023 6:30:00PM

Preparation, Mercury (Stationary Source) FH

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-1-A (29_7470A)	N/A (140-34237-1)	Digestate	5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-1-B
2	140-34307-A-1-A (29_7470A)	N/A (140-34307-1)	Digestate	5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-1-B
3	140-34307-A-6-A (29_7470A)	N/A (140-34307-1)	Digestate	5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-6-B
4	140-34307-A-11-A (29_7470A)	N/A (140-34307-1)	Digestate	5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-11-B
5	140-34307-A-16-A (29_7470A)	N/A (140-34307-1)	Digestate	5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-16-B
6	140-34307-A-17-A (29_7470A)	N/A (140-34307-1)	Digestate	5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-17-B
7	MB~140-80160/7-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		MB 140-80160/7-B
8	LCS~140-80160/8-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCS 140-80160/8-B
9	LCSD~140-80160/9-A N/A	N/A		5 mL	50 mL	N/A	N/A	N/A		LCSD 140-80160/9-B

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80441 Analyst: Collins, Kerry N Batch Open: 11/20/2023 12:00:00PM

Batch End: 11/20/2023 6:30:00PM

Preparation, Mercury (Stationary Source)

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	140-34237-A-2-B (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-2-E
2	140-34237-A-2-C~MS (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-2-F MS
3	140-34237-A-2-D~MSD (29_7470A)	N/A (140-34237-1)	AT_Volume	2.5 mL	50 mL	11/22/23	13_Days	4		140-34237-A-2-G MSD
4	140-34307-A-2-B (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-2-C
5	140-34307-A-7-B (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-7-E
6	140-34307-A-7-C~MS (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-7-F MS
7	140-34307-A-7-D~MSD (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-7-G MSD
8	140-34307-A-12-B (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-12-C
9	140-34307-A-19-B (29_7470A)	N/A (140-34307-1)	AT_Volume	2.5 mL	50 mL	11/21/23	8_Days	4		140-34307-A-19-C
10	MB~140-80440/10-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		MB 140-80440/10-B
11	LCS~140-80440/11-A N/A	N/A		2.5 mL	50 mL	N/A	N/A	N/A		LCS 140-80440/11-B
12	STD0~140-80441/12 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-80441/12-A
13	STD1~140-80441/13 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A		IC 140-80441/13-A

HG_AT_BH_P Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 140-80441 Analyst: Collins, Kerry N Batch Open: 11/20/2023 12:00:00PM

Batch End: 11/20/2023 6:30:00PM

14	STD2~140-80441/14 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
15	STD3~140-80441/15 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
16	STD4~140-80441/16 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
17	STD5~140-80441/17 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
18	STD6~140-80441/18 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
19	ICV~140-80441/19 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
20	ICB~140-80441/20 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
21	CRA~140-80441/21 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
22	CCV~140-80441/22 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	
23	CCB~140-80441/23 N/A	N/A		50 mL	50 mL	N/A	N/A	N/A	

11/27/2023
12:19 PM

Eurofins Knoxville *WSK*

Report Generated By Teledyne Leeman QuickTrace

Analyst: knxinsthg2

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\A112123A.wszf

Creation Date: 11/21/2023 8:41:58 AM

Comment:

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
Calibration Blank	STD	11/21/23 11:07:53 am	0.00000	57	57.53			1.0000	N/A
Replicates	44.9	60.8	99.6	21.9					
Standard #1 (0.1 ug/L)	STD	11/21/23 11:10:26 am	0.10000	1141	3.05	-29.84%		1.0000	N/A
Replicates	1089.7	1157.8	1150.0	1166.5					
Standard #2 (0.2 ug/L)	STD	11/21/23 11:12:59 am	0.20000	2349	0.80	-11.53%		1.0000	N/A
Replicates	2327.8	2343.4	2373.2	2350.6					
Standard #3 (0.5 ug/L)	STD	11/21/23 11:15:32 am	0.50000	5597	1.03	-7.18%		1.0000	N/A
Replicates	5650.1	5635.7	5578.3	5524.0					
Standard #4 (1.0 ug/L)	STD	11/21/23 11:18:05 am	1.00000	11722	0.12	0.55%		1.0000	N/A
Replicates	11703.5	11730.0	11734.9	11718.5					
Standard #5 (5.0 ug/L)	STD	11/21/23 11:20:37 am	5.00000	59328	0.36	4.28%		1.0000	N/A
Replicates	59611.1	59361.9	59233.3	59103.9					
Standard #6 (10.0 ug/l)	STD	11/21/23 11:23:09 am	10.00000	112279	1.15	-1.05%		1.0000	N/A
Replicates	110681.4	111916.0	112814.6	113705.6					

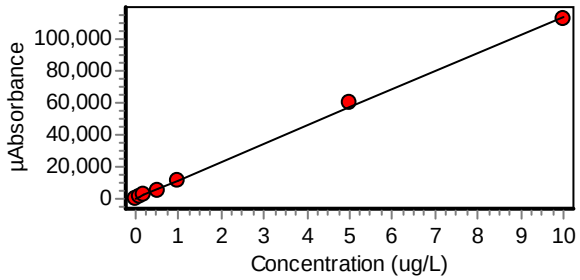
Calibration

Equation: Abs = 11311.961x + 347.339

R2: 0.99930 RSE: 16.54%

SEE: 1241.2900

Flags:



ICV 140-80441/19-A	ICV	11/21/23 11:25:40 am	2.65300	30358	1.38			1.0000	106.12
Replicates	29813.5	30302.3	30532.0	30785.8					
ICB 140-80441/20-A	ICB	11/21/23 11:28:12 am	-0.02927	16	3.65			1.0000	N/A
Replicates	32.6	14.4	14.6	3.4					
CRA 140-80441/21-A	CRDL	11/21/23 11:30:44 am	0.18281	2415	1.07			1.0000	91.40
Replicates	2432.9	2433.1	2387.5	2407.5					
CCV 140-80441/22-A	CCV	11/21/23 11:33:18 am	5.23440	59559	0.08			1.0000	104.69
Replicates	59631.5	59539.7	59526.2	59538.4					
CCB 140-80441/23-A	CCB	11/21/23 11:35:52 am	-0.03007	7	3.89			1.0000	N/A
Replicates	18.3	17.0	-9.8	3.2					

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
MB 140-80160/7-B	MB	11/21/23 11:38:24 am	-0.02655	47	7.21			1.0000	N/A
Replicates	73.5	21.9	52.4	40.4					
LCS 140-80160/8-B	LCS	11/21/23 11:40:56 am	4.65290	52980	1.26			1.0000	93.06
Replicates	52656.4	52348.0	53040.2	53876.7					
LCSD 140-80160/9-B	LCS	11/21/23 11:43:28 am	5.30620	60370	0.04			1.0000	106.12
Replicates	60365.6	60358.3	60349.9	60407.8					
140-34237-A-1-B	UNK	11/21/23 11:46:01 am	-0.02795	31	6.56			1.0000	N/A
Replicates	45.8	4.4	25.4	49.3					
140-34237-A-1-B pds	UNK	11/21/23 11:48:33 am	1.03890	12100	0.08			1.0000	N/A
Replicates	12107.1	12107.8	12088.2	12095.8					
140-34237-A-1-B pds	UNK	11/21/23 11:51:06 am	1.02980	11997	0.17			1.0000	N/A
Replicates	11979.5	11987.3	11995.7	12024.8					
140-34307-A-1-B	UNK	11/21/23 11:53:39 am	2.37930	27262	0.42			1.0000	N/A
Replicates	27431.8	27209.7	27199.8	27208.5					
140-34307-A-6-B	UNK	11/21/23 11:56:12 am	1.40000	16184	0.09			1.0000	N/A
Replicates	16167.6	16178.2	16189.2	16201.2					
140-34307-A-6-B pds	UNK	11/21/23 11:58:45 am	2.30930	26470	0.17			1.0000	N/A
Replicates	26413.3	26459.2	26491.4	26516.7					
140-34307-A-6-B pds	UNK	11/21/23 12:01:17 pm	2.14740	24639	0.31			1.0000	N/A
Replicates	24594.0	24588.0	24623.7	24748.4					
CCV 140-80441/22-A	CCV	11/21/23 12:03:51 pm	5.22450	59447	0.19			1.0000	104.49
Replicates	59605.8	59449.5	59353.4	59379.5					
CCB 140-80441/23-A	CCB	11/21/23 12:06:25 pm	-0.02849	25	4.13			1.0000	N/A
Replicates	44.3	18.4	22.9	14.4					
140-34307-A-11-B	UNK	11/21/23 12:08:57 pm	1.30860	15151	0.31			1.0000	N/A
Replicates	15097.8	15138.2	15157.8	15209.0					
140-34307-A-16-B	UNK	11/21/23 12:11:29 pm	-0.02927	16	4.58			1.0000	N/A
Replicates	2.6	37.9	10.9	13.5					
140-34307-A-17-B	UNK	11/21/23 12:14:01 pm	-0.02898	20	4.01			1.0000	N/A
Replicates	26.5	8.8	8.3	34.6					
MB 140-80440/10-B	MB	11/21/23 12:16:32 pm	-0.02769	34	4.92			1.0000	N/A
Replicates	31.8	51.2	14.4	39.2					
LCS 140-80440/11-B	LCS	11/21/23 12:19:05 pm	4.66100	53073	0.51			1.0000	93.22
Replicates	52698.0	53053.6	53239.4	53299.4					
140-34237-A-2-E	UNK	11/21/23 12:21:37 pm	0.00113	360	153.61			1.0000	N/A
Replicates	357.0	376.1	373.9	333.6					
140-34237-A-2-F MS	UNK	11/21/23 12:24:09 pm	1.06430	12387	0.38			1.0000	N/A
Replicates	12449.5	12389.4	12363.4	12344.2					

Sample Name			Type	Date/Time	Conc (ug/L)	µAbs	%RSD	Residual	Flags	DF	% Recovery
140-34237-A-2-G MSD			UNK	11/21/23 12:26:42 pm	1.04330	12149	0.57			1.0000	N/A
Replicates	12237.0	12164.2	12109.0	12085.4							
140-34307-A-2-C			UNK	11/21/23 12:29:15 pm	0.68684	8117	3.59			1.0000	N/A
Replicates	7711.8	8152.4	8307.5	8295.5							
140-34307-A-7-E			UNK	11/21/23 12:31:48 pm	4.91600	55957	0.05			1.0000	N/A
Replicates	55994.0	55936.0	55942.3	55957.2							
CCV 140-80441/22-A			CCV	11/21/23 12:34:22 pm	5.01930	57126	0.59			1.0000	100.39
Replicates	56662.8	57110.8	57310.3	57419.0							
CCB 140-80441/23-A			CCB	11/21/23 12:36:56 pm	-0.02855	24	5.52			1.0000	N/A
Replicates	13.3	26.0	9.4	48.9							
140-34307-A-7-F MS			UNK	11/21/23 12:39:29 pm	5.50890	62663	0.22			1.0000	N/A
Replicates	62649.7	62587.7	62554.5	62861.5							
140-34307-A-7-G MSD			UNK	11/21/23 12:42:01 pm	5.87620	66819	0.42			1.0000	N/A
Replicates	66468.1	66742.0	66968.5	67097.1							
140-34307-A-12-C			UNK	11/21/23 12:44:33 pm	8.45930	96039	4.55			1.0000	N/A
Replicates	91378.5	93438.1	98640.8	100698.1							
140-34307-A-19-C			UNK	11/21/23 12:47:04 pm	-0.03642	-65	4.19			1.0000	N/A
Replicates	-58.9	-87.9	-46.7	-65.0							
CCV 140-80441/22-A			CCV	11/21/23 12:49:38 pm	5.22690	59474	0.13			1.0000	104.54
Replicates	59428.0	59432.3	59445.6	59589.8							
CCB 140-80441/23-A			CCB	11/21/23 12:52:13 pm	-0.02748	37	2.98			1.0000	N/A
Replicates	41.5	23.1	37.9	43.6							

Eurofins Knoxville Mercury Batch Review Checklist
SOPs: KNOX-MT-0009r16, KNOX-MT-0010r15, KNOX-MT-0008r8, KNOX-MT-0001r6

Chart Name:	4112123A	Analysis Batch #:	605329	Analyst:	WSK	Instrument:	ADT	

A. Calibration/Instrument Run QC	1st	2nd	Why is data reportable?
1. Instrument calibrated with at least 5 standards and a blank?	Y	Y	
2. Linearity and intercept verified? (r≥0.995 and x-intercept <RL)	Y	Y	
3. ICV analyzed at beginning of run & within limits? (90 - 110%R)	Y	Y	
4. CCV analyzed at required frequency & within limits? (80 - 120%R)	Y	Y	☐ CCV reanalyzed one time; reanalysis within limits ☐ **CCV - %D, High, Sample ND** (NCM# _____)
5. ICB/CCB analyzed at required frequency & within limits? (Water/Soil/Waste ≤MDL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ CCB reanalyzed one time; reanalysis within limits ☐ **CCB-Out, Samples ND or 10x** (NCM# _____)
6. Reporting Limit Check Standard (CRI) within limits? (±30%; ±50 % for Method 30B)	Y	Y	
B. Client Sample and QC Sample Results			
1. Were samples with results > the linear range (LR) diluted and reanalyzed?	NA	NA	Comments:
2. Were samples with negative results >RL reanalyzed at a dilution?	NA	NA	
3. Were samples analyzed with the holding time?	Y	Y	☐ **Holding Time-Receipt** (NCM# _____) ☐ **Holding Time-Initial Analysis** (NCM# _____) ☐ **Holding Time-Reanalysis** (NCM# _____) ☐ **Holding Time- Insufficient Time** (NCM# _____)
4. Calculations checked for error? (Document manual calc in comments.)	Y	Y	
C. Preparation/Matrix QC			
1. Method blank done per prep batch and within limits? (Waters/Soils/Waste < ½ RL; Air/SEP/PM10/JN Waste/30B <RL)	Y	Y	☐ **Method Blank–Report, ND** (NCM# _____) ☐ **Method Blank – Report, 10X** (NCM# _____) ☐ **Method Blank–Insufficient Sample** (NCM# _____)
2. LCS done per prep batch & within QC limits?	Y	Y	☐ **LCS/LCS –Insufficient Sample** (NCM# _____) ☐ **LCS/LCSD - %R High** (NCM# _____) ☐ See narrative-SEP LCS within historical limits.
3. MS/MSD or MS/DUP run at required frequency?	Y	Y	☐ **MS/MSD/DUP-Insufficient Vol** (NCM# _____)
4. MS/MSD %R and RPD within QC limits?	N	N	☐ LCS acceptable-matrix effects ☒ Native analyte > 4x spike level ☐ **MS/MSD - %RPD** (NCM# _____)
5. DUP RPD within limits?	NA	NA	☐ **DUP - %RPD** (NCM# _____)
6. PDS/PDSD run at required frequency & within QC limits? (75-125%R and ≤20 RPD)	Y	Y	☐ **Post Digestion Spike - %R** (NCM# _____) ☐ **MS/MSD; High Bias; PDS Accept.** (NCM# _____)

D. TALS Review		1st
TALS Run Log Tab	Date and time match raw data *(to verify TALS import worked properly)*	Y
	Dilutions are correct *(instrument sample ID vs. Dilution column)*	Y
TALS Worksheet Tab	Complete and correct *(Final amount and notes populated where needed)*	Y
TALS Reagents Tab	Complete and correct	Y
TALS QC Links Tab	All samples, standards and QC linked correctly	Y
TALS Sample Results Tab	All unused data are marked Rejected or Accepted	Y
	All reported analytes are marked Primary or Secondary	Y
TALS Batch Information Screen	Documentation is complete	Y
TALS Sample List Tab	TALS Status set to appropriate review level	Y

1st Level Review by: WSK 11-21-23	2nd Level Review by: LNC 11-21-23
MO-34702-A-11-B @ 12:08	
(1.30860 mg/L)(0.100L)($\frac{50mL}{5mL}$) = 1.31 mg/Sample	

Shipping and Receiving Documents

Chain of Custody Record

No. 118.01290.00025_0500

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

SLR

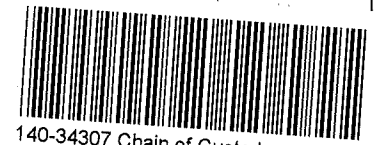
Project Name:	FMMI	Project Number:	118.01290.00025_0500
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsulting.com		

Page 1 of 2

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Full Metals List	Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
AP29-1, Container 1	10/31/23		Filter	1	X	X		
AP29-1, Container 3	10/31/23		0.1 N HNO_3	1	X	X		
AP29-1, Container 4	10/31/23		H_2O_2/HNO_3	1	X	X		
AP29-1, Container 5A	10/31/23		0.1 N HNO3	1		X		
AP29-1, Container 5B	10/31/23		Acidified KMnO4	1		X		
AP29-1, Container 5C	10/31/23		H_2O_2/HCl	1		X		
AP29-2, Container 1	11/01/23		Filter	1	X	X		
AP29-2, Container 3	11/01/23		0.1 N HNO3	1	X	X		
AP29-2, Container 4	11/01/23		H_2O_2/HNO_3	1	X	X		
AP29-2, Container 5A	11/01/23		0.1 N HNO3	1		X		
AP29-2, Container 5B	11/01/23		Acidified KMnO4	1		X		
AP29-2, Container 5C	11/01/23		H_2O_2/HNO_3	1		X		
AP29-3, Container 1	11/02/23		Filter	1	X	X		
AP29-3, Container 3	11/02/23		0.1 N HNO3	1	X	X		
AP29-3, Container 4	11/02/23		H_2O_2/HNO_3	1	X	X		
AP29-3, Container 5B	11/02/23		0.1 N HNO3	1		X		
AP29-3, Container 5B	11/02/23		Acidified KMnO4	1		X		
AP29-3, Container 5C	11/02/23		H2O2/HCl	1		X		

no custody seal
Received at RT 20.0/25.2°C
CAR 11-9-23
FedEx PO# 7740 3890 4034
7740 3838 7531



Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	11/8/23	16:00	[signature]	11-9-23	9:15
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level		Turnaround	
Level I	☐	Routine	☑
Level II	☐	24 Hour	☐
Level III	☐	1 Week	☐
Other	☐	Other	

Sample Receipt	
Total # Containers Received?	
COC Seals Present?	
COC Seals Intact?	
Received Containers Intact?	
Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

11/27/2023 12:19 PM

Chain of Custody Record

No. 118.01290.00025_0500

SLR International Corporation
1612 Specht Point Road, Suite 119, Fort Collilns, CO 80525
(970) 494-0805 Phone * (970) 999-3998 Fax
http://www.slrconsulting.com/us

SLR

Project Name:	FMMI	Project Number:	118.01290.00025_0500
Send Report To:	Doug Bopray	Sampler (Print Name):	Doug Bopray
Address:	1612 Specht Point Road	Sampler (Print Name):	John Rosburg
	Suite 119	Shipment Method:	FED EX
	Fort Collins, CO 80525	Airbill Number	
Phone:	(970) 999-3980	Laboratory Receiving:	Eurofins Knoxville
Email:	dbopray@slrconsulting.com		

Page 2 of 2

Purchase Order No. 3024

Field Sample ID	Sample Date	Sample Time	Sample Matrix	Number of Containers	Full Metals List	Mercury	Comments, Special Instructions, etc.	Lab Sample ID (to be completed by lab)
Blank, Container 12	11/01/23		Filter	1	X	X		
Blank, Container 8A	11/01/23		0.1 N HNO_3	1	X	X		
Blank, Container 8B	11/01/23		H_2O	1	X	X		
Blank, Container 9	11/01/23		H_2O_2/HNO_3	1	X	X		
Blank, Container 10	11/01/23		Acidified KMnO4	1		X		
Blank, Container 11	11/01/23		H2O/HCl	1		X		
Please provide separate front and back half metals results.								
Metals List: Lead, Silver, Arsenic, Gold, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Mercury, Nickel, Antimony, Selenium, Thallium, Vanadium, Zinc.								
Please provide digital results to Doug Bopray at dbopray@slrconsulting.com								
If you have any questions or concerns regarding the samples or instructions please call Doug Bopray at (970) 219-1431.								

Relinquished by: (Signature)	Date: 11/8/23	Time: 16:00	Received by: (Signature)	Date: 11-9-23	Time: 9:15
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Sample Custodian Remarks (Completed By Laboratory):

QA/QC Level		Turnaround		Sample Receipt	
Level I	☐	Routine	☑	Total # Containers Received?	
Level II	☐	24 Hour	☐	COC Seals Present?	
Level III	☐	1 Week	☐	COC Seals Intact?	
Other	☐	Other		Received Containers Intact?	
				Temperature?	

White: Lab Copy Yellow: PM Copy Pink: Field Copy Gold: PM/QA/QC Copy

Loc: 140
34307

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : S176 Correction factor: +0.4			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	~~CMR 11-9-23~~ ✓			☑ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

1 COC 4029-3, container 5B (0.1N HNO3) bottle label 4029-3 container 5A (0.1N HNO3) logged per bottle

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14003997 PM Instructions:

Sample Receiving Associate: Cmr Holeman Date: 11-9-23

QA026R32.doc, 062719

11/27/2023 12:19 PM

Appendix B Calibration Data

Vent Fume, Aisle Scrubber and Acid Plant Tail Gas Mercury Emissions Test Report

Freeport-McMoRan Miami Inc.

SLR Project No.: 118.01290.00025

February 15, 2024

Alternative RM-5 Post Test Calibration
Freeport-McMoRan Miami Inc.
Compliance Test - Reference Method 29
Aisle Scrubber Stack
April 12, 2023

RUN #	METER BOX	RUN TIME (min)	dH@	M_d	P_b (in. Hg)	T_{dm} (^oF)	T_{dm} (^oR)	V_{dm} (acf)	dH_{avg} (in. H_2O)	$(SQRT\ dH)_{avg}$ SQRT (in. H_2O)	Y_{qa}
AS29-1	Hawkeye	120	1.7674	28.84	26.30	94.3	554.3	82.385	1.26	1.12	1.0066
AS29-2	Hawkeye	120	1.7674	28.84	26.30	81.8	541.8	87.763	1.43	1.19	0.9948
AS29-3	Hawkeye	120	1.7674	28.84	26.30	87.2	547.2	85.736	1.35	1.16	0.9963
										Average	0.9992

Average Y_{dq}	Meter Y_d	% Difference
0.9992	0.9932	0.60%

The difference between the average Yqa for the three runs and the meter box Yd must be within five percent to pass the calibration

Reference: Roger T. Shigehara, P.G. Royals, and E.W. Steward,
"Alternative Method 5 Post-Test Calibration", Entropy Inc.

Alternative RM-5 Post Test Calibration
Freeport-McMoRan Miami Inc.
Compliance Test - Reference Method 29
Vent Fume
May 11, 2023

RUN #	METER BOX	RUN TIME (min)	dH@	M_d	P_b (in. Hg)	T_{dm} (^oF)	T_{dm} (^oR)	V_{dm} (acf)	dH_{avg} (in. H_2O)	$(SQRT\ dH)_{avg}$ SQRT (in. H_2O)	Y_{qa}
VF29-1	Blackhawk	120	1.9156	28.84	26.10	79.0	539.0	106.320	2.26	1.50	0.9953
VF29-2	Blackhawk	120	1.9156	28.84	26.10	80.3	540.3	101.881	2.07	1.44	0.9939
VF29-3	Blackhawk	120	1.9156	28.84	26.05	87.1	547.1	101.470	2.04	1.43	0.9985
										Average	0.9959

Average Y_{dq}	Meter Y_d	% Difference
0.9959	1.0068	1.09%

The difference between the average Yqa for the three runs and the meter box Yd must be within five percent to pass the calibration

Reference: Roger T. Shigehara, P.G. Royals, and E.W. Steward,
"Alternative Method 5 Post-Test Calibration", Entropy Inc.

Alternative RM-5 Post Test Calibration
Freeport-McMoRan Miami Inc.
Compliance Test - Reference Method 29
Acid Plant Tail Gas
October 31, 2023

RUN #	METER BOX	RUN TIME (min)	dH@	M_d	P_b (in. Hg)	T_{dm} (°F)	T_{dm} (°R)	V_{dm} (acf)	dH_{avg} (in. H_2O)	$(SQRT\ dH)_{avg}$ SQRT (in. H_2O)	Y_{qa}
AP29-1	Hawkeye	120	1.7674	28.60	26.35	75.8	535.8	99.948	1.89	1.38	1.0048
AP29-2	Hawkeye	120	1.7674	28.48	26.35	78.3	538.3	100.380	1.90	1.38	1.0075
AP29-3	Hawkeye	120	1.7674	28.48	26.40	70.3	530.3	85.032	1.41	1.18	1.0062
										Average	1.0061

Average Y_{dq}	Meter Y_d	% Difference
1.0061	0.9932	1.29%

The difference between the average Yqa for the three runs and the meter box Yd must be within five percent to pass the calibration

Reference: Roger T. Shigehara, P.G. Royals, and E.W. Steward,
"Alternative Method 5 Post-Test Calibration", Entropy Inc.

CleanAir Engineering - Meter Box Full Test Calibration

Client: SLR | **Reviewed By:** R. Redel | **Calibration Signature:** Martin Vaquero

ID No: Blackhawk | **Calibrated By:** M. Vaquero | **Meter Box Yd:** 1.0068

Dept No: | **Date of Calibration:** 01/20/23 | **Meter Box ΔH@:** 1.9156

Meter Box Serial No: 28-041614-1 | **Due Date of Calibration:** 01/20/24 | **Barometer Serial No:** W12637

Manufacturer Part No: 0028 | **Meter Box Vacuum:** 1.0 in. H_2O | **Barometric Pressure:** 29.32 in. Hg

				Standard Meter Gas Volume (ft^3)			Meter Box Gas Volume (ft^3)			Std. Meter Temperature (°F)			Meter Box Temperature (°F)			Time (min.)	Calibration Results	
Q	ΔH	ΔP	Y_{ds}	Initial	Final	V_{ds} Net	Initial	Final	V_d Net	T_{is} In	T_{os} Out	T_{ds} Avg.	T_i In	T_o Out	T_d Avg.	Θ	Y_d	ΔH@
0.366	0.50	-0.50	1.0000	0.000	5.000	5.000	176.522	181.610	5.088	69.0	69.0	69.00	86.0	82.0	84.00	13.34	1.0080	1.9993
0.367	0.50	-0.50	1.0000	0.000	5.000	5.000	181.610	186.693	5.083	69.0	69.0	69.00	86.0	82.0	84.00	13.32	1.0090	1.9933
0.645	1.50	-1.00	1.0000	0.000	10.000	10.000	152.431	162.603	10.172	69.0	69.0	69.00	82.0	86.5	84.25	15.15	1.0051	1.9181
0.645	1.50	-1.00	1.0000	0.000	10.000	10.000	162.603	172.771	10.168	69.0	69.0	69.00	83.0	87.0	85.00	15.15	1.0069	1.9163
0.938	3.00	-1.80	1.0000	0.000	10.000	10.000	123.514	133.660	10.146	69.0	69.0	69.00	93.0	80.0	86.50	10.42	1.0061	1.8365
0.938	3.00	-1.80	1.0000	0.000	10.000	10.000	133.660	143.829	10.169	69.0	69.0	69.00	93.0	82.0	87.50	10.42	1.0056	1.8298
																Averages	1.00679	1.91555

Nomenclature

P_b	Barometric Pressure (in. Hg)
Q	Flow Rate (cfm)
ΔH	Orifice Pressure differential (in. H_2O)
ΔP	Inlet Pressure Differential (in. H_2O)
V_d	Gas Meter Volume - Dry (ft^3)
V_{ds}	Standard Meter Volume - Dry (ft^3)
T_d	Average Meter Box Temperature (°F)
T_o	Outlet Meter Box Temperature (°F)
T_{ds}	Average Standard Meter Temperature (°F)
Y_d	Meter Correction Factor (unitless), $Y_i \leq Y_{avg} \pm 0.02$
Y_{ds}	Standard Meter Correction Factor (unitless)
ΔH@	Orifice Pressure Differential giving 0.75 cfm of air at 68°F and 29.92 in. Hg (in. H_2O) $\Delta H@_i \leq \Delta H@_{avg} \pm 0.2$
Θ	Duration of Run (minutes)

Equations

$$Y_d = (Y_{ds})\left[\frac{V_{ds}}{V_d}\right]\left[\frac{T_d + 460}{T_{ds} + 460}\right]\left[\frac{P_b + \Delta P/13.6}{P_b + \Delta H/13.6}\right]$$

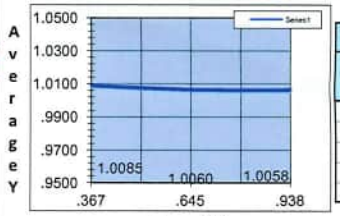
$$\Delta H@ = \frac{(0.0319)(\Delta H)}{P_b(T_o + 460)}\left[\frac{(T_{ds} + 460)\Theta}{(V_{ds})(Y_{ds})}\right]^2$$

$$Q = \frac{17.64(V_{ds})(P_b)}{(T_{ds} + 460)(\Theta)}$$

Pyrometer Calibration

Calibration Reference	1 Stack	2 Probe	3 Filter	4 Imp. Outlet	3 Aux
50	49	51	50	50	49
100	99	101	100	100	100
150	149	151	150	150	150
200	200	201	200	200	200
250	250	251	250	250	250
300	300	301	300	300	300
350	350	351	350	350	350
400	400	401	400	400	400
450	450	451	450	450	450
500	500	501	500	500	500
550	550	551	550	550	550
600	600	301	600	600	600

Tolerance = ± 2°F difference from reference setting.



Vacuum Guage

Standard (in.Hg)	Gauge (in.Hg)
5.2	5.0
10.2	10.0
14.9	15.0
19.8	20.0
24.5	25.0

Calibration Reference Information (Pyrometer)

Reference Used: Omega CL23A | Serial No: T-279500

Calibrated By: JH Metrology | Date Calibrated: 6/28/2022

Calibration Report No: 1000230501 | Calibration Due Date: 6/28/2023

Calibration Reference Information (Standard Meter)

Reference Used: Wet Test Meter | Serial No: 11AH6

Calibrated By: Martin Vaquero | Date Calibrated: 10/20/2022

Percent Error: -0.0054% | Calibration Due Date: 10/20/2023

Meter Box Pre-Calibration Inspection

Positive Leak Check:	Pass	Electrical Check:	Pass
Negative Leak Check:	Pass	Pyrometer Check:	Pass
Vacuum Gauge Check	Pass	YD Tol.:± 2% of 1.0	Pass

CleanAir Engineering - Meter Box Full Test Calibration

Client: SLR | **Reviewed By:** R. Redel | **Calibration Signature:** Martin Vaquero

ID No: Hawkeye | **Calibrated By:** M. Vaquero | **Meter Box Yd:** 0.9932

Dept No: | **Date of Calibration:** 01/23/23 | **Meter Box ΔH@:** 1.7674

Meter Box Serial No: 28-041514-1 | **Due Date of Calibration:** 01/23/24 | **Barometer Serial No:** W12637

Manufacturer Part No: 0028 | **Meter Box Vacuum:** 1.0 in. H_2O | **Barometric Pressure:** 29.43 in. Hg

				Standard Meter Gas Volume (ft^3)			Meter Box Gas Volume (ft^3)			Std. Meter Temperature (°F)			Meter Box Temperature (°F)			Time (min.)	Calibration Results	
Q	ΔH	ΔP	Y_{ds}	Initial	Final	V_{ds} Net	Initial	Final	V_d Net	T_{is} In	T_{os} Out	T_{ds} Avg.	T_i In	T_o Out	T_d Avg.	Θ	Y_d	ΔH@
0.390	0.50	-0.50	1.0000	0.000	5.000	5.000	448.920	454.086	5.166	68.0	68.0	68.00	85.0	81.0	83.00	12.60	0.9929	1.7735
0.390	0.50	-0.50	1.0000	0.000	5.000	5.000	454.086	459.259	5.173	68.0	68.0	68.00	85.0	81.0	83.00	12.60	0.9915	1.7735
0.679	1.50	-1.10	1.0000	0.000	10.000	10.000	425.125	435.456	10.331	68.0	68.0	68.00	90.0	82.0	86.00	14.47	0.9945	1.7510
0.679	1.50	-1.10	1.0000	0.000	10.000	10.000	435.456	445.799	10.343	68.0	68.0	68.00	90.0	82.0	86.00	14.47	0.9933	1.7510
0.957	3.00	-1.70	1.0000	0.000	10.000	10.000	378.720	388.985	10.265	68.0	68.0	68.00	91.0	79.0	85.00	10.27	0.9938	1.7740
0.955	3.00	-1.70	1.0000	0.000	10.000	10.000	388.985	399.273	10.288	68.0	68.0	68.00	92.0	80.0	86.00	10.30	0.9934	1.7810
																Averages	0.99325	1.76736

Nomenclature

P_b	Barometric Pressure (in. Hg)
Q	Flow Rate (cfm)
ΔH	Orifice Pressure differential (in. H_2O)
ΔP	Inlet Pressure Differential (in. H_2O)
V_d	Gas Meter Volume - Dry (ft^3)
V_{ds}	Standard Meter Volume - Dry (ft^3)
T_d	Average Meter Box Temperature (°F)
T_o	Outlet Meter Box Temperature (°F)
T_{ds}	Average Standard Meter Temperature (°F)
Y_d	Meter Correction Factor (unitless), $Y_i \leq Y_{avg} \pm 0.02$
Y_{ds}	Standard Meter Correction Factor (unitless)
ΔH@	Orifice Pressure Differential giving 0.75 cfm of air at 68°F and 29.92 in. Hg (in. H_2O) $\Delta H@_i \leq \Delta H@_{avg} \pm 0.2$
Θ	Duration of Run (minutes)

Equations

$$Y_d = (Y_{ds})\left[\frac{V_{ds}}{V_d}\right]\left[\frac{T_d + 460}{T_{ds} + 460}\right]\left[\frac{P_b + \Delta P/13.6}{P_b + \Delta H/13.6}\right]$$

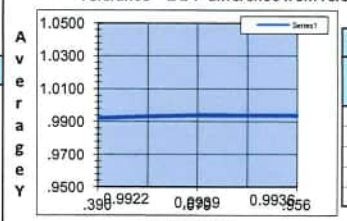
$$\Delta H@ = \frac{(0.0319)(\Delta H)}{P_b(T_o + 460)}\left[\frac{(T_{ds} + 460)\Theta}{(V_{ds})(Y_{ds})}\right]^2$$

$$Q = \frac{17.64(V_{ds})(P_b)}{(T_{ds} + 460)(\Theta)}$$

Pyrometer Calibration

Calibration Reference	1 Stack	2 Probe	3 Filter	4 Imp. Outlet	3 Aux
50	50	50	50	50	50
100	100	100	100	101	100
150	150	151	150	150	150
200	201	200	201	200	200
250	250	250	250	250	250
300	300	300	300	300	300
350	350	350	350	350	350
400	400	400	400	400	400
450	450	450	450	450	450
500	501	500	500	501	501
550	550	550	550	550	550
600	600	300	600	600	600

Tolerance = ± 2°F difference from reference setting.



Vacuum Guage

Standard (in.Hg)	Gauge (in.Hg)
4.4	5.0
9.2	10.0
14.4	15.0
19.4	20.0
24.4	25.0

Calibration Reference Information (Pyrometer)

Reference Used: Omega CL23A | Serial No: T-279500

Calibrated By: JH Metrology | Date Calibrated: 6/28/2022

Calibration Report No: 1000230501 | Calibration Due Date: 6/28/2023

Calibration Reference Information (Standard Meter)

Reference Used: Wet Test Meter | Serial No: 11AH6

Calibrated By: Martin Vaquero | Date Calibrated: 10/20/2022

Percent Error: -0.0054% | Calibration Due Date: 10/20/2023

Meter Box Pre-Calibration Inspection

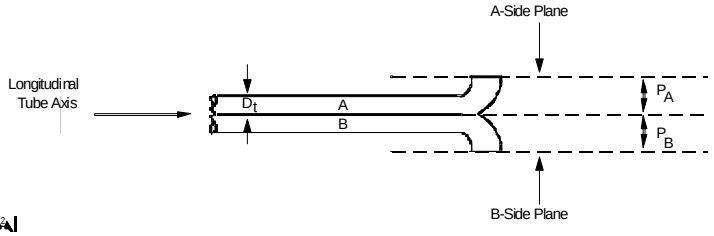
Positive Leak Check:	Pass	Electrical Check:	Pass
Negative Leak Check:	Pass	Pyrometer Check:	Pass
Vacuum Gauge Check	Pass	YD Tol.:± 2% of 1.0	Pass

PROBE CALIBRATION FORM

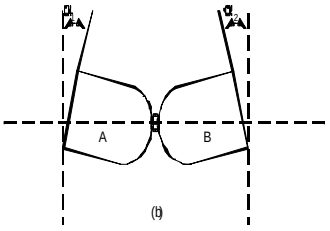
S-TYPE CALIBRATION DATA

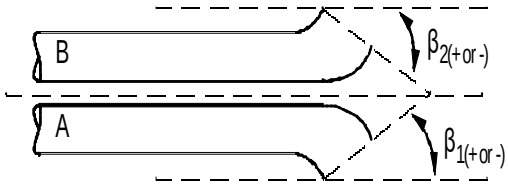
Probe ID: 1712724 **Date:** 2/28/2023 **Technician:** D. Bopray

D_t = 0.375 in. $3/16 \leq D_t \leq 3/8$
P_A = 0.478 in. $1.05D_t \leq P \leq 1.50D_t$
P_B = 0.478 in. $P_A = P_B$

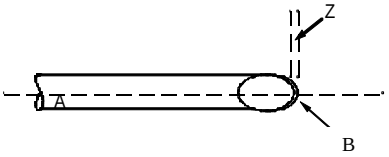


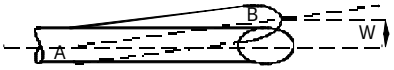
a_1 = 0 ° $a_1 \leq 10°$
a_2 = 0 ° $a_2 \leq 10°$
b_1 = 0 ° $b_1 \leq 5°$
b_2 = 0 ° $b_2 \leq 5°$





Z = 0.000 in. $Z \leq 0.125"$
W = 0.000 in. $W \leq 0.031"$





THERMOCOUPLE CALIBRATION DATA

Thermocouple ID#: 1712724 **Standard ID #:** Omega T-305421
Ambient Temp (F°): 70 **Barometric Pressure (in. Hg):** 24.81

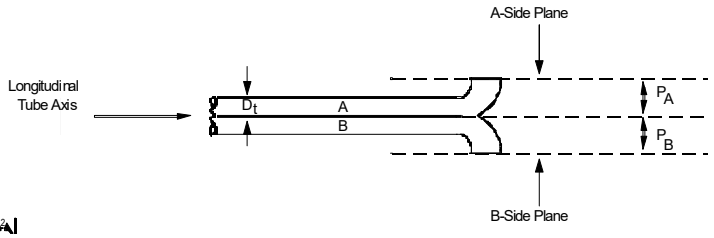
Temperature Reference Point	Source	Reference Temperature R °	Thermocouple Potentiometer Temperature R °	Temperature Difference (%) ≤ 1.5 %
0 C° (32 F°)	Ice Water	492.8	492.9	-0.02
100 C° (212 F°)	Boiling Water	666	668	-0.30
~25° C (~75°F)	Ambient	532.5	532.9	-0.08
150-250 C° (300-500 F°)	Hot Filter Box	NA	NA	NA

PROBE CALIBRATION FORM

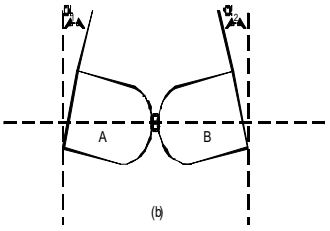
S-TYPE CALIBRATION DATA

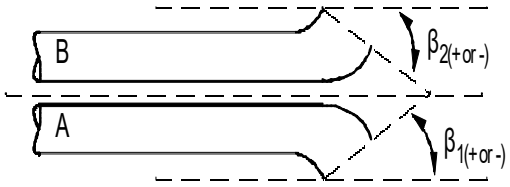
Probe ID: 419 **Date:** 2/28/2023 **Technician:** D. Bopray

D_t = 0.375 in. $3/16 \leq D_t \leq 3/8$
P_A = 0.428 in. $1.05D_t \leq P \leq 1.50D_t$
P_B = 0.428 in. $P_A = P_B$

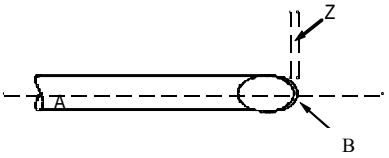


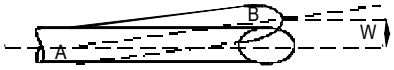
a_1 = 1 ° $a_1 \leq 10°$
a_2 = 0 ° $a_2 \leq 10°$
b_1 = 0 ° $b_1 \leq 5°$
b_2 = 0 ° $b_2 \leq 5°$





Z = 0.016 in. $Z \leq 0.125"$
W = 0.016 in. $W \leq 0.031"$





THERMOCOUPLE CALIBRATION DATA

Thermocouple ID#: 419 **Standard ID #:** Omega T-305421
Ambient Temp (F°): 70 **Barometric Pressure (in. Hg):** 24.81

Temperature Reference Point	Source	Reference Temperature R °	Thermocouple Potentiometer Temperature R °	Temperature Difference (%) ≤ 1.5 %
0 C° (32 F°)	Ice Water	493.2	493.2	0.00
100 C° (212 F°)	Boiling Water	661	664	-0.45
~25° C (~75°F)	Ambient	529.7	530.2	-0.09
150-250 C° (300-500 F°)	Hot Filter Box	460	460	0.00

IMPINGER OUTLET CALIBRATION FORM

Impinger Outlet ID Blue
Date 2/28/2023
Barometric Pressure (in Hg) 24.81
Calibrator D. Bopray

Standard ID Omega T-305421
Ambient Temp.(°F) 70

Temperature Reference Point	Source	Reference Temperature (R)	Thermocouple Potentiometer Temperature (R)	Temperature Difference (%)
(32°F)	Ice Water	492	493	-0.20
(75°F)	Ambient	529	531	-0.38
(212°F)	Boiling Water	669	670	-0.15

R= °F+460
Temperature Difference (%) <= 1.5%
Temperature Difference (%) = (Reference Temp.-Thermocouple temp.)/Reference temp.

IMPINGER OUTLET CALIBRATION FORM

Impinger Outlet ID Green
Date 2/28/2023
Barometric Pressure (in Hg) 24.81
Calibrator D. Bopray

Standard ID Omega T-305421
Ambient Temp.(°F) 72

Temperature Reference Point	Source	Reference Temperature (R)	Thermocouple Potentiometer Temperature (R)	Temperature Difference (%)
(32°F)	Ice Water	492	493	-0.20
(75°F)	Ambient	529	532	-0.57
(212°F)	Boiling Water	669	671	-0.30

R= °F+460
Temperature Difference (%) <= 1.5%
Temperature Difference (%) = (Reference Temp.-Thermocouple temp.)/Reference temp.

IMPINGER OUTLET CALIBRATION FORM

Impinger Outlet ID Yellow
Date 2/28/2023
Barometric Pressure (in Hg) 28.41
Calibrator D. Bopray

Standard ID Omega T-305421
Ambient Temp.(°F) 72

Temperature Reference Point	Source	Reference Temperature (R)	Thermocouple Potentiometer Temperature (R)	Temperature Difference (%)
(32°F)	Ice Water	492	493	-0.20
(75°F)	Ambient	530	533	-0.57
(212°F)	Boiling Water	670	671	-0.15

R= °F+460
Temperature Difference (%) <= 1.5%
Temperature Difference (%) = (Reference Temp.-Thermocouple temp.)/Reference temp.

IMPINGER OUTLET CALIBRATION FORM

Impinger Outlet ID Red
Date 2/28/2023
Barometric Pressure (in Hg) 24.81
Calibrator D. Bopray

Standard ID Omega T-305421
Ambient Temp.(°F) 72

Temperature Reference Point	Source	Reference Temperature (R)	Thermocouple Potentiometer Temperature (R)	Temperature Difference (%)
(32°F)	Ice Water	492	492	0.00
(75°F)	Ambient	529	533	-0.76
(212°F)	Boiling Water	670	672	-0.30

R= °F+460
Temperature Difference (%) <= 1.5%
Temperature Difference (%) = (Reference Temp.-Thermocouple temp.)/Reference temp.

Appendix C Process Operations Data

Vent Fume, Aisle Scrubber and Acid Plant Tail Gas Mercury Emissions Test Report

Freeport-McMoRan Miami Inc.

SLR Project No.: 118.01290.00025

February 15, 2024

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-1	4/12/23 14:31	125.1	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:32	124.9	18.0	0.0	0.0	4.4	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:33	125.0	18.1	0.0	0.0	16.0	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:34	124.9	18.1	0.0	0.0	19.7	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:35	125.2	18.1	0.0	0.0	20.1	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:36	125.2	18.1	0.0	0.0	20.1	0.1	0.3	0.3	0.4	-0.3
M29, AS29-1	4/12/23 14:37	125.1	18.1	0.0	0.0	19.4	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:38	125.1	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:39	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:40	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:41	124.8	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:42	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:43	124.9	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:44	124.9	18.1	0.0	0.2	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:45	124.9	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:46	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:47	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:48	125.3	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:49	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:50	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:51	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:52	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:53	124.5	18.2	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:54	124.6	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:55	124.4	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:56	125.0	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:57	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:58	125.3	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 14:59	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:00	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:01	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:02	124.8	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:03	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:04	124.7	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:05	124.8	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:06	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.3
M29, AS29-1	4/12/23 15:07	125.1	18.0	0.0	0.1	18.0	0.2	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:08	125.1	18.0	0.0	0.1	18.0	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:09	125.2	18.1	0.0	0.1	18.1	0.2	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:10	125.3	18.1	0.0	0.1	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:11	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:12	124.8	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:13	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:14	125.3	18.1	0.0	0.0	18.1	0.2	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:15	124.7	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:16	124.6	18.1	0.0	0.0	18.1	0.2	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:17	124.8	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.5	-0.4
M29, AS29-1	4/12/23 15:18	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:19	125.4	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:20	125.4	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:21	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:22	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:23	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:24	125.2	18.1	0.0	0.0	18.1	0.2	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:25	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:26	124.9	18.1	0.0	0.0	18.1	0.2	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:27	124.7	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:28	124.8	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:29	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:30	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:31	125.1	18.1	0.0	0.0	18.1	0.2	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:32	125.2	18.1	0.0	0.0	17.6	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:33	124.9	18.2	0.0	0.0	1.7	0.1	0.3	0.3	0.4	-0.4

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-1	4/12/23 15:34	125.0	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:35	125.2	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:36	125.2	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:37	125.1	18.1	0.0	0.0	1.2	0.2	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:38	124.5	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:39	124.6	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:40	124.8	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:41	125.1	18.1	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:42	125.2	18.1	0.0	0.0	2.8	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:43	124.9	18.1	0.0	0.0	12.8	0.2	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:44	125.2	18.1	0.0	0.0	17.6	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:45	125.1	18.1	0.0	0.0	18.0	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:46	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:47	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:48	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:49	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:50	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:51	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:52	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:53	124.9	18.1	0.0	0.0	18.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:54	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:55	125.4	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:56	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:57	125.2	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:58	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 15:59	124.6	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:00	125.4	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:01	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:02	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:03	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:04	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:05	125.3	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:06	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:07	124.9	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:08	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:09	125.0	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:10	125.1	18.1	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:11	124.9	18.0	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:12	125.2	18.0	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:13	125.4	18.0	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:14	124.5	17.9	0.0	0.0	18.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:15	124.5	17.9	0.0	0.1	14.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:16	125.0	17.8	0.0	0.1	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:17	124.9	17.6	0.0	0.1	1.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:18	125.2	17.2	0.0	0.1	1.1	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:19	125.0	11.2	0.0	0.1	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:20	124.7	1.4	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:21	125.2	1.4	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:22	125.2	1.3	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:23	125.0	1.3	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:24	124.5	1.3	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:25	124.8	1.3	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.4
M29, AS29-1	4/12/23 16:26	125.0	1.2	0.0	0.0	1.2	0.1	0.3	66.3	0.4	-0.4
M29, AS29-1	4/12/23 16:27	125.1	1.2	0.0	0.0	1.2	0.2	0.3	499.9	0.4	-0.4
M29, AS29-1	4/12/23 16:28	124.8	1.2	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.5
M29, AS29-1	4/12/23 16:29	125.0	1.2	0.0	0.0	1.2	0.1	0.3	204.0	0.4	-0.5
M29, AS29-1	4/12/23 16:30	125.1	1.2	0.0	0.0	1.2	0.1	0.3	210.5	0.4	-0.5
M29, AS29-1	4/12/23 16:31	125.2	1.2	0.0	0.0	1.2	0.1	0.3	0.3	0.4	-0.5
M29, AS29-1	4/12/23 16:32	125.1	1.2	0.0	0.0	1.2	0.1	0.3	0.3	0.5	-0.5
M29, AS29-1	4/12/23 16:33	124.8	1.2	0.0	0.0	1.2	0.1	0.3	0.3	0.5	-0.5
M29, AS29-1	4/12/23 16:34	125.0	1.2	0.0	0.0	1.2	0.1	0.3	0.3	0.5	-0.5
M29, AS29-1	4/12/23 16:35	125.0	4.2	0.0	0.0	1.2	0.1	0.3	0.3	0.5	-0.5
M29, AS29-1	4/12/23 16:36	125.0	12.7	0.0	0.0	1.2	0.1	0.3	0.3	0.5	-0.5
M29, AS29-1	Average	125.0	15.9	0.0	0.0	13.7	0.1	0.3	8.0	0.4	-0.4

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-2	4/15/23 14:05	125.1	1.6	0.0	15.5	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:06	125.3	1.5	0.0	15.5	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:07	125.1	1.5	0.0	15.5	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:08	124.6	1.5	0.0	15.5	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:09	124.7	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:10	124.8	1.5	0.0	15.3	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:11	124.8	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:12	124.9	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:13	125.3	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:14	125.3	1.5	0.0	15.5	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:15	125.3	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:16	125.2	1.5	0.0	15.3	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:17	124.9	1.5	0.0	15.3	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:18	125.0	1.5	0.0	15.3	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:19	125.2	1.5	0.0	15.4	18.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:20	125.1	1.4	0.0	15.5	18.1	0.1	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:21	125.0	1.5	0.0	15.6	14.9	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:22	124.9	1.4	0.0	15.8	1.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:23	124.9	1.4	0.0	15.7	1.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:24	124.8	1.4	0.0	15.6	1.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:25	125.0	1.4	0.0	15.5	1.1	0.2	0.4	0.3	0.5	-0.5
M29, AS29-2	4/15/23 14:26	125.2	1.4	0.0	15.5	1.0	0.2	0.4	0.3	0.5	4512.8
M29, AS29-2	4/15/23 14:27	125.1	1.4	0.0	15.5	1.0	0.2	0.4	0.3	0.5	7637.7
M29, AS29-2	4/15/23 14:28	124.9	1.4	0.0	15.5	1.0	0.2	0.4	0.3	0.5	6441.1
M29, AS29-2	4/15/23 14:29	124.9	1.4	0.0	15.4	2.7	0.2	0.4	0.3	0.5	2210.7
M29, AS29-2	4/15/23 14:30	125.3	1.4	0.0	15.2	12.9	0.2	0.4	49.5	0.5	1045.3
M29, AS29-2	4/15/23 14:31	125.1	1.4	0.0	15.3	17.6	0.2	0.4	595.1	0.5	6377.2
M29, AS29-2	4/15/23 14:32	124.7	1.4	0.0	15.5	18.0	0.2	0.4	561.0	0.5	5955.0
M29, AS29-2	4/15/23 14:33	124.9	1.4	0.0	15.6	18.1	0.2	0.4	1.3	0.5	150.5
M29, AS29-2	4/15/23 14:34	125.1	1.4	0.0	15.7	18.1	0.2	0.4	0.3	0.5	-0.7
M29, AS29-2	4/15/23 14:35	125.1	1.4	0.0	15.9	18.1	0.2	0.4	0.3	0.5	-0.6
M29, AS29-2	4/15/23 14:36	125.1	1.4	0.0	16.0	18.1	0.2	0.4	0.3	280.4	4636.4
M29, AS29-2	4/15/23 14:37	125.3	1.4	0.0	16.1	18.1	0.2	0.4	0.3	582.3	6288.7
M29, AS29-2	4/15/23 14:38	125.1	1.4	0.0	16.2	18.1	0.2	0.4	0.3	570.3	6196.0
M29, AS29-2	4/15/23 14:39	125.0	1.4	0.0	16.3	18.1	0.2	0.4	0.3	560.9	6121.1
M29, AS29-2	4/15/23 14:40	124.6	1.4	0.0	16.4	18.1	0.2	0.4	0.3	554.7	6072.1
M29, AS29-2	4/15/23 14:41	124.7	1.4	0.0	16.5	18.1	0.2	0.4	0.3	549.9	6033.9
M29, AS29-2	4/15/23 14:42	124.9	1.5	0.0	16.6	18.1	0.2	0.4	0.3	547.3	6003.0
M29, AS29-2	4/15/23 14:43	125.0	1.4	0.0	16.5	18.1	0.2	0.4	0.3	545.2	5984.9
M29, AS29-2	4/15/23 14:44	125.0	1.4	0.0	16.5	18.1	0.2	0.4	0.3	543.5	5964.0
M29, AS29-2	4/15/23 14:45	125.1	1.4	0.0	16.5	18.1	0.2	0.4	0.3	541.7	5949.4
M29, AS29-2	4/15/23 14:46	125.2	1.4	0.0	16.6	18.1	0.2	0.4	0.3	540.5	5940.1
M29, AS29-2	4/15/23 14:47	124.9	1.5	0.0	16.8	18.1	0.2	0.4	0.3	539.8	5931.7
M29, AS29-2	4/15/23 14:48	124.8	1.4	0.0	17.0	18.1	0.2	0.4	0.3	539.1	5926.2
M29, AS29-2	4/15/23 14:49	124.8	1.4	0.0	17.2	18.1	0.2	0.4	0.3	538.5	5918.0
M29, AS29-2	4/15/23 14:50	124.8	1.4	0.0	17.3	18.1	0.2	0.4	0.3	537.3	5912.5
M29, AS29-2	4/15/23 14:51	124.7	1.4	0.0	17.3	18.1	0.2	0.4	0.3	536.4	5911.0
M29, AS29-2	4/15/23 14:52	125.0	1.4	0.0	17.3	18.1	0.2	0.4	0.3	536.3	5905.2
M29, AS29-2	4/15/23 14:53	125.0	1.4	0.0	17.4	18.1	0.2	0.4	0.3	536.6	5903.2
M29, AS29-2	4/15/23 14:54	125.0	1.4	0.0	17.4	18.1	0.2	0.4	0.3	536.8	5903.2
M29, AS29-2	4/15/23 14:55	125.1	1.4	0.0	17.5	18.1	0.2	0.4	0.3	537.1	5899.0
M29, AS29-2	4/15/23 14:56	125.1	1.4	0.0	17.8	18.1	0.2	0.4	0.3	536.7	5897.5
M29, AS29-2	4/15/23 14:57	125.0	1.4	0.0	17.9	18.1	0.2	0.4	0.3	536.8	5890.1
M29, AS29-2	4/15/23 14:58	124.9	1.4	0.0	18.0	18.1	0.2	0.4	0.3	536.7	5879.8
M29, AS29-2	4/15/23 14:59	124.8	1.4	0.0	18.0	18.1	0.2	0.4	0.3	536.6	5873.1
M29, AS29-2	4/15/23 15:00	124.8	1.4	0.0	18.1	18.1	0.2	0.4	0.3	536.6	5870.2
M29, AS29-2	4/15/23 15:01	125.0	1.4	0.0	18.1	18.1	0.2	0.4	0.3	536.5	5869.7
M29, AS29-2	4/15/23 15:02	125.0	1.4	0.0	18.2	18.1	0.2	0.4	0.3	536.5	5869.9
M29, AS29-2	4/15/23 15:03	125.0	1.4	0.0	18.5	18.1	0.2	0.4	0.3	536.4	5870.9
M29, AS29-2	4/15/23 15:04	125.0	1.5	0.0	18.4	18.1	0.2	0.4	0.3	536.4	5873.6
M29, AS29-2	4/15/23 15:05	125.2	1.4	0.0	18.2	18.1	0.2	0.4	0.3	536.3	5876.6
M29, AS29-2	4/15/23 15:06	124.9	1.4	0.0	18.2	18.1	0.2	0.4	0.3	536.2	5879.9
M29, AS29-2	4/15/23 15:07	124.7	1.4	0.0	18.2	18.1	0.2	0.4	0.3	536.2	5881.4
M29, AS29-2	4/15/23 15:08	125.0	1.5	0.0	18.1	18.1	0.2	0.4	0.3	536.1	5882.4
M29, AS29-2	4/15/23 15:09	125.1	1.5	0.0	18.1	18.0	0.2	0.4	0.3	536.1	5884.8

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-2	4/15/23 15:10	125.0	1.5	0.0	18.1	18.0	0.2	0.4	0.3	536.2	5889.6
M29, AS29-2	4/15/23 15:11	125.0	1.5	0.0	18.1	18.0	0.2	0.4	0.3	536.2	5894.7
M29, AS29-2	4/15/23 15:12	124.8	1.5	0.0	18.1	18.1	0.2	0.4	0.3	536.3	5896.0
M29, AS29-2	4/15/23 15:13	124.9	1.5	0.0	18.1	18.1	0.2	0.4	0.3	536.3	5899.8
M29, AS29-2	4/15/23 15:14	125.0	1.5	0.0	18.1	18.2	0.2	0.4	0.3	536.2	5895.8
M29, AS29-2	4/15/23 15:15	125.0	1.5	0.0	18.1	18.2	0.2	0.4	0.3	535.9	5890.0
M29, AS29-2	4/15/23 15:16	124.9	1.5	0.0	18.1	18.1	0.2	0.4	0.3	535.8	5889.5
M29, AS29-2	4/15/23 15:17	124.9	1.4	0.0	18.1	18.1	0.2	0.4	0.3	535.6	5890.2
M29, AS29-2	4/15/23 15:18	125.0	1.4	0.0	18.1	18.1	0.2	0.4	0.3	535.5	5885.9
M29, AS29-2	4/15/23 15:19	125.1	1.4	0.0	18.1	18.1	0.2	0.4	0.3	535.3	5877.7
M29, AS29-2	4/15/23 15:20	125.1	1.4	0.0	18.1	18.1	0.2	0.4	0.3	535.2	5874.5
M29, AS29-2	4/15/23 15:21	125.0	1.4	0.0	18.1	18.1	0.2	0.4	0.3	535.0	5875.5
M29, AS29-2	4/15/23 15:22	125.0	1.4	0.0	18.1	18.1	0.2	0.4	0.3	534.9	5877.3
M29, AS29-2	4/15/23 15:23	125.0	1.3	0.0	18.1	18.1	0.2	0.4	0.3	534.7	5876.5
M29, AS29-2	4/15/23 15:24	124.9	1.3	0.0	18.1	18.1	0.2	0.4	0.3	534.5	5873.9
M29, AS29-2	4/15/23 15:25	124.9	1.3	0.0	18.1	18.1	0.2	0.4	0.3	534.4	5872.2
M29, AS29-2	4/15/23 15:26	125.0	1.3	0.0	18.1	18.1	0.2	0.4	0.3	534.2	5873.1
M29, AS29-2	4/15/23 15:27	125.5	1.3	0.0	18.1	18.1	0.2	0.4	0.3	534.1	5876.2
M29, AS29-2	4/15/23 15:28	125.2	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.9	5874.8
M29, AS29-2	4/15/23 15:29	124.7	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.8	5876.4
M29, AS29-2	4/15/23 15:30	124.6	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.6	5880.7
M29, AS29-2	4/15/23 15:31	124.8	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.5	5878.8
M29, AS29-2	4/15/23 15:32	124.9	1.4	0.0	18.1	18.1	0.2	0.4	0.3	533.3	5871.4
M29, AS29-2	4/15/23 15:33	125.1	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.2	5870.7
M29, AS29-2	4/15/23 15:34	125.1	1.3	0.0	18.1	18.1	0.2	0.4	0.3	533.0	5870.9
M29, AS29-2	4/15/23 15:35	125.0	1.3	0.0	18.1	18.1	0.2	0.4	0.3	532.9	5865.1
M29, AS29-2	4/15/23 15:36	125.0	1.2	0.0	18.1	18.1	0.2	0.4	0.3	532.7	5864.2
M29, AS29-2	4/15/23 15:37	125.0	1.2	0.0	18.1	18.1	0.2	0.4	0.3	532.5	5862.7
M29, AS29-2	4/15/23 15:38	125.0	1.3	0.0	18.1	18.1	0.2	0.4	0.3	532.4	5868.8
M29, AS29-2	4/15/23 15:39	125.1	1.3	0.0	18.2	3.6	0.2	0.4	0.3	532.2	5865.1
M29, AS29-2	4/15/23 15:40	125.1	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.1	5865.3
M29, AS29-2	4/15/23 15:41	125.0	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.9	5864.7
M29, AS29-2	4/15/23 15:42	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.8	5863.6
M29, AS29-2	4/15/23 15:43	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.6	5863.2
M29, AS29-2	4/15/23 15:44	125.0	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.7	5864.2
M29, AS29-2	4/15/23 15:45	125.2	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.6	5864.9
M29, AS29-2	4/15/23 15:46	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.6	5864.6
M29, AS29-2	4/15/23 15:47	125.1	1.2	0.0	18.1	1.2	0.2	0.4	0.3	533.4	5862.1
M29, AS29-2	4/15/23 15:48	125.2	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.9	5861.3
M29, AS29-2	4/15/23 15:49	125.2	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.5	5859.6
M29, AS29-2	4/15/23 15:50	125.1	1.1	0.0	18.1	1.2	0.2	0.4	0.3	532.0	5858.4
M29, AS29-2	4/15/23 15:51	125.1	1.1	0.0	18.1	1.1	0.2	0.4	0.3	531.6	5854.5
M29, AS29-2	4/15/23 15:52	125.1	1.2	0.0	18.1	1.1	0.2	0.4	0.3	531.1	5853.8
M29, AS29-2	4/15/23 15:53	125.1	1.2	0.0	18.1	1.2	0.2	0.4	0.3	530.7	5854.9
M29, AS29-2	4/15/23 15:54	125.1	1.2	0.0	18.1	1.2	0.2	0.4	0.3	530.5	5853.6
M29, AS29-2	4/15/23 15:55	125.0	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.1	5854.4
M29, AS29-2	4/15/23 15:56	124.7	1.2	0.0	18.1	1.2	0.2	0.4	0.3	532.0	5854.8
M29, AS29-2	4/15/23 15:57	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.9	5850.1
M29, AS29-2	4/15/23 15:58	124.8	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.9	5847.2
M29, AS29-2	4/15/23 15:59	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.8	5845.3
M29, AS29-2	4/15/23 16:00	125.1	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.7	5847.5
M29, AS29-2	4/15/23 16:01	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.7	5847.6
M29, AS29-2	4/15/23 16:02	124.9	1.2	0.0	18.1	1.2	0.2	0.4	0.3	531.6	5844.3
M29, AS29-2	4/15/23 16:03	124.9	1.2	0.0	18.1	4.5	0.2	0.4	0.3	531.6	5842.5
M29, AS29-2	4/15/23 16:04	125.0	1.2	0.0	18.1	14.1	0.2	0.4	0.3	531.5	5841.0
M29, AS29-2	4/15/23 16:05	125.1	1.3	0.0	18.1	17.6	0.2	0.4	0.3	531.5	5840.5
M29, AS29-2	4/15/23 16:06	125.2	1.3	0.0	18.1	18.4	0.2	0.4	0.3	531.6	5843.6
M29, AS29-2	4/15/23 16:07	125.3	1.2	0.0	18.1	18.2	0.2	0.4	0.3	531.6	5847.2
M29, AS29-2	4/15/23 16:08	125.1	1.3	0.0	18.1	18.1	0.2	0.4	0.3	531.7	5849.6
M29, AS29-2	4/15/23 16:09	124.9	1.3	0.0	18.1	18.1	0.2	0.4	0.3	531.7	5849.1
M29, AS29-2	4/15/23 16:10	125.1	1.2	0.0	18.1	18.1	0.2	0.4	0.3	531.8	5847.9
M29, AS29-2	4/15/23 16:11	125.1	1.2	0.0	18.1	18.1	0.2	0.4	0.3	531.9	5848.8
M29, AS29-2	4/15/23 16:12	124.9	1.2	0.0	18.1	18.1	0.2	0.4	0.3	531.9	5848.5
M29, AS29-2	Average	125.0	1.4	0.0	17.3	13.7	0.2	0.4	9.7	404.4	4722.9

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-3	4/17/23 13:35	125.0	15.7	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:36	125.1	15.8	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:37	125.0	15.7	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:38	124.9	15.7	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:39	124.7	15.6	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:40	125.2	15.4	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:41	125.1	15.4	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:42	124.9	15.3	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:43	125.2	15.5	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:44	125.3	15.5	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:45	124.8	15.5	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:46	124.6	15.6	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:47	124.8	15.5	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:48	125.1	15.4	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:49	125.2	15.4	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:50	125.0	15.5	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:51	125.0	15.7	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:52	125.0	15.8	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:53	125.0	15.8	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:54	125.0	15.8	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:55	125.0	15.9	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:56	125.2	15.9	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:57	125.2	15.9	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:58	125.3	16.1	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 13:59	125.0	16.2	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:00	125.1	16.2	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:01	125.1	16.2	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:02	124.8	16.1	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:03	125.0	16.0	0.0	16.1	1.3	0.2	0.4	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:04	125.0	15.8	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:05	125.2	15.6	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:06	125.2	15.2	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:07	125.0	15.0	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:08	124.9	14.9	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:09	124.8	14.7	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:10	124.7	14.7	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:11	124.7	14.6	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:12	124.8	14.5	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:13	125.2	14.4	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:14	125.1	14.4	0.0	16.1	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:15	125.1	14.4	0.0	16.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:16	125.1	14.4	0.0	16.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:17	124.7	14.5	0.0	15.9	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:18	124.9	14.3	0.0	15.9	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:19	124.9	14.3	0.0	14.5	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:20	124.9	14.6	0.0	0.2	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:21	124.9	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:22	124.9	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:23	124.9	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:24	124.8	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:25	125.1	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:26	125.1	14.6	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:27	125.2	14.7	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:28	125.1	14.8	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:29	125.1	14.7	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:30	125.0	14.5	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:31	125.1	14.4	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:32	125.4	14.4	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:33	125.3	14.4	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:34	125.0	14.3	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:35	124.7	13.9	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:36	124.9	13.7	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:37	125.0	14.0	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:38	125.1	14.4	0.0	0.0	1.3	0.2	0.3	0.3	0.5	-0.3
M29, AS29-3	4/17/23 14:39	124.9	14.5	0.0	0.0	1.3	0.2	0.4	0.3	0.5	-0.3

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)
M29, AS29-3	4/17/23 14:40	125.0	14.3	0.0	0.0	1.3	0.2	0.4	0.3	0.5	1651.1
M29, AS29-3	4/17/23 14:41	124.9	14.6	0.0	0.0	1.3	0.2	0.4	0.3	0.5	7750.6
M29, AS29-3	4/17/23 14:42	124.9	14.5	0.0	0.0	1.3	0.2	0.4	0.3	0.5	7725.8
M29, AS29-3	4/17/23 14:43	125.1	14.3	0.0	0.0	1.3	0.2	0.4	0.3	0.5	5616.5
M29, AS29-3	4/17/23 14:44	125.0	14.3	0.0	0.0	1.3	0.2	0.4	0.3	0.5	6754.3
M29, AS29-3	4/17/23 14:45	124.8	14.2	0.0	0.0	1.3	0.2	0.4	0.3	0.5	7757.9
M29, AS29-3	4/17/23 14:46	125.0	14.3	0.0	0.0	1.3	0.2	0.4	0.3	0.5	7698.3
M29, AS29-3	4/17/23 14:47	125.0	14.1	0.0	0.0	1.3	0.2	0.4	0.3	0.5	720.8
M29, AS29-3	4/17/23 14:48	125.0	13.7	0.0	0.0	1.3	0.2	0.4	0.3	0.5	-0.1
M29, AS29-3	4/17/23 14:49	125.0	13.6	0.0	0.0	1.3	0.2	0.4	0.3	0.5	-0.2
M29, AS29-3	4/17/23 14:50	125.1	13.3	0.0	0.0	1.3	0.2	0.4	0.3	0.5	-0.2
M29, AS29-3	4/17/23 14:51	125.0	13.4	0.0	0.0	1.3	0.2	0.4	0.3	0.5	-0.2
M29, AS29-3	4/17/23 14:52	124.7	13.4	0.0	0.0	1.3	0.2	0.4	0.3	0.5	2814.9
M29, AS29-3	4/17/23 14:53	124.9	13.5	0.0	0.0	1.3	0.2	0.4	0.3	0.5	7734.3
M29, AS29-3	4/17/23 14:54	124.9	13.4	0.0	0.0	1.3	0.2	0.4	0.3	0.5	6655.6
M29, AS29-3	4/17/23 14:55	124.9	13.5	0.0	0.0	1.3	0.2	0.4	0.3	0.5	3382.1
M29, AS29-3	4/17/23 14:56	125.1	13.9	0.0	0.0	1.3	0.2	0.4	0.9	0.5	2.0
M29, AS29-3	4/17/23 14:57	125.1	13.6	0.0	0.0	1.3	0.2	0.4	952.1	0.5	-0.1
M29, AS29-3	4/17/23 14:58	125.0	13.6	0.0	0.0	1.3	0.2	0.4	437.4	0.5	-0.1
M29, AS29-3	4/17/23 14:59	124.9	13.6	0.0	0.0	1.3	0.2	0.4	732.8	0.5	-0.1
M29, AS29-3	4/17/23 15:00	124.9	13.4	0.0	0.0	1.3	0.2	0.4	933.7	0.5	-0.1
M29, AS29-3	4/17/23 15:01	124.9	13.4	0.0	0.0	1.3	0.2	0.4	937.4	0.5	-0.1
M29, AS29-3	4/17/23 15:02	125.1	13.4	0.0	0.0	1.5	0.2	0.4	940.9	0.5	-0.1
M29, AS29-3	4/17/23 15:03	125.1	13.9	0.0	0.0	8.1	0.2	0.4	938.0	0.5	-0.1
M29, AS29-3	4/17/23 15:04	125.0	13.9	0.0	0.0	15.1	0.2	0.4	937.1	0.5	-0.1
M29, AS29-3	4/17/23 15:05	125.0	13.8	0.0	0.0	16.0	0.2	0.4	926.9	0.5	-0.1
M29, AS29-3	4/17/23 15:06	124.8	13.9	0.0	0.0	16.1	0.2	0.4	921.1	0.5	-0.1
M29, AS29-3	4/17/23 15:07	124.9	13.7	0.0	0.0	16.1	0.2	0.4	920.9	0.5	-0.1
M29, AS29-3	4/17/23 15:08	124.8	13.8	0.0	0.0	16.1	0.2	0.4	928.1	0.5	-0.1
M29, AS29-3	4/17/23 15:09	124.6	14.2	0.0	0.0	16.1	0.2	0.4	926.2	0.5	-0.1
M29, AS29-3	4/17/23 15:10	125.1	14.5	0.0	0.0	16.1	0.2	0.4	931.8	0.5	-0.1
M29, AS29-3	4/17/23 15:11	125.3	14.2	0.0	0.0	16.1	0.2	0.4	933.9	0.5	-0.1
M29, AS29-3	4/17/23 15:12	125.1	13.9	0.0	0.0	16.1	0.2	0.4	927.1	0.5	-0.1
M29, AS29-3	4/17/23 15:13	125.4	13.9	0.0	0.0	16.1	0.2	0.4	911.7	0.5	-0.1
M29, AS29-3	4/17/23 15:14	125.2	14.0	0.0	0.0	16.1	0.2	0.4	912.1	0.5	-0.1
M29, AS29-3	4/17/23 15:15	125.2	13.6	0.0	0.0	16.1	0.2	0.4	914.0	0.5	-0.1
M29, AS29-3	4/17/23 15:16	125.2	13.5	0.0	0.0	16.1	0.2	0.4	920.3	0.5	-0.1
M29, AS29-3	4/17/23 15:17	125.0	13.4	0.0	0.0	16.1	0.2	0.4	926.8	0.5	-0.1
M29, AS29-3	4/17/23 15:18	124.8	13.6	0.0	0.0	16.1	0.2	0.4	940.5	0.5	-0.1
M29, AS29-3	4/17/23 15:19	124.6	13.9	0.0	0.0	16.1	0.2	0.4	938.8	0.5	-0.1
M29, AS29-3	4/17/23 15:20	124.7	13.8	0.0	0.0	16.1	0.2	0.4	940.7	0.5	-0.1
M29, AS29-3	4/17/23 15:21	125.0	13.6	0.0	0.0	16.1	0.2	0.4	942.4	0.5	-0.1
M29, AS29-3	4/17/23 15:22	125.2	13.7	0.0	0.0	16.1	0.2	0.4	946.9	0.5	-0.2
M29, AS29-3	4/17/23 15:23	125.0	14.0	0.0	0.0	16.1	0.2	0.4	947.6	0.5	-0.2
M29, AS29-3	4/17/23 15:24	124.8	13.6	0.0	0.0	16.1	0.2	0.4	945.2	0.5	-0.2
M29, AS29-3	4/17/23 15:25	125.1	13.6	0.0	0.0	16.1	0.2	0.4	941.4	0.5	-0.2
M29, AS29-3	4/17/23 15:26	125.1	13.4	0.0	0.0	16.1	0.2	0.4	944.5	0.5	-0.2
M29, AS29-3	4/17/23 15:27	125.1	13.3	0.0	0.0	16.1	0.2	0.4	941.2	0.5	-0.2
M29, AS29-3	4/17/23 15:28	125.1	13.4	0.0	0.0	16.1	0.2	0.4	939.3	0.5	-0.2
M29, AS29-3	4/17/23 15:29	125.1	15.1	0.0	0.1	16.1	0.2	0.4	939.0	0.5	-0.2
M29, AS29-3	4/17/23 15:30	125.1	16.9	0.0	0.0	16.1	0.2	0.4	943.0	0.5	-0.2
M29, AS29-3	4/17/23 15:31	124.9	16.3	0.0	0.0	16.1	0.2	0.4	940.5	0.5	-0.2
M29, AS29-3	4/17/23 15:32	124.6	16.1	0.0	0.0	16.1	0.2	0.4	940.0	0.5	-0.2
M29, AS29-3	4/17/23 15:33	124.7	16.1	0.0	0.0	16.1	0.2	0.4	940.3	0.5	-0.2
M29, AS29-3	4/17/23 15:34	124.9	16.1	0.0	0.0	16.1	0.2	0.4	936.9	0.5	-0.2
M29, AS29-3	4/17/23 15:35	125.1	16.1	0.0	0.0	16.1	0.2	0.4	935.7	0.5	-0.2
M29, AS29-3	4/17/23 15:36	125.1	16.0	0.0	0.0	16.1	0.2	0.4	936.0	0.5	-0.2
M29, AS29-3	4/17/23 15:37	124.9	16.1	0.0	0.0	16.1	0.2	0.4	935.1	0.5	-0.2
M29, AS29-3	4/17/23 15:38	125.0	16.1	0.0	0.0	16.1	0.2	0.4	934.7	0.5	-0.2
M29, AS29-3	4/17/23 15:39	125.1	16.1	0.0	0.0	16.1	0.2	0.4	933.5	0.5	-0.2
M29, AS29-3	4/17/23 15:40	125.0	16.0	0.0	0.0	16.1	0.2	0.4	935.4	0.5	-0.2
M29, AS29-3	4/17/23 15:41	124.8	16.1	0.0	0.0	16.1	0.2	0.4	932.7	0.5	-0.2
M29, AS29-3	Average	125.0	14.7	0.0	5.7	5.8	0.2	0.4	325.9	0.5	521.6

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-1	5/11/23 9:42	125.0	0.4	0.0	18.1	1.2	230.3
M29, VF29-1	5/11/23 9:43	125.1	0.3	0.0	18.1	1.2	232.6
M29, VF29-1	5/11/23 9:44	125.1	0.3	0.0	18.1	1.1	232.3
M29, VF29-1	5/11/23 9:45	124.8	0.3	0.0	18.1	1.1	230.3
M29, VF29-1	5/11/23 9:46	124.9	0.3	0.0	18.1	1.1	233.7
M29, VF29-1	5/11/23 9:47	125.1	0.4	0.0	18.3	1.1	230.6
M29, VF29-1	5/11/23 9:48	124.9	0.4	0.0	19.0	1.1	230.1
M29, VF29-1	5/11/23 9:49	124.9	0.4	0.0	19.2	1.1	234.2
M29, VF29-1	5/11/23 9:50	124.8	0.4	0.0	19.2	1.2	232.7
M29, VF29-1	5/11/23 9:51	124.8	0.5	0.0	19.1	1.2	234.2
M29, VF29-1	5/11/23 9:52	125.0	0.5	0.0	18.9	1.1	233.0
M29, VF29-1	5/11/23 9:53	125.2	0.5	0.0	18.5	1.2	233.8
M29, VF29-1	5/11/23 9:54	125.3	0.5	0.0	18.1	1.2	232.8
M29, VF29-1	5/11/23 9:55	125.2	0.5	0.0	17.7	1.2	235.4
M29, VF29-1	5/11/23 9:56	125.0	0.5	0.3	17.4	1.2	232.4
M29, VF29-1	5/11/23 9:57	125.0	0.5	0.1	17.2	1.2	231.2
M29, VF29-1	5/11/23 9:58	125.0	0.5	4.4	17.2	1.2	230.6
M29, VF29-1	5/11/23 9:59	125.0	0.5	31.7	17.2	1.2	228.7
M29, VF29-1	5/11/23 10:00	125.1	0.5	40.5	17.4	1.2	230.1
M29, VF29-1	5/11/23 10:01	125.2	0.5	36.6	17.5	1.2	234.3
M29, VF29-1	5/11/23 10:02	125.0	0.5	40.0	17.7	1.2	229.2
M29, VF29-1	5/11/23 10:03	125.0	0.5	40.0	17.8	1.2	232.3
M29, VF29-1	5/11/23 10:04	125.1	0.5	34.4	16.6	1.2	233.7
M29, VF29-1	5/11/23 10:05	124.7	0.5	25.5	16.1	1.2	232.7
M29, VF29-1	5/11/23 10:06	124.9	0.5	10.7	16.1	1.2	234.8
M29, VF29-1	5/11/23 10:07	124.9	0.5	0.0	16.1	1.2	235.6
M29, VF29-1	5/11/23 10:08	125.0	0.5	0.0	16.1	1.2	232.1
M29, VF29-1	5/11/23 10:09	125.0	0.5	0.0	16.1	1.2	233.3
M29, VF29-1	5/11/23 10:10	124.9	0.5	0.0	16.0	2.0	233.1
M29, VF29-1	5/11/23 10:11	125.0	0.6	0.0	16.0	12.5	233.2
M29, VF29-1	5/11/23 10:12	124.7	0.6	0.0	16.2	19.3	232.7
M29, VF29-1	5/11/23 10:13	124.9	0.6	0.0	16.2	19.6	231.7
M29, VF29-1	5/11/23 10:14	124.9	0.5	0.0	16.6	18.0	231.3
M29, VF29-1	5/11/23 10:15	124.9	0.6	0.0	17.3	18.0	232.3
M29, VF29-1	5/11/23 10:16	125.0	0.6	0.0	17.7	18.0	228.8
M29, VF29-1	5/11/23 10:17	125.4	0.6	0.0	18.1	18.0	231.1
M29, VF29-1	5/11/23 10:18	124.9	0.5	0.0	18.1	18.0	233.4
M29, VF29-1	5/11/23 10:19	125.0	0.5	0.0	18.1	18.0	234.9
M29, VF29-1	5/11/23 10:20	125.0	0.5	0.0	18.0	18.0	233.8
M29, VF29-1	5/11/23 10:21	124.9	0.5	0.0	18.0	18.0	233.9
M29, VF29-1	5/11/23 10:22	124.8	0.5	0.0	18.0	18.0	230.3
M29, VF29-1	5/11/23 10:23	124.9	0.5	0.0	17.9	18.0	230.5
M29, VF29-1	5/11/23 10:24	125.0	0.4	0.0	18.1	18.0	232.4

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-1	5/11/23 10:25	125.1	0.4	0.0	18.1	18.0	231.7
M29, VF29-1	5/11/23 10:26	125.2	0.4	0.0	18.0	18.1	232.8
M29, VF29-1	5/11/23 10:27	125.2	0.4	0.0	18.1	18.2	232.3
M29, VF29-1	5/11/23 10:28	125.1	0.4	0.0	17.5	18.2	233.0
M29, VF29-1	5/11/23 10:29	124.8	0.4	0.0	17.3	18.2	233.8
M29, VF29-1	5/11/23 10:30	125.1	0.5	0.0	17.1	18.2	232.0
M29, VF29-1	5/11/23 10:31	125.1	0.4	0.0	17.1	18.2	235.4
M29, VF29-1	5/11/23 10:32	124.8	0.4	0.0	17.0	18.2	231.7
M29, VF29-1	5/11/23 10:33	124.8	0.4	0.0	17.1	18.2	234.4
M29, VF29-1	5/11/23 10:34	124.8	0.4	0.0	17.2	18.2	231.9
M29, VF29-1	5/11/23 10:35	124.8	0.4	0.0	17.2	18.2	231.2
M29, VF29-1	5/11/23 10:36	124.8	0.4	0.0	17.1	18.2	233.1
M29, VF29-1	5/11/23 10:37	124.9	0.4	0.0	17.0	18.2	231.1
M29, VF29-1	5/11/23 10:38	125.1	0.4	0.0	17.0	18.2	231.3
M29, VF29-1	5/11/23 10:39	124.9	0.4	0.0	17.2	18.2	233.0
M29, VF29-1	5/11/23 10:40	124.8	0.4	0.0	17.0	18.2	234.6
M29, VF29-1	5/11/23 10:41	125.0	0.4	0.0	17.1	18.2	234.1
M29, VF29-1	5/11/23 10:42	125.0	0.4	0.0	17.2	18.2	234.8
M29, VF29-1	5/11/23 10:43	124.8	0.3	0.0	16.7	18.2	237.0
M29, VF29-1	5/11/23 10:44	124.7	0.3	0.0	16.2	18.2	234.4
M29, VF29-1	5/11/23 10:45	124.7	0.2	0.0	16.1	18.2	233.6
M29, VF29-1	5/11/23 10:46	125.1	0.2	0.0	16.1	17.2	231.5
M29, VF29-1	5/11/23 10:47	125.1	0.2	0.0	16.1	17.1	233.2
M29, VF29-1	5/11/23 10:48	125.0	0.2	0.0	16.0	17.1	235.8
M29, VF29-1	5/11/23 10:49	125.0	0.1	0.0	16.1	17.1	234.1
M29, VF29-1	5/11/23 10:50	125.1	0.2	0.0	16.1	17.1	234.6
M29, VF29-1	5/11/23 10:51	125.1	0.2	0.0	16.2	17.1	236.5
M29, VF29-1	5/11/23 10:52	125.0	0.2	0.0	16.1	17.1	234.0
M29, VF29-1	5/11/23 10:53	124.8	0.2	0.0	16.0	17.1	233.5
M29, VF29-1	5/11/23 10:54	125.0	0.1	0.0	16.1	17.1	234.6
M29, VF29-1	5/11/23 10:55	125.0	0.1	0.0	16.1	17.1	232.5
M29, VF29-1	5/11/23 10:56	124.8	0.1	0.0	16.2	16.2	232.8
M29, VF29-1	5/11/23 10:57	124.8	0.1	0.0	16.1	16.1	235.1
M29, VF29-1	5/11/23 10:58	124.8	0.2	0.0	16.1	16.1	232.6
M29, VF29-1	5/11/23 10:59	124.8	0.1	0.0	16.0	16.1	230.1
M29, VF29-1	5/11/23 11:00	125.1	0.2	0.0	16.1	16.1	231.9
M29, VF29-1	5/11/23 11:01	125.2	0.1	0.0	16.1	16.1	235.2
M29, VF29-1	5/11/23 11:02	125.1	0.2	0.0	16.1	16.1	230.6
M29, VF29-1	5/11/23 11:03	124.9	0.2	0.0	16.1	16.1	231.6
M29, VF29-1	5/11/23 11:04	124.7	0.2	0.0	16.1	16.1	235.9
M29, VF29-1	5/11/23 11:05	124.8	0.2	0.0	16.1	16.1	235.4
M29, VF29-1	5/11/23 11:06	125.2	0.1	0.0	16.1	16.1	235.9
M29, VF29-1	5/11/23 11:07	125.3	0.1	0.0	16.1	16.1	235.1
M29, VF29-1	5/11/23 11:08	125.4	0.1	0.0	16.1	16.1	235.7

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-1	5/11/23 11:09	125.2	0.2	0.0	16.1	16.1	232.2
M29, VF29-1	5/11/23 11:10	124.9	0.2	0.0	16.1	16.1	231.0
M29, VF29-1	5/11/23 11:11	124.8	0.3	0.0	16.0	16.1	231.9
M29, VF29-1	5/11/23 11:12	125.0	0.4	0.0	16.1	16.1	229.5
M29, VF29-1	5/11/23 11:13	125.0	0.4	0.0	16.2	16.1	230.2
M29, VF29-1	5/11/23 11:14	125.0	0.5	0.0	16.1	16.1	229.2
M29, VF29-1	5/11/23 11:15	125.0	0.5	0.0	16.1	16.1	230.0
M29, VF29-1	5/11/23 11:16	125.0	0.6	0.0	16.9	17.5	231.3
M29, VF29-1	5/11/23 11:17	124.8	0.6	0.0	17.8	17.0	233.0
M29, VF29-1	5/11/23 11:18	124.8	0.6	0.0	18.4	1.3	234.3
M29, VF29-1	5/11/23 11:19	124.8	0.6	0.0	18.2	1.1	234.9
M29, VF29-1	5/11/23 11:20	125.0	0.6	0.0	18.2	1.1	235.2
M29, VF29-1	5/11/23 11:21	125.2	0.7	0.0	18.1	1.1	235.8
M29, VF29-1	5/11/23 11:22	125.2	0.6	0.0	18.4	1.1	234.6
M29, VF29-1	5/11/23 11:23	124.9	0.6	0.0	18.2	1.1	235.9
M29, VF29-1	5/11/23 11:24	125.0	0.5	0.0	18.1	1.1	233.8
M29, VF29-1	5/11/23 11:25	125.2	0.5	0.0	18.1	1.1	234.2
M29, VF29-1	5/11/23 11:26	125.0	0.4	0.0	18.1	1.1	230.6
M29, VF29-1	5/11/23 11:27	124.9	0.3	0.0	18.1	1.1	235.5
M29, VF29-1	5/11/23 11:28	124.9	0.3	0.0	18.1	1.1	233.0
M29, VF29-1	5/11/23 11:29	125.0	0.3	0.0	18.1	1.1	235.4
M29, VF29-1	5/11/23 11:30	125.1	0.3	0.0	18.1	1.1	232.4
M29, VF29-1	5/11/23 11:31	125.1	0.3	0.0	18.1	1.1	231.6
M29, VF29-1	5/11/23 11:32	125.1	0.2	0.0	18.1	1.1	238.3
M29, VF29-1	5/11/23 11:33	124.7	0.2	0.0	18.1	1.1	235.3
M29, VF29-1	5/11/23 11:34	125.0	0.2	0.0	18.1	1.1	238.6
M29, VF29-1	5/11/23 11:35	125.2	0.2	0.0	18.1	1.1	233.5
M29, VF29-1	5/11/23 11:36	125.1	0.2	0.0	18.1	1.1	234.5
M29, VF29-1	5/11/23 11:37	124.9	0.2	0.0	18.1	1.1	231.1
M29, VF29-1	5/11/23 11:38	124.8	0.1	0.0	18.0	3.0	232.6
M29, VF29-1	5/11/23 11:39	125.2	0.2	0.0	18.0	13.5	233.7
M29, VF29-1	5/11/23 11:40	125.1	0.2	0.0	18.1	17.7	232.2
M29, VF29-1	5/11/23 11:41	125.4	0.3	0.0	18.1	18.1	236.1
M29, VF29-1	5/11/23 11:42	125.3	0.4	0.0	18.1	18.2	233.0
M29, VF29-1	5/11/23 11:43	125.0	0.5	0.0	18.1	18.2	229.8
M29, VF29-1	5/11/23 11:44	125.1	0.6	0.0	18.0	18.2	230.0
M29, VF29-1	Average	125.0	0.4	2.2	17.3	10.7	233.0
M29, VF29-2	5/11/23 12:06	124.9	0.7	0.0	0.0	18.1	233.6
M29, VF29-2	5/11/23 12:07	124.9	0.7	0.0	0.0	18.1	234.5
M29, VF29-2	5/11/23 12:08	125.2	0.7	0.0	0.0	18.1	238.5
M29, VF29-2	5/11/23 12:09	125.2	0.7	0.0	0.0	18.1	233.2
M29, VF29-2	5/11/23 12:10	125.0	0.7	0.0	0.0	18.1	236.0
M29, VF29-2	5/11/23 12:11	124.9	0.7	0.0	0.0	18.1	231.9

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-2	5/11/23 12:12	125.1	0.7	0.0	0.0	18.1	232.4
M29, VF29-2	5/11/23 12:13	125.0	0.7	0.0	0.0	18.1	233.5
M29, VF29-2	5/11/23 12:14	125.0	0.7	0.0	0.0	18.1	231.7
M29, VF29-2	5/11/23 12:15	124.9	0.7	0.0	0.0	18.1	231.9
M29, VF29-2	5/11/23 12:16	124.9	0.7	0.0	0.0	18.1	232.5
M29, VF29-2	5/11/23 12:17	125.0	0.6	0.0	0.0	18.1	233.7
M29, VF29-2	5/11/23 12:18	125.0	0.6	0.0	0.0	5.9	232.3
M29, VF29-2	5/11/23 12:19	124.7	0.6	0.0	0.0	1.2	233.4
M29, VF29-2	5/11/23 12:20	124.9	0.6	0.0	0.0	1.2	234.9
M29, VF29-2	5/11/23 12:21	125.0	0.6	0.0	0.0	1.1	231.2
M29, VF29-2	5/11/23 12:22	125.0	0.6	0.0	0.0	1.1	235.4
M29, VF29-2	5/11/23 12:23	125.0	0.6	0.0	0.0	1.1	234.5
M29, VF29-2	5/11/23 12:24	125.0	0.6	0.0	0.0	1.1	230.3
M29, VF29-2	5/11/23 12:25	125.1	0.6	0.0	0.0	1.0	229.9
M29, VF29-2	5/11/23 12:26	125.4	0.6	0.0	0.0	0.9	228.7
M29, VF29-2	5/11/23 12:27	125.1	0.7	0.0	0.0	1.0	228.4
M29, VF29-2	5/11/23 12:28	125.0	0.7	0.0	0.0	1.0	230.2
M29, VF29-2	5/11/23 12:29	125.2	0.6	0.0	0.0	1.1	229.7
M29, VF29-2	5/11/23 12:30	124.9	0.6	0.0	0.0	1.1	233.5
M29, VF29-2	5/11/23 12:31	124.7	0.6	0.0	0.0	1.1	232.6
M29, VF29-2	5/11/23 12:32	124.8	0.6	0.0	0.0	1.1	234.5
M29, VF29-2	5/11/23 12:33	125.0	0.5	0.0	0.0	3.6	236.0
M29, VF29-2	5/11/23 12:34	125.0	0.6	0.0	0.0	14.1	234.3
M29, VF29-2	5/11/23 12:35	124.9	0.6	0.0	0.0	17.7	231.5
M29, VF29-2	5/11/23 12:36	125.1	0.6	0.0	0.0	18.0	230.2
M29, VF29-2	5/11/23 12:37	125.4	0.6	0.0	0.0	18.1	233.3
M29, VF29-2	5/11/23 12:38	125.1	0.6	0.0	0.0	18.1	235.1
M29, VF29-2	5/11/23 12:39	124.8	0.6	0.0	0.0	18.1	233.8
M29, VF29-2	5/11/23 12:40	124.9	0.6	0.0	0.0	18.0	233.3
M29, VF29-2	5/11/23 12:41	125.0	0.6	0.0	0.0	18.0	232.0
M29, VF29-2	5/11/23 12:42	125.0	0.6	0.0	0.0	18.0	234.4
M29, VF29-2	5/11/23 12:43	125.0	0.6	0.0	0.0	18.0	232.0
M29, VF29-2	5/11/23 12:44	125.1	0.7	0.0	0.0	18.1	233.2
M29, VF29-2	5/11/23 12:45	124.9	0.7	0.0	0.0	18.2	233.2
M29, VF29-2	5/11/23 12:46	125.1	0.7	0.0	0.0	18.1	231.8
M29, VF29-2	5/11/23 12:47	124.9	0.8	0.0	0.0	18.0	231.3
M29, VF29-2	5/11/23 12:48	125.2	0.8	0.0	0.0	18.0	229.9
M29, VF29-2	5/11/23 12:49	125.5	0.8	0.0	0.0	18.3	226.1
M29, VF29-2	5/11/23 12:50	125.4	0.8	0.0	0.0	18.2	231.8
M29, VF29-2	5/11/23 12:51	125.1	0.8	0.0	0.0	18.1	231.5
M29, VF29-2	5/11/23 12:52	124.9	0.8	0.0	0.0	18.1	232.7
M29, VF29-2	5/11/23 12:53	124.9	0.8	0.0	0.0	18.1	231.1
M29, VF29-2	5/11/23 12:54	124.9	0.8	0.0	0.0	18.0	231.3
M29, VF29-2	5/11/23 12:55	124.9	0.8	0.0	0.0	18.1	232.0

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-2	5/11/23 12:56	125.0	0.7	0.0	0.0	18.1	230.3
M29, VF29-2	5/11/23 12:57	125.0	0.7	0.0	0.3	18.1	231.8
M29, VF29-2	5/11/23 12:58	124.9	0.8	0.0	9.1	18.0	230.6
M29, VF29-2	5/11/23 12:59	125.0	0.7	0.0	16.0	18.2	227.5
M29, VF29-2	5/11/23 13:00	125.1	0.8	0.0	17.6	18.2	227.7
M29, VF29-2	5/11/23 13:01	125.2	0.7	0.0	17.7	18.2	229.5
M29, VF29-2	5/11/23 13:02	124.7	0.7	0.0	17.8	18.1	227.4
M29, VF29-2	5/11/23 13:03	124.9	0.7	0.0	17.9	18.1	228.0
M29, VF29-2	5/11/23 13:04	125.0	0.7	0.0	18.0	18.1	231.0
M29, VF29-2	5/11/23 13:05	125.0	0.7	0.0	18.0	18.1	227.3
M29, VF29-2	5/11/23 13:06	124.9	0.7	0.0	18.0	12.9	230.2
M29, VF29-2	5/11/23 13:07	124.8	0.7	0.0	18.1	1.1	231.9
M29, VF29-2	5/11/23 13:08	124.7	0.7	0.0	18.2	1.1	231.4
M29, VF29-2	5/11/23 13:09	124.9	0.7	0.0	18.2	1.1	233.9
M29, VF29-2	5/11/23 13:10	125.0	0.7	0.0	18.2	1.1	233.8
M29, VF29-2	5/11/23 13:11	124.8	0.6	0.0	18.2	1.1	233.7
M29, VF29-2	5/11/23 13:12	124.8	0.6	0.0	18.2	1.1	231.6
M29, VF29-2	5/11/23 13:13	125.1	0.6	0.0	18.1	1.1	231.4
M29, VF29-2	5/11/23 13:14	125.0	0.6	0.0	18.1	1.1	230.0
M29, VF29-2	5/11/23 13:15	124.8	0.6	0.0	18.1	1.1	233.3
M29, VF29-2	5/11/23 13:16	124.9	0.6	0.0	18.0	1.1	229.5
M29, VF29-2	5/11/23 13:17	125.0	0.6	0.0	18.0	1.1	228.0
M29, VF29-2	5/11/23 13:18	125.0	0.6	0.0	18.0	1.1	230.7
M29, VF29-2	5/11/23 13:19	125.4	0.6	0.0	18.0	1.0	227.7
M29, VF29-2	5/11/23 13:20	125.1	0.6	0.0	18.0	1.0	230.5
M29, VF29-2	5/11/23 13:21	124.9	0.6	0.0	18.0	1.0	231.2
M29, VF29-2	5/11/23 13:22	124.9	0.6	0.0	17.7	1.1	230.7
M29, VF29-2	5/11/23 13:23	125.0	0.6	0.0	17.5	1.1	228.9
M29, VF29-2	5/11/23 13:24	125.2	0.6	0.0	17.3	1.1	231.8
M29, VF29-2	5/11/23 13:25	125.2	0.6	0.0	17.2	1.1	227.4
M29, VF29-2	5/11/23 13:26	125.1	0.6	0.0	17.2	1.0	229.0
M29, VF29-2	5/11/23 13:27	125.1	0.6	0.0	17.1	1.0	231.8
M29, VF29-2	5/11/23 13:28	125.1	0.6	0.0	17.1	1.0	229.1
M29, VF29-2	5/11/23 13:29	125.2	0.6	0.0	17.1	1.1	229.9
M29, VF29-2	5/11/23 13:30	125.0	0.6	0.0	17.1	1.0	228.0
M29, VF29-2	5/11/23 13:31	124.7	0.6	0.0	17.0	1.0	227.3
M29, VF29-2	5/11/23 13:32	124.9	0.6	0.0	16.9	1.1	229.5
M29, VF29-2	5/11/23 13:33	124.8	0.6	0.0	16.9	1.1	228.0
M29, VF29-2	5/11/23 13:34	124.8	0.6	0.0	16.9	1.1	231.0
M29, VF29-2	5/11/23 13:35	124.8	0.6	0.0	16.9	1.1	230.2
M29, VF29-2	5/11/23 13:36	124.8	0.6	0.0	16.4	1.0	228.8
M29, VF29-2	5/11/23 13:37	124.8	0.7	0.0	17.0	1.1	228.5
M29, VF29-2	5/11/23 13:38	124.8	0.7	0.0	18.3	1.1	226.6
M29, VF29-2	5/11/23 13:39	124.9	0.7	0.0	18.6	1.2	227.4

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-2	5/11/23 13:40	125.0	0.7	0.0	18.3	1.2	229.9
M29, VF29-2	5/11/23 13:41	125.1	0.7	0.0	18.1	1.2	229.0
M29, VF29-2	5/11/23 13:42	125.2	0.7	0.0	18.1	1.2	230.3
M29, VF29-2	5/11/23 13:43	125.1	0.7	0.0	18.0	1.1	232.6
M29, VF29-2	5/11/23 13:44	124.9	0.7	0.0	17.8	1.2	232.1
M29, VF29-2	5/11/23 13:45	124.8	0.6	0.0	17.5	1.1	226.8
M29, VF29-2	5/11/23 13:46	124.6	0.7	0.0	17.1	1.1	229.7
M29, VF29-2	5/11/23 13:47	124.6	0.6	0.0	16.9	1.1	228.1
M29, VF29-2	5/11/23 13:48	125.1	0.7	0.0	16.8	1.1	229.9
M29, VF29-2	5/11/23 13:49	125.2	0.6	0.0	17.1	1.1	229.5
M29, VF29-2	5/11/23 13:50	125.3	0.7	0.0	17.5	1.1	227.8
M29, VF29-2	5/11/23 13:51	125.3	0.7	0.0	18.0	1.1	226.9
M29, VF29-2	5/11/23 13:52	125.1	0.7	0.0	18.1	1.1	229.8
M29, VF29-2	5/11/23 13:53	124.9	0.6	0.0	18.1	1.1	229.9
M29, VF29-2	5/11/23 13:54	124.8	0.6	0.0	18.1	1.1	230.0
M29, VF29-2	5/11/23 13:55	125.0	0.6	0.0	18.0	1.1	230.6
M29, VF29-2	5/11/23 13:56	125.1	0.6	0.0	18.0	1.1	228.9
M29, VF29-2	5/11/23 13:57	124.9	0.6	0.0	18.0	1.1	225.8
M29, VF29-2	5/11/23 13:58	125.3	0.6	0.0	18.0	1.1	227.3
M29, VF29-2	5/11/23 13:59	125.3	0.6	0.0	18.1	1.1	226.2
M29, VF29-2	5/11/23 14:00	124.7	0.7	0.0	18.1	1.1	230.8
M29, VF29-2	5/11/23 14:01	125.0	0.7	0.0	18.2	1.1	228.9
M29, VF29-2	5/11/23 14:02	125.1	0.7	0.0	18.3	1.1	230.9
M29, VF29-2	5/11/23 14:03	125.0	0.7	0.0	18.3	1.1	227.5
M29, VF29-2	5/11/23 14:04	125.0	0.6	0.0	18.2	1.1	227.9
M29, VF29-2	5/11/23 14:05	125.0	0.6	0.0	18.2	1.1	227.3
M29, VF29-2	5/11/23 14:06	125.0	0.7	0.0	18.2	1.1	227.8
M29, VF29-2	5/11/23 14:07	125.1	0.7	0.0	18.5	1.1	229.0
M29, VF29-2	5/11/23 14:08	125.0	0.7	0.0	18.7	1.1	228.6
M29, VF29-2	Average	125.0	0.7	0.0	10.2	7.3	230.7
M29, VF29-3	5/11/23 14:33	125.0	0.6	0.0	20.6	1.2	229.7
M29, VF29-3	5/11/23 14:34	125.3	0.6	0.0	20.8	1.2	227.2
M29, VF29-3	5/11/23 14:35	125.4	0.6	0.0	20.9	1.2	228.1
M29, VF29-3	5/11/23 14:36	124.8	0.6	0.0	20.8	1.2	229.8
M29, VF29-3	5/11/23 14:37	124.8	0.5	0.0	20.8	1.2	231.4
M29, VF29-3	5/11/23 14:38	125.2	0.6	0.0	20.7	1.2	226.7
M29, VF29-3	5/11/23 14:39	125.3	0.6	0.0	20.8	1.2	228.9
M29, VF29-3	5/11/23 14:40	125.2	0.6	0.0	20.8	1.2	228.9
M29, VF29-3	5/11/23 14:41	125.1	0.6	0.0	20.8	1.2	227.4
M29, VF29-3	5/11/23 14:42	125.1	0.6	0.0	20.9	1.2	227.9
M29, VF29-3	5/11/23 14:43	125.1	0.6	0.0	21.1	1.2	227.2
M29, VF29-3	5/11/23 14:44	125.0	0.6	0.0	21.2	1.2	225.0
M29, VF29-3	5/11/23 14:45	125.0	0.6	0.0	21.4	1.2	225.4

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-3	5/11/23 14:46	125.0	0.6	0.0	21.4	1.2	227.1
M29, VF29-3	5/11/23 14:47	124.9	0.6	0.0	21.2	1.2	224.4
M29, VF29-3	5/11/23 14:48	124.9	0.5	0.0	21.1	1.2	227.5
M29, VF29-3	5/11/23 14:49	125.0	0.5	0.0	21.1	1.2	225.1
M29, VF29-3	5/11/23 14:50	125.0	0.5	0.0	21.1	1.2	226.8
M29, VF29-3	5/11/23 14:51	124.9	0.4	0.0	7.2	1.2	225.8
M29, VF29-3	5/11/23 14:52	124.7	0.4	0.0	0.1	1.2	224.4
M29, VF29-3	5/11/23 14:53	124.7	0.5	0.0	0.2	1.2	224.0
M29, VF29-3	5/11/23 14:54	125.1	0.4	0.0	0.2	1.2	224.6
M29, VF29-3	5/11/23 14:55	125.1	0.5	0.0	0.3	1.2	225.6
M29, VF29-3	5/11/23 14:56	124.9	0.5	0.0	0.2	1.2	227.3
M29, VF29-3	5/11/23 14:57	124.7	0.4	0.0	0.2	1.2	228.0
M29, VF29-3	5/11/23 14:58	124.8	0.5	0.0	0.3	1.2	225.8
M29, VF29-3	5/11/23 14:59	125.0	0.4	0.0	0.2	1.2	224.0
M29, VF29-3	5/11/23 15:00	125.1	0.5	0.0	0.1	1.2	224.5
M29, VF29-3	5/11/23 15:01	125.0	0.5	0.0	0.2	1.2	225.1
M29, VF29-3	5/11/23 15:02	124.8	0.5	0.0	0.3	2.3	225.6
M29, VF29-3	5/11/23 15:03	124.7	0.4	0.0	0.4	12.3	227.2
M29, VF29-3	5/11/23 15:04	124.9	0.5	0.0	0.2	17.5	224.8
M29, VF29-3	5/11/23 15:05	124.9	0.5	0.0	0.4	18.0	223.3
M29, VF29-3	5/11/23 15:06	125.0	0.5	0.0	0.2	18.1	226.7
M29, VF29-3	5/11/23 15:07	125.0	0.5	0.0	0.3	18.1	225.1
M29, VF29-3	5/11/23 15:08	125.0	0.5	0.0	0.3	18.1	225.8
M29, VF29-3	5/11/23 15:09	125.1	0.4	0.0	0.3	18.1	222.2
M29, VF29-3	5/11/23 15:10	125.3	0.4	0.0	0.3	18.1	225.4
M29, VF29-3	5/11/23 15:11	124.7	0.4	0.0	0.3	18.1	223.8
M29, VF29-3	5/11/23 15:12	124.7	0.4	0.0	0.4	18.1	227.5
M29, VF29-3	5/11/23 15:13	124.8	0.4	0.0	0.3	18.1	227.1
M29, VF29-3	5/11/23 15:14	124.7	0.4	0.0	0.3	18.1	223.6
M29, VF29-3	5/11/23 15:15	125.1	0.4	0.0	0.3	18.1	226.5
M29, VF29-3	5/11/23 15:16	125.1	0.4	0.0	0.3	18.1	226.9
M29, VF29-3	5/11/23 15:17	124.9	0.5	0.0	0.3	18.1	224.4
M29, VF29-3	5/11/23 15:18	124.8	0.4	0.0	0.3	18.1	225.1
M29, VF29-3	5/11/23 15:19	125.0	0.4	0.0	0.3	18.1	223.6
M29, VF29-3	5/11/23 15:20	125.2	0.4	0.0	0.3	18.1	225.9
M29, VF29-3	5/11/23 15:21	125.5	0.4	0.0	0.3	18.1	225.9
M29, VF29-3	5/11/23 15:22	125.1	0.4	0.0	0.2	18.1	227.3
M29, VF29-3	5/11/23 15:23	124.8	0.4	0.0	0.3	18.1	227.3
M29, VF29-3	5/11/23 15:24	124.9	0.4	0.0	0.3	18.1	227.2
M29, VF29-3	5/11/23 15:25	125.4	0.4	0.0	0.3	18.1	223.4
M29, VF29-3	5/11/23 15:26	125.6	0.5	0.0	0.4	18.1	223.3
M29, VF29-3	5/11/23 15:27	125.4	0.4	0.0	0.2	18.1	221.6
M29, VF29-3	5/11/23 15:28	125.2	0.4	0.0	0.2	18.1	221.8
M29, VF29-3	5/11/23 15:29	125.2	0.4	0.0	0.3	18.1	226.0

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-3	5/11/23 15:30	125.1	5.4	0.0	0.4	18.1	225.7
M29, VF29-3	5/11/23 15:31	124.7	14.8	0.0	0.1	18.1	226.4
M29, VF29-3	5/11/23 15:32	124.8	16.7	0.0	0.2	18.1	227.5
M29, VF29-3	5/11/23 15:33	124.8	17.2	0.0	0.5	18.1	226.3
M29, VF29-3	5/11/23 15:34	125.0	17.9	0.0	0.2	18.1	227.6
M29, VF29-3	5/11/23 15:35	125.2	18.0	0.0	0.3	18.1	226.6
M29, VF29-3	5/11/23 15:36	124.9	18.0	0.0	0.3	18.1	226.9
M29, VF29-3	5/11/23 15:37	125.0	18.0	0.0	0.3	18.1	229.3
M29, VF29-3	5/11/23 15:38	125.2	18.0	0.0	0.3	18.1	229.8
M29, VF29-3	5/11/23 15:39	125.1	18.0	0.0	0.3	18.1	227.9
M29, VF29-3	5/11/23 15:40	125.0	18.0	0.0	0.2	18.1	226.3
M29, VF29-3	5/11/23 15:41	125.0	18.0	0.0	0.2	18.1	227.3
M29, VF29-3	5/11/23 15:42	125.1	18.0	0.0	0.2	18.1	225.9
M29, VF29-3	5/11/23 15:43	125.1	18.0	0.0	0.3	18.1	226.5
M29, VF29-3	5/11/23 15:44	125.1	18.0	0.0	0.4	18.1	228.8
M29, VF29-3	5/11/23 15:45	125.0	18.0	0.0	1.6	18.0	228.9
M29, VF29-3	5/11/23 15:46	124.9	18.0	0.0	0.3	18.0	227.9
M29, VF29-3	5/11/23 15:47	125.0	18.0	0.0	0.3	18.0	227.6
M29, VF29-3	5/11/23 15:48	125.1	18.0	0.0	0.4	18.0	231.5
M29, VF29-3	5/11/23 15:49	124.9	18.0	0.0	0.3	18.1	227.2
M29, VF29-3	5/11/23 15:50	124.7	18.0	0.0	0.4	18.1	227.6
M29, VF29-3	5/11/23 15:51	124.7	18.0	0.0	0.3	18.1	228.7
M29, VF29-3	5/11/23 15:52	125.1	18.0	0.0	0.4	18.1	227.5
M29, VF29-3	5/11/23 15:53	125.1	17.9	0.0	0.3	18.1	228.6
M29, VF29-3	5/11/23 15:54	125.1	17.9	0.0	0.3	18.1	226.2
M29, VF29-3	5/11/23 15:55	124.9	17.9	0.0	0.4	18.1	229.7
M29, VF29-3	5/11/23 15:56	124.8	17.9	0.0	0.4	18.1	229.8
M29, VF29-3	5/11/23 15:57	124.6	17.9	0.0	0.3	18.1	227.7
M29, VF29-3	5/11/23 15:58	124.8	18.0	0.0	0.4	18.1	226.6
M29, VF29-3	5/11/23 15:59	125.2	18.0	0.0	0.4	18.2	226.4
M29, VF29-3	5/11/23 16:00	125.1	17.9	0.0	0.5	18.1	229.3
M29, VF29-3	5/11/23 16:01	125.2	17.8	0.0	0.4	18.1	228.0
M29, VF29-3	5/11/23 16:02	124.9	17.8	0.0	0.5	18.1	225.4
M29, VF29-3	5/11/23 16:03	124.9	18.1	0.0	0.4	18.1	226.2
M29, VF29-3	5/11/23 16:04	124.8	18.1	0.0	0.8	18.1	225.0
M29, VF29-3	5/11/23 16:05	124.8	18.4	0.0	0.4	18.1	224.2
M29, VF29-3	5/11/23 16:06	125.2	18.0	0.0	0.6	18.1	223.8
M29, VF29-3	5/11/23 16:07	125.0	18.0	0.0	0.4	18.1	224.4
M29, VF29-3	5/11/23 16:08	125.0	17.9	0.0	0.6	18.1	224.2
M29, VF29-3	5/11/23 16:09	125.0	18.0	0.0	0.6	18.1	229.2
M29, VF29-3	5/11/23 16:10	125.0	18.0	0.0	0.3	18.1	227.1
M29, VF29-3	5/11/23 16:11	125.0	17.9	0.0	0.6	18.1	229.3
M29, VF29-3	5/11/23 16:12	125.0	18.1	0.0	0.5	18.2	225.3
M29, VF29-3	5/11/23 16:13	125.0	3.4	0.0	1.7	18.2	226.7

Method/ Run No	Date/ Time	Isa Feed Rate (tons/hour)	#2 Converter Blast Air (kscfm)	#3 Converter Blast Air (kscfm)	#4 Converter Blast Air (kscfm)	#5 Converter Blast Air (kscfm)	Vent Fume Flow (kscfm)
M29, VF29-3	5/11/23 16:14	125.0	0.5	0.0	0.6	18.1	225.2
M29, VF29-3	5/11/23 16:15	125.0	0.4	0.0	0.5	18.0	224.1
M29, VF29-3	5/11/23 16:16	125.0	0.3	0.0	0.4	18.0	226.2
M29, VF29-3	5/11/23 16:17	124.8	0.3	0.0	0.3	18.1	227.4
M29, VF29-3	5/11/23 16:18	124.7	0.3	0.0	0.4	18.1	228.4
M29, VF29-3	5/11/23 16:19	124.9	0.3	0.0	0.3	18.1	226.3
M29, VF29-3	5/11/23 16:20	125.2	0.2	0.0	0.4	18.1	223.5
M29, VF29-3	5/11/23 16:21	125.4	0.2	0.0	0.2	18.1	225.3
M29, VF29-3	5/11/23 16:22	124.9	0.2	0.0	0.3	18.1	225.9
M29, VF29-3	5/11/23 16:23	125.0	0.2	0.0	0.3	18.1	224.9
M29, VF29-3	5/11/23 16:24	125.2	0.2	0.0	0.3	18.1	228.2
M29, VF29-3	5/11/23 16:25	125.1	0.2	0.0	0.3	18.1	227.3
M29, VF29-3	5/11/23 16:26	124.9	0.2	0.0	0.3	18.1	222.6
M29, VF29-3	5/11/23 16:27	125.0	0.2	0.0	0.3	18.1	223.4
M29, VF29-3	5/11/23 16:28	125.1	1.5	0.0	0.7	18.1	224.5
M29, VF29-3	5/11/23 16:29	125.0	11.3	0.0	0.3	18.1	229.4
M29, VF29-3	5/11/23 16:30	125.0	17.0	0.0	0.4	18.1	225.9
M29, VF29-3	5/11/23 16:31	125.0	17.9	0.0	0.4	18.1	225.4
M29, VF29-3	5/11/23 16:32	125.0	17.9	0.0	0.5	18.1	229.1
M29, VF29-3	5/11/23 16:33	125.0	17.9	0.0	0.6	18.1	227.1
M29, VF29-3	5/11/23 16:34	125.0	17.9	0.0	0.6	18.1	226.4
M29, VF29-3	5/11/23 16:35	125.0	17.9	0.0	0.6	18.1	228.7
M29, VF29-3	Average	125.0	7.4	0.0	3.4	13.9	226.4

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
Run AP29-1											
10/31/23 13:17	125.0	0.7	17.1	2.4	0.0	0.1	1.7	0.3	0.4	-0.2	8.1
10/31/23 13:18	125.0	0.7	17.0	13.0	0.0	0.1	1.6	0.3	0.4	-0.2	8.2
10/31/23 13:19	125.2	0.7	17.1	16.6	0.0	0.1	1.5	0.3	0.4	-0.2	8.2
10/31/23 13:20	124.9	0.7	17.1	17.0	0.0	0.1	1.4	0.3	0.4	-0.2	8.2
10/31/23 13:21	125.0	0.7	17.1	17.0	0.0	0.1	1.3	0.3	0.4	-0.2	7.9
10/31/23 13:22	125.1	0.7	17.1	17.0	0.0	0.1	1.2	0.3	0.4	-0.2	5.8
10/31/23 13:23	125.1	0.7	17.1	17.0	0.0	0.1	1.1	0.3	0.4	-0.2	4.4
10/31/23 13:24	124.8	0.7	17.1	17.0	0.0	0.1	1.1	0.3	0.4	-0.2	3.4
10/31/23 13:25	125.0	0.7	17.1	17.0	0.0	0.1	1.0	0.2	0.4	-0.2	3.0
10/31/23 13:26	125.2	0.7	17.1	17.0	0.0	0.1	0.9	0.3	0.4	-0.2	2.9
10/31/23 13:27	125.0	0.7	17.1	17.1	0.0	0.1	0.8	0.3	0.4	-0.2	2.9
10/31/23 13:28	124.8	0.7	17.1	17.0	0.0	0.1	0.7	0.3	0.4	-0.2	2.9
10/31/23 13:29	124.8	0.7	17.1	16.9	0.0	0.1	0.6	0.3	0.4	-0.2	2.9
10/31/23 13:30	124.7	0.7	17.1	17.2	0.0	0.1	0.5	0.3	0.4	-0.2	1.9
10/31/23 13:31	124.8	0.7	17.1	17.4	0.0	0.1	0.4	0.3	0.4	-0.2	0.1
10/31/23 13:32	124.9	0.7	17.1	17.2	0.0	0.1	0.3	0.2	0.4	-0.2	0.1
10/31/23 13:33	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:34	125.3	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:35	125.0	0.7	17.1	17.2	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:36	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:37	125.3	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:38	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:39	124.7	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.4	-0.2	0.1
10/31/23 13:40	125.1	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:41	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	0.1
10/31/23 13:42	125.2	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.4	-0.2	1.0
10/31/23 13:43	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.4	-0.2	3.6
10/31/23 13:44	125.2	0.7	17.1	16.1	0.0	0.1	0.3	0.2	0.4	-0.2	4.1
10/31/23 13:45	125.4	0.7	17.1	2.4	0.0	0.1	0.3	0.2	0.4	-0.2	4.5
10/31/23 13:46	125.3	0.7	17.1	1.1	0.0	0.1	0.3	0.3	0.4	-0.2	4.7
10/31/23 13:47	125.2	0.7	17.1	0.7	0.0	0.1	0.3	0.3	0.4	-0.2	4.7
10/31/23 13:48	124.9	0.7	17.1	1.3	0.0	0.1	0.3	0.2	0.4	-0.2	4.7
10/31/23 13:49	124.8	0.7	17.1	9.1	0.0	0.1	0.3	0.3	0.4	-0.2	4.6
10/31/23 13:50	125.0	0.7	17.1	15.6	0.0	0.1	0.3	0.3	0.4	-0.2	4.5
10/31/23 13:51	124.9	0.7	17.1	16.9	0.0	0.1	0.3	0.2	0.4	-0.2	4.4
10/31/23 13:52	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.2	0.4	-0.2	4.4
10/31/23 13:53	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.2	0.5	-0.2	4.4
10/31/23 13:54	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	4.5
10/31/23 13:55	125.1	0.7	17.1	17.3	0.0	0.1	0.3	0.2	0.5	-0.2	4.8
10/31/23 13:56	125.2	0.7	17.1	17.2	0.0	0.1	0.3	0.3	0.5	-0.2	4.9
10/31/23 13:57	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	5.0
10/31/23 13:58	124.9	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	5.1
10/31/23 13:59	125.1	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	5.3
10/31/23 14:00	125.1	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	5.5
10/31/23 14:01	124.8	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	5.5
10/31/23 14:02	124.8	0.7	17.1	17.2	0.0	0.1	0.3	0.3	0.5	-0.2	5.5
10/31/23 14:03	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	5.6
10/31/23 14:04	125.2	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	5.8
10/31/23 14:05	125.3	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	5.9
10/31/23 14:06	125.1	0.7	17.1	17.2	0.0	0.1	0.3	0.3	0.5	-0.2	5.9
10/31/23 14:07	124.8	0.7	17.1	17.1	0.0	0.1	0.3	0.2	0.5	-0.2	6.2
10/31/23 14:08	124.8	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	6.3
10/31/23 14:09	124.9	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.4

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
10/31/23 14:10	124.9	0.7	17.1	17.0	0.0	0.1	0.3	0.2	0.5	-0.2	6.7
10/31/23 14:11	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.8
10/31/23 14:12	125.3	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.8
10/31/23 14:13	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.9
10/31/23 14:14	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.9
10/31/23 14:15	125.0	0.7	17.1	16.8	0.0	0.1	0.3	0.3	0.5	-0.2	6.9
10/31/23 14:16	124.9	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.5	-0.2	6.9
10/31/23 14:17	125.1	0.7	17.1	16.2	0.0	0.1	0.3	0.2	0.5	-0.2	6.9
10/31/23 14:18	124.8	0.7	17.1	16.0	0.0	0.1	0.3	0.3	0.5	-0.2	6.9
10/31/23 14:19	124.9	0.7	17.1	15.8	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:20	125.1	0.7	17.1	15.6	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:21	124.9	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:22	125.1	0.7	17.1	15.4	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:23	125.0	0.7	17.1	15.4	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:24	125.0	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:25	125.0	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:26	125.0	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:27	125.0	0.7	17.1	15.4	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:28	125.0	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.1
10/31/23 14:29	125.0	0.7	17.1	15.5	0.0	0.1	0.3	0.3	0.5	-0.2	7.5
10/31/23 14:30	125.0	0.7	17.1	15.6	0.0	0.1	0.3	0.3	0.5	-0.2	7.6
10/31/23 14:31	125.2	0.7	17.1	15.8	0.0	0.1	0.3	0.3	0.5	-0.2	7.7
10/31/23 14:32	125.1	0.7	17.1	15.7	0.0	0.1	0.3	0.3	0.5	-0.2	7.7
10/31/23 14:33	124.9	0.7	17.1	15.7	0.0	0.1	0.3	0.3	0.5	-0.2	7.7
10/31/23 14:34	125.0	0.7	17.1	16.1	0.0	0.1	0.3	0.3	0.5	-0.2	7.8
10/31/23 14:35	125.0	0.7	17.1	16.2	0.0	0.1	0.3	0.3	0.5	-0.2	7.8
10/31/23 14:36	124.9	0.7	17.1	16.6	0.0	0.1	0.3	0.3	0.5	-0.2	7.8
10/31/23 14:37	125.0	0.7	17.1	16.6	0.0	0.1	0.3	0.3	0.5	-0.2	7.9
10/31/23 14:38	125.2	0.7	17.1	16.8	0.0	0.1	0.3	0.3	0.5	-0.2	8.0
10/31/23 14:39	124.9	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.5	-0.2	8.3
10/31/23 14:40	124.9	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:41	125.1	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:42	124.9	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:43	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:44	125.2	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:45	124.8	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.4
10/31/23 14:46	124.8	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.2
10/31/23 14:47	125.0	0.7	17.1	17.1	0.0	0.1	0.3	0.3	0.5	-0.2	8.1
10/31/23 14:48	125.1	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:49	125.0	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 14:50	125.3	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 14:51	125.0	0.7	17.1	16.9	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:52	124.8	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:53	125.1	0.7	17.1	16.6	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:54	124.9	0.7	17.1	16.7	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:55	125.0	0.7	17.1	16.8	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:56	125.1	0.7	17.1	16.8	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:57	125.1	0.7	17.1	16.6	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:58	125.2	0.7	17.1	16.9	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 14:59	125.2	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:00	125.2	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:01	125.1	0.7	17.1	17.0	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:02	125.1	0.7	17.1	16.8	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:03	124.9	0.7	17.1	16.7	0.0	0.1	0.3	0.3	0.4	-0.2	8.0

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
10/31/23 15:04	125.1	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:05	125.2	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:06	124.9	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:07	125.1	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:08	124.9	0.7	17.1	16.7	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:09	124.7	0.7	17.1	16.4	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:10	124.9	0.7	17.1	16.4	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:11	124.7	0.7	17.1	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:12	124.7	0.7	17.5	16.3	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:13	125.0	0.7	17.5	16.3	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 15:14	125.0	0.7	17.5	16.1	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 15:15	125.0	0.7	17.5	16.1	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 15:16	125.0	0.7	17.5	16.1	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 15:17	125.0	0.7	17.5	16.2	0.0	0.1	0.3	0.3	0.4	-0.2	7.9
10/31/23 15:18	125.0	0.7	17.5	16.6	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:19	125.0	0.7	17.5	16.6	0.0	0.1	0.3	0.3	0.4	-0.2	8.0
10/31/23 15:20	125.2	0.7	17.5	16.5	0.0	0.1	0.3	0.3	0.4	-0.2	8.1
10/31/23 15:21	125.3	0.7	17.5	16.1	0.0	0.1	0.3	0.3	0.4	-0.2	8.1
10/31/23 15:22	125.1	0.7	17.5	16.1	0.0	0.1	0.3	0.3	0.4	-0.2	8.2
10/31/23 15:23	124.9	0.7	17.5	16.0	0.0	0.1	0.3	0.3	0.4	-0.2	8.2
AP29-1 Average	125.0	0.7	17.1	16.0	0.0	0.1	0.4	0.3	0.4	-0.2	6.2
Run AP29-2											
11/1/23 12:03	125.2	0.7	0.5	18.2	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:04	125.4	0.7	0.4	18.2	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:05	124.9	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:06	124.8	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:07	125.0	0.7	0.5	18.0	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:08	124.9	0.7	0.6	18.0	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:09	125.2	0.7	0.6	18.0	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:10	125.1	0.7	0.5	18.0	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:11	125.1	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:12	125.1	0.7	0.5	18.0	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:13	125.2	0.7	0.5	17.3	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:14	124.9	0.7	0.6	18.2	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:15	125.0	0.7	0.6	18.8	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:16	124.8	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:17	124.7	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:18	124.8	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:19	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:20	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:21	125.1	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:22	125.2	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:23	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.0
11/1/23 12:24	125.1	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.0
11/1/23 12:25	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.0
11/1/23 12:26	125.0	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.1
11/1/23 12:27	125.1	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.1
11/1/23 12:28	124.8	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.2
11/1/23 12:29	124.7	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.2
11/1/23 12:30	125.0	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.1
11/1/23 12:31	125.2	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.0
11/1/23 12:32	125.3	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.0

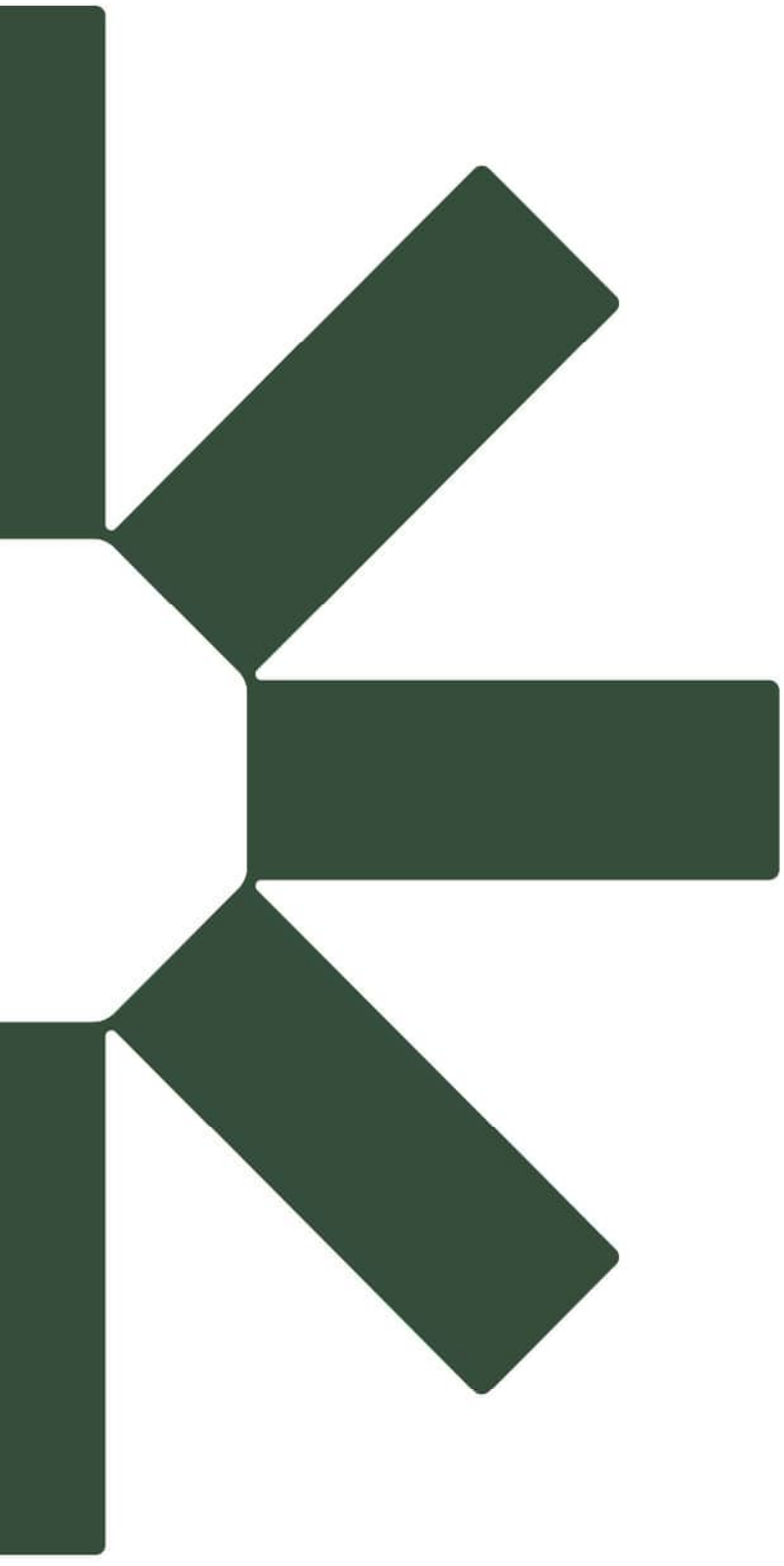
	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
11/1/23 12:33	125.2	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:34	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 12:35	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:36	125.2	0.7	4.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:37	124.5	0.8	16.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:38	124.7	0.8	17.8	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:39	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:40	125.1	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 12:41	125.0	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.6
11/1/23 12:42	124.8	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.5
11/1/23 12:43	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.9
11/1/23 12:44	125.0	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:45	125.1	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:46	125.2	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:47	125.2	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:48	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:49	124.8	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:50	125.0	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:51	125.3	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:52	125.2	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:53	125.1	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:54	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:55	124.7	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:56	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:57	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:58	124.9	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 12:59	124.8	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:00	125.1	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:01	125.4	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:02	125.3	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:03	125.0	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:04	125.0	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:05	125.2	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:06	125.3	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:07	124.8	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:08	124.9	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:09	125.0	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:10	124.8	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:11	124.8	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:12	125.2	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:13	125.1	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:14	124.9	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:15	124.8	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:16	124.8	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	0.1
11/1/23 13:17	124.9	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	1.2
11/1/23 13:18	125.3	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	3.9
11/1/23 13:19	125.1	0.7	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.1
11/1/23 13:20	124.8	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.1
11/1/23 13:21	124.7	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.1
11/1/23 13:22	124.7	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.3
11/1/23 13:23	124.7	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.8
11/1/23 13:24	124.7	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:25	125.0	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.1
11/1/23 13:26	125.3	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
11/1/23 13:27	125.6	0.7	2.3	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:28	125.5	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:29	125.1	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:30	124.7	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:31	124.5	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:32	124.8	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:33	125.1	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:34	125.0	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.0
11/1/23 13:35	125.0	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.1
11/1/23 13:36	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.2
11/1/23 13:37	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.3
11/1/23 13:38	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.4
11/1/23 13:39	124.9	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.3
11/1/23 13:40	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.4
11/1/23 13:41	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.7
11/1/23 13:42	125.0	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.8
11/1/23 13:43	124.9	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 13:44	124.7	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 13:45	125.2	0.7	0.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 13:46	125.4	0.7	0.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	5.9
11/1/23 13:47	125.3	0.7	2.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	6.1
11/1/23 13:48	125.5	0.8	13.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.0
11/1/23 13:49	125.5	0.8	17.5	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:50	125.0	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:51	124.9	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:52	124.8	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:53	124.8	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:54	124.9	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:55	124.9	0.8	17.7	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:56	125.0	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:57	125.1	0.8	18.1	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:58	125.1	0.7	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.2
11/1/23 13:59	125.2	0.7	17.7	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.3
11/1/23 14:00	125.2	0.7	17.4	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	7.5
11/1/23 14:01	125.3	0.7	17.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.6
11/1/23 14:02	125.3	0.7	18.6	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.6
11/1/23 14:03	125.3	0.7	18.3	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.6
11/1/23 14:04	125.1	0.7	18.1	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.6
11/1/23 14:05	124.9	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.5
11/1/23 14:06	125.1	0.8	17.9	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.3
11/1/23 14:07	125.2	0.8	18.0	18.1	0.0	0.1	0.3	0.2	0.4	-0.6	7.1
AP29-2 Average	125.0	0.7	10.3	18.1	0.0	0.1	0.3	0.2	0.4	-0.5	4.3
Run AP29-3											
11/2/23 9:59	125.0	0.7	0.3	0.6	18.1	0.1	0.3	0.3	0.5	-0.1	9.5
11/2/23 10:00	125.0	0.7	0.3	0.8	18.1	0.1	0.3	0.3	0.5	-0.1	9.5
11/2/23 10:01	125.0	0.7	0.3	0.6	18.1	0.1	0.3	0.3	0.5	-0.1	9.6
11/2/23 10:02	124.9	0.7	0.3	0.7	18.1	0.1	0.3	0.3	0.5	-0.1	9.8
11/2/23 10:03	124.9	0.7	0.4	0.9	17.0	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:04	125.0	0.7	0.3	2.3	0.3	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:05	125.2	0.7	0.4	0.7	0.0	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:06	125.1	0.7	0.4	1.0	0.0	0.1	0.3	0.3	0.5	-0.1	9.9
11/2/23 10:07	125.0	0.7	8.4	1.7	0.0	0.1	0.3	0.3	0.5	-0.1	10.0

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
11/2/23 10:08	124.9	0.7	16.6	0.5	0.0	0.1	0.3	0.3	0.5	-0.1	9.9
11/2/23 10:09	124.8	0.7	17.8	0.6	0.0	0.1	0.3	0.3	0.5	-0.1	9.8
11/2/23 10:10	124.9	0.7	11.2	1.3	0.0	0.1	0.3	0.3	0.5	-0.1	9.6
11/2/23 10:11	125.0	0.7	0.4	1.1	0.0	0.1	0.3	0.3	0.5	-0.1	9.6
11/2/23 10:12	125.2	0.7	0.4	1.0	0.0	0.1	0.3	0.3	0.5	-0.1	9.6
11/2/23 10:13	125.2	0.7	0.4	0.7	0.0	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:14	124.7	0.8	0.4	0.6	0.0	0.1	0.3	0.3	0.5	-0.1	10.5
11/2/23 10:15	124.3	0.8	0.4	0.5	0.0	0.1	0.3	0.3	0.5	-0.1	10.4
11/2/23 10:16	124.5	0.8	0.4	0.5	0.0	0.1	0.3	0.3	0.5	-0.1	10.2
11/2/23 10:17	125.2	0.8	0.4	0.7	0.0	0.1	0.3	0.3	0.5	-0.1	10.1
11/2/23 10:18	125.6	0.8	0.4	0.4	0.0	0.1	0.3	0.3	0.5	-0.1	9.9
11/2/23 10:19	125.2	0.8	0.4	0.7	0.0	0.1	0.3	0.3	0.5	-0.1	9.8
11/2/23 10:20	125.1	0.8	0.4	2.4	3.5	0.1	0.3	0.3	0.5	-0.1	9.7
11/2/23 10:21	125.1	0.8	0.4	1.0	14.9	0.1	0.3	0.3	0.5	-0.1	9.4
11/2/23 10:22	125.1	0.8	0.4	0.5	17.8	0.1	0.3	0.3	0.5	-0.1	9.5
11/2/23 10:23	125.1	0.8	0.4	0.6	18.1	0.1	0.3	0.3	0.5	-0.1	9.5
11/2/23 10:24	125.1	0.8	0.5	0.8	18.0	0.1	0.3	0.3	0.5	-0.1	9.8
11/2/23 10:25	125.1	0.8	0.5	1.1	18.0	0.1	0.3	0.3	0.5	-0.1	10.1
11/2/23 10:26	125.1	0.8	0.5	0.7	18.0	0.1	0.3	0.3	0.5	-0.1	10.3
11/2/23 10:27	125.0	0.8	0.6	0.7	18.1	0.1	0.3	0.3	0.5	-0.1	10.4
11/2/23 10:28	125.0	0.8	0.5	0.7	18.1	0.1	0.3	0.3	0.5	-0.1	10.1
11/2/23 10:29	124.7	0.8	0.5	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	9.9
11/2/23 10:30	124.8	0.8	0.5	0.8	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:31	124.8	0.8	0.5	1.1	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:32	125.0	0.8	0.5	0.9	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:33	125.1	0.8	0.5	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:34	125.1	0.8	0.4	0.8	18.1	542.9	0.3	0.3	0.5	-0.1	10.1
11/2/23 10:35	125.5	0.8	0.5	0.6	18.1	60.1	0.3	0.3	0.5	-0.1	10.2
11/2/23 10:36	125.2	0.8	0.5	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	10.4
11/2/23 10:37	125.2	0.8	0.5	1.1	18.1	0.1	0.3	0.3	0.5	-0.1	10.6
11/2/23 10:38	125.1	0.8	0.4	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:39	125.1	0.8	0.4	1.2	18.2	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:40	125.1	0.8	0.4	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	10.0
11/2/23 10:41	125.4	0.8	0.4	1.0	18.1	0.1	0.3	0.3	0.5	-0.1	10.2
11/2/23 10:42	125.1	0.8	0.4	1.1	18.1	0.1	0.3	0.3	0.5	-0.1	10.2
11/2/23 10:43	125.1	0.8	0.4	0.9	18.1	0.1	0.3	0.3	0.5	-0.1	9.9
11/2/23 10:44	125.1	0.8	0.4	0.8	18.1	0.1	0.3	0.3	0.5	-0.2	10.1
11/2/23 10:45	125.1	0.8	0.4	0.8	18.1	0.1	0.3	0.3	0.5	-0.2	10.1
11/2/23 10:46	125.1	0.8	0.4	1.0	18.1	0.1	0.3	0.3	0.5	-0.2	10.1
11/2/23 10:47	125.1	0.8	0.4	1.1	18.1	791.3	0.3	0.3	0.5	-0.2	9.9
11/2/23 10:48	125.1	0.8	0.4	0.9	18.1	972.1	0.3	0.3	0.5	-0.2	10.1
11/2/23 10:49	124.8	0.8	0.3	0.8	18.1	984.7	0.3	0.3	0.5	-0.2	10.4
11/2/23 10:50	124.9	0.8	0.4	0.6	18.1	994.0	0.3	0.3	0.5	-0.2	10.4
11/2/23 10:51	125.0	0.8	0.3	0.9	18.1	993.7	0.3	0.3	0.5	-0.2	10.2
11/2/23 10:52	125.0	0.8	0.4	1.1	18.1	992.0	0.3	0.3	0.5	-0.2	9.9
11/2/23 10:53	124.9	0.8	0.3	0.8	18.1	992.1	0.3	0.3	0.5	-0.2	9.7
11/2/23 10:54	124.9	0.8	0.4	0.7	18.1	993.9	0.3	0.3	0.5	-0.2	9.5
11/2/23 10:55	125.0	0.8	0.3	1.0	18.1	995.0	0.3	0.3	0.5	-0.2	9.6
11/2/23 10:56	124.9	0.8	0.3	0.9	18.1	996.7	0.3	0.3	0.5	-0.2	9.8
11/2/23 10:57	125.1	0.8	0.3	1.2	18.1	998.3	0.3	0.3	0.5	-0.2	10.1
11/2/23 10:58	125.1	0.8	0.3	0.8	18.1	1002.6	0.3	0.3	0.5	-0.2	10.0
11/2/23 10:59	124.9	0.8	0.3	0.4	18.1	1001.9	0.3	0.3	0.5	-0.2	10.1
11/2/23 11:00	124.7	0.8	0.3	0.8	18.1	1001.9	0.3	0.3	0.5	-0.2	10.1
11/2/23 11:01	125.0	0.8	0.3	0.5	18.1	1000.8	0.3	0.3	0.5	-0.2	10.1

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
11/2/23 11:02	125.2	0.7	0.3	2.4	7.9	997.2	0.3	0.3	0.5	-0.2	10.2
11/2/23 11:03	125.1	0.7	0.3	0.7	0.0	1001.7	0.3	0.3	0.5	-0.2	10.3
11/2/23 11:04	124.9	0.7	0.3	0.6	0.0	1003.3	0.3	0.3	0.5	-0.2	10.4
11/2/23 11:05	124.9	0.7	0.3	0.6	0.0	1002.5	0.3	0.3	0.5	-0.2	10.0
11/2/23 11:06	125.0	0.7	0.3	0.5	0.0	1003.7	0.3	0.3	0.5	-0.2	9.9
11/2/23 11:07	125.2	0.7	0.3	0.5	0.0	1000.5	0.3	0.3	0.5	-0.2	10.0
11/2/23 11:08	125.0	0.7	0.3	0.5	0.0	1001.5	0.3	0.3	0.5	-0.2	9.6
11/2/23 11:09	124.6	0.7	0.3	0.5	0.0	1002.1	0.3	0.3	0.5	-0.2	9.9
11/2/23 11:10	124.8	0.7	0.3	0.7	0.0	1000.4	0.3	0.3	0.5	-0.2	10.2
11/2/23 11:11	124.8	0.7	0.3	0.7	0.0	1002.5	0.3	0.3	0.5	-0.2	10.4
11/2/23 11:12	125.0	0.7	0.4	0.5	0.0	995.6	0.3	0.3	0.5	-0.2	10.1
11/2/23 11:13	124.8	0.7	0.4	0.4	0.0	997.8	0.3	0.3	0.5	-0.2	10.0
11/2/23 11:14	124.9	0.7	0.4	1.4	0.4	1001.4	0.3	0.3	0.5	-0.2	10.2
11/2/23 11:15	125.2	0.7	0.4	1.1	10.7	998.1	0.3	0.3	0.5	-0.2	9.5
11/2/23 11:16	125.4	0.7	0.4	0.7	19.6	996.8	0.3	0.3	0.5	-0.2	6.7
11/2/23 11:17	125.2	0.7	0.3	0.7	21.0	990.7	0.4	0.3	0.5	-0.2	1.4
11/2/23 11:18	124.8	0.7	0.4	0.9	21.0	992.8	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:19	124.8	0.7	0.4	0.8	20.9	1001.1	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:20	125.1	0.7	0.5	0.6	20.9	999.5	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:21	125.0	0.7	0.5	0.8	21.1	999.9	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:22	125.1	0.8	0.5	0.8	21.0	997.1	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:23	125.1	0.8	0.4	0.8	20.9	997.4	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:24	125.1	0.8	0.5	1.1	20.9	1000.9	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:25	125.1	0.8	0.5	0.8	21.1	1002.7	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:26	125.0	0.8	0.5	1.2	21.2	997.8	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:27	124.9	0.8	0.5	1.3	21.2	1004.1	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:28	124.9	0.8	0.6	1.0	21.2	1012.1	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:29	124.8	0.8	0.6	0.5	21.5	1010.3	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:30	125.1	0.8	0.6	2.6	21.2	1007.0	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:31	124.7	0.8	0.6	1.6	21.0	1003.5	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:32	124.7	0.8	0.6	1.4	21.0	998.9	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:33	125.1	0.8	0.6	1.0	21.0	994.2	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:34	125.0	0.8	0.6	0.9	21.2	998.7	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:35	125.0	0.8	0.6	0.9	21.3	1000.9	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:36	125.1	0.8	0.5	0.8	21.1	997.7	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:37	125.1	0.8	0.6	0.4	21.1	1000.5	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:38	124.9	0.8	0.6	0.7	21.1	999.2	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:39	124.7	0.8	0.5	0.7	21.1	1000.1	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:40	124.6	0.8	0.6	0.9	21.2	389.7	0.4	0.3	0.5	-0.2	0.1
11/2/23 11:41	124.9	0.8	0.6	0.7	21.1	0.2	0.4	0.3	0.5	-0.2	2.3
11/2/23 11:42	125.1	0.8	0.5	1.1	21.1	0.1	0.4	0.3	0.5	-0.2	5.8
11/2/23 11:43	125.2	0.8	0.5	1.2	21.0	0.2	0.4	0.3	0.5	-0.2	6.7
11/2/23 11:44	125.2	0.8	0.5	0.7	21.1	0.2	0.4	0.3	0.5	-0.2	6.7
11/2/23 11:45	125.0	0.8	0.5	0.7	20.8	0.1	0.4	0.3	0.5	-0.2	6.8
11/2/23 11:46	125.0	0.8	0.5	2.4	1.8	0.1	0.4	0.3	0.5	-0.2	6.9
11/2/23 11:47	124.7	0.8	0.6	1.9	0.0	0.2	0.4	0.3	0.5	-0.2	6.9
11/2/23 11:48	124.8	0.8	0.4	2.3	0.0	0.1	0.4	0.3	0.5	-0.2	6.8
11/2/23 11:49	125.0	0.8	0.3	0.2	0.0	0.2	0.4	0.3	0.5	-0.3	6.7
11/2/23 11:50	125.2	0.8	0.3	0.5	0.0	0.2	0.4	0.3	0.5	-0.3	4.4
11/2/23 11:51	125.3	0.8	0.3	0.3	0.0	0.2	0.4	0.3	0.5	-0.3	0.1
11/2/23 11:52	124.9	0.8	0.3	0.3	0.0	0.2	0.4	0.3	0.5	-0.3	0.1
11/2/23 11:53	125.2	0.8	0.4	0.6	0.0	0.2	0.3	0.3	0.5	-0.3	0.1
11/2/23 11:54	125.4	0.8	0.4	0.5	0.0	0.2	0.3	0.3	0.5	-0.3	0.1
11/2/23 11:55	125.2	0.8	0.4	0.5	0.0	0.1	0.3	0.3	0.5	-0.3	0.1

	Isa Feed Rate (tons/hour)	#2 Conv Blast Air (kscfm)	#3 Conv Blast Air (kscfm)	#4 Conv Blast Air (kscfm)	#5 Conv Blast Air (kscfm)	#1 Anode Barrel Air (scfm)	#1 Anode Barrel Gas (scfm)	#2 Anode Barrel Air (scfm)	#2 Anode Barrel Gas (scfm)	Steam Use (lbs/hr)	ELF Power (MW)
11/2/23 11:56	125.0	0.8	0.5	0.6	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 11:57	124.5	0.8	0.4	0.9	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 11:58	124.6	0.8	0.4	0.6	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 11:59	124.9	0.8	0.4	0.5	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 12:00	125.2	0.8	0.4	0.3	0.0	0.2	0.3	0.3	0.5	-0.3	0.1
11/2/23 12:01	125.2	0.8	0.4	1.5	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 12:02	124.8	0.8	0.4	0.6	0.0	0.2	0.3	0.3	0.5	-0.3	0.1
11/2/23 12:03	125.0	0.8	0.3	0.8	0.0	0.1	0.3	0.3	0.5	-0.3	0.1
11/2/23 12:04	125.2	0.8	0.4	0.4	0.0	0.2	0.3	0.3	0.5	-0.3	0.1
AP29-3 Aveerage	125.0	0.8	0.8	0.9	11.8	426.4	0.3	0.3	0.5	-0.2	6.7



Making Sustainability Happen